RESEARCH ARTICLE

Dimensions of Night Market Visit Experience of International Tourists: An Analysis of Google Reviews of Night Markets in Phuket, Thailand

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Abstract: This study attempts to analyze the dimensions of the night market visit experience of international tourists. Based on a two-step analysis of 13,833 Google review comments collected for the nine most popular night markets in Phuket, two key dimensions—market experience and food experience—were identified. Overall, the tourists were highly satisfied with their night market experiences. The results of machine learning analysis using the KNIME analytics platform indicate that the market experience dimension was more positive in valence and higher in salience than the food experience dimension. In addition, food was found to be the most important component in both market experience and food experience dimensions. The content analysis results of both positive and negative reviews show factors that determine tourist satisfaction, including a variety of food and stores, affordable prices, and a pleasurable atmosphere. On the other hand, factors being of serious concern to tourists were also identified and are discussed, most of which relate to the food experience dimension, including food hygiene, staff attitude, and overcharging.

Keywords: Tourist experience, online-review, night market, Phuket

Night markets offer unique cultural and life experiences to tourists during their holidays abroad. These markets have become key attractions in many destinations worldwide, particularly in Asia, where international tourists can hang out and experience the local culture at the markets. Night markets offer not only places to shop but a well-balanced combination of local products and souvenirs, local food, local culture, and street performances. According to Chou (2013), night markets have become a major recreation for both locals and tourists. The benefits gained by tourists from night market visits comprise cultural and social benefits, including enjoying access to a selection of local foods, having a pleasant atmosphere and experience, as well as gaining spiritual relaxation. H. C. Wu et al. (2014) further concluded that night markets meet the needs of tourists for novelty, socializing, improved understanding of the places and their cultures, and authentic experiences. It was also reported that night markets normally offer diverse products, low prices, and flexibility in bargaining, more so than traditional shops and department stores. In addition, the locals also stand to gain benefits, not only economically, but the night markets serve as a place to showcase their culture, history, and customs, reflecting traditional characters of the destination. Tsai (2013) further emphasized the economic value of night markets based on the jobs and income generated to the locals and the destination as a whole. Locals also find night markets to provide recreational functions in a similar way as enjoyed by the tourists.

Although significant benefits of night markets have been recognized with a wide array of economic, social, cultural, and historical values, several negative effects of night markets on the community have also been noted (Hung & Wu, 2020). These downsides of night markets include several issues, such as hygiene, safety, chaotic atmosphere, noise, and traffic jams (Tsai, 2013). Food hygiene at night markets and street stalls, in particular, has been an ongoing issue in many tourist destinations, especially in developing countries (Amuquandoh, 2011). Although a wide selection of local foods is offered at night markets, Thai food is claimed to be a key attraction for tourists worldwide to visit Thailand. Food safety and hygiene issues in tourism in Thailand have been frequently discussed in past research (Promsivapallop & Kannaovakun, 2019). According to Wongleedee (2013), nearly 50% of the 400 European respondents surveyed on food safety concerns in Thailand had become sick at least once after consuming street food while on holiday in Thailand. In addition, research confirmed that many tourists did not trust street food vendors due to concerns about hygiene standards, although they trusted the food in hotels and restaurants. Similar results from food safety and hygiene studies in Thailand were reported by Poolklai (2015) and Yiamjanya and Wongleedee (2013).

Despite the significant issues with night markets highlighted above, little research has been designated, particularly examining tourist experiences of night markets as tourist destinations. Previous studies on night markets tend to be part of an investigation of tourist motivation to shopping at street markets as the wider context (Correia & Kozak, 2016; M. Y. Wu et al., 2014), with a few scholars (Hsieh & Chang, 2006) focusing research efforts on night market shopping. Others conduct their research on tourist motivation and behavioral intentions to visit night markets (Feng & Wu, 2016; H. C. Wu et al., 2014) and the attractiveness of a night market to tourists (Chuang et al., 2014). However, tourist night market experience studies have been inadequate. Kuo et al. (2012), Chou (2013), and Chen et al. (2008) have investigated tourist experiences of night market visits, but these studies were geographically limited only to Taiwan.

In addition, a review of the night market literature has revealed a number of literature gaps. Firstly, the night market literature reveals the locations of research to be concentrated mainly in Taiwan (Kuo et al., 2012; Hsieh & Chang, 2006; H. C. Wu et al., 2014; Chen et al., 2008). Little is known about the tourist experiences of night markets in Thailand, despite the significance of night markets as tourist attractions in Thailand. Recently, Taecharungroj and Mathayomchan (2019) conducted an analysis on TripAdvisor reviews focusing on tourist experiences at tourist attractions in Phuket, including markets. This research provides a foundation for understanding tourist experiences of market visits and presents further opportunities for more in-depth investigations into the factors determining tourist experiences of night market visits.

Another limitation in the current night market literature is with regard to the narrow range of study methods. Most night market studies (H. C. Wu et al., 2014; Sun et al., 2012; Chuang et al., 2014; Tsai, 2013; Kuo et al., 2012) presented in the literature tend to investigate issues based on traditional research methods, such as a survey or other qualitative methods. With the exception of Taecharungroj and Mathayomchan (2019), online reviews have rarely been used as sources of data in previous night market studies. Given the increasing reliance of tourists on reviews on social media (Ayeh et al., 2016), there is a need to further examine reviews on social media, particularly regarding the experiences of tourists at night markets, to address the current dearth of such research.

In addition, a growing number of existing online review studies tend to focus mostly on destination image in general (Wong & Qi, 2017; Mak, 2017; Kladou & Mavragani, 2015), but online tourist review studies that focus on tourist experiences at tourist attractions are scarce. Most of these online tourist experience reviews have been largely applied to private tourism amenities such as hotels (Khorsand et al., 2020; Padma & Ahn, 2020) or restaurants (Huifeng et al., 2020) instead of tourist attractions such as beaches and night markets. It is essential that destination managers and marketers understand in-depth components of tourist experiences at these tourist attractions to manage destination competitiveness and tourist satisfaction. So far, only a few studies such as the works by Taecharungroj and Mathayomchan (2019) in Thailand, Fang et al. (2016) and, Kirilenko et al. (2019) in the U.S., and Simeon et al. (2017) in Italy have examined online reviews of tourist attractions using machine learning techniques to assess tourist experiences. These studies mainly use the TripAdvisor platform as the data source. Despite the increasing popularity of the Google Review platform, to the best of our knowledge, no prior work in the literature has been conducted on Google reviews of night markets.

The Taecharungroj and Mathayomchan (2019) study offered a comprehensive analysis of online reviews on TripAdvisor regarding key tourist attractions in Phuket. They have extensively analyzed reviews on beaches and other locations, such as night markets, temples, and a pedestrian street, providing notable theoretical frameworks underpinning the tourist attractions. However, the authors raised a major concern with regard to the small number of reviews for night markets (3,514 reviews) as compared to the range of 13,004-25,453 reviews for other attractions under study. This subsequently presented the model of night markets with a lower accuracy level at 61%, a level well below the study's target of 70%, which Taecharungroj and Mathayomchan (2019) claimed as the average classification accuracy in hospitality and tourism research. On the other hand, all the other attractions under the study had accuracy levels well above the 70% threshold. In addition, the market reviews on TripAdvisor did not cover all key night markets in Phuket, and the number of reviews of each market was small compared to sample sizes of other attractions in the study.

The issues pertaining to the study of Taecharungroj and Mathayomchan (2019) present research opportunities to extend the existing body of knowledge and gain a full and comprehensive understanding of the tourist experiences, their dimensionality, and how the identified factors determine the experiences of tourists. These issues are the main agenda that the current study aims to address. The current study extends the knowledge established by Taecharungroj and Mathayomchan (2019) by analyzing a larger pool of data from Google Reviews to ensure a sufficient accuracy level of the model and permit generalization of the results. Furthermore, it deepens the understanding of factors that determine positive and negative experiences of international tourists with a two-step analysis process. The first step employs machine learning techniques to identify dimensions and factors that determine tourist experiences. Then, key themes and factors identified in the first step are further manually qualitatively analyzed to gain an in-depth understanding of the tourist experiences.

Therefore, this research offers academic contribution by providing a theoretical framework and in-depth understanding of night market experience dimensions as perceived by international tourists. Specifically, it contributes to the night market literature by focusing on analyzing online tourist experience reviews based on a large sample from the Google Review platform to derive dimensions underpinning tourist experience at night markets. In addition, it extends the existing body of knowledge in the literature by offering a more comprehensive analytical technique with a combination of machine learning analysis of big data and qualitative content analysis to extend insights into key dimensions identified in the machine analysis phase. This provides insightful knowledge on the nature and significance of the key factors within each dimension influencing overall night market experiences and satisfaction. Full understanding of night market visit experience is critical to both night market managers and destination managers in sustaining the competitiveness and meeting the needs and preferences of international tourists towards night markets and destinations (Promsivapallop & Jarumaneerat, 2018).

Phuket was chosen for the study due to its worldwide popularity as a tourist destination, attracting more than nine million international tourists worldwide in 2019 (C9 Hotelswork, 2020). Furthermore, night markets have been increasingly popular among international tourists in Thailand, particularly those in Bangkok and Phuket (Svasti, 2016). Phuket's outdoor activities and shopping styles that range from flea markets, shopping centers, duty-free complexes, and night markets form an important part of Phuket as a top international tourist destination besides its renowned beaches. In addition, the island of Phuket has been named as the City of Gastronomy by UNESCO, and this is reflected by the popularity of its local food (especially seafood) as a major attraction to tourists, complementing its renowned beaches (Promsivapallop & Kannaovakun, 2019; 2020; Yasami et al., in press).

The aims of this paper are twofold. First, it seeks to identify the key dimensions underlying tourist visit experiences at night markets. Second, it attempts to examine in-depth the nature of key components in each dimension and how they relate to the tourists' overall night market visit experience.

Literature Review

Night Markets

A night market has been recognized in the literature as an attraction that fulfills many aspects of tourist experiences. According to Chou (2013), night markets offer recreational benefits that meet six aspects of benefits identified by Bammel and Burres-Bammel (1992): physical benefits, social benefits, relaxation benefits, educational benefits, physiological benefits, and aesthetic benefits. In addition, scholars including H. C. Wu et al. (2014), Chang et al. (2007), and Kikuchi and Ryan (2007) have explained key motives that drive tourists to visit local markets at tourist destinations. These motives include having novelty involvement, meeting socializing needs, understanding new places and cultures, and obtaining authentic experiences. Moreover, the study by Hsieh and Chang (2006) emphasized that night markets particularly meet the need of tourists who seek novelty experiences. Based on their study of night markets in Taiwan, novelty seeking and flow experience contributed positively to place attachment. The study results further revealed key factors influencing a tourist's willingness to visit night markets, including an escape from boredom, an amazing experience, total concentration, and a change in the sense of time.

One of the key issues regarding night markets, discussed in the literature, is the factors determining the attractiveness of night markets and visit experiences of tourists. According to Hsieh and Chang (2006), two main factors that attract tourists to night markets include shopping and leisure. Furthermore, the study by Chuang et al. (2014) offered more detailed results on these two factors, concluding that the night market attractiveness comprises the diversity of services and local food, service attributes of the vendors, affordable consumption, and leisure activities. Vendor service attributes relate mainly to the quality aspect, including performance, empathy, responsiveness, and courtesy.

It is important to note that most of the key night market studies in the literature highlighted above originate in Taiwan. Furthermore, these studies tend to rely on traditional methods of studies, including surveys (H. C. Wu et al., 2014; Sun et al., 2012), observation (Chuang et al., 2013), and in-depth interviews (Kuo et al., 2012). Recently, Taecharungroj and Mathayomchan (2019) took a different approach to the study method by analyzing online reviews of night markets on the TripAdvisor platform. They discovered two key dimensions of tourist visit experience: food and shops. These results relate closely to the two attractiveness factors identified by Hsieh and Chang (2006). Taecharungroj and Mathayomchan (2019) suggested that the food dimension is centered around comments and terms used by reviewers to include food and its quality, such as food, seafood, fresh, and Thai. The shop dimension, on the other hand, comprises terms that describe the environment of the market such as shop, stall, local, and bargain.

Tourist Experience Online Review Research

The significance of tourist experience has been highlighted by Ritchie et al. (2011) as tourism management has shifted its focus from managing tourism products to tourism experience. Offering quality tourist experience is argued by Cetin et al. (2017) as a source of destination competitiveness. Furthermore, a full understanding of the quality and satisfaction of the tourist experience provides a framework for tourism managers to effectively design destination products and services to meet or exceed tourists' expectations.

Research has confirmed that a quality tourist experience leads to positive behavior outcomes (Promsivapallop & Jarumaneerat, 2018; Sangpikul, 2018). According to Cetin (2020), tourist experience was found to exert a higher level of influence on both satisfaction and loyalty than service quality. The study provides evidence to support that those tourists who participate in tour programs that have been designed based on experiential components display higher levels of satisfaction and loyalty. Likewise, Widjaja et al. (2020) confirmed the strong influence of quality culinary experience on culinary satisfaction and destination satisfaction among gastronomy tourists in Indonesia.

In addition, as argued by Promsivapallop and Kannaovakun (2017), travel decision-making is intricate and subject to risk and uncertainty due to its intangible features. Unlike tangible products, travel and tourism services are unavailable to pre-testing and thus cannot be evaluated prior to a purchase decision. Moreover, taking a holiday abroad is a high-cost activity, requiring both financial commitment and time investment in the trip and its planning process. Furthermore, travel expenses are often incurred prior to the actual trip and are difficult to recover if the expectations are not met. Tourists are therefore faced with financial risk, particularly when making travel arrangements to unfamiliar destinations abroad. In addition to the financial risk, there are many other kinds of travel risks while on holiday abroad, which influence the travel decision. These risks include health risks, safety risks, crime and false practice risks, over-commercialization risks, hazard risks, communication risks, political risks, and terrorism risks (Promsivapallop & Kannaovakun, 2018; Adam, 2015; Rittichainuwat & Chakraborty, 2009; Lepp & Gibson, 2003; Sönmez & Graefe, 1998).

Although travel risks tend to inhibit travels due to expected negative outcomes (Sönmez & Graefe, 1998), travel risk perception and anxiety can indeed be substantially reduced by improved knowledge and experiences about the destination. Travel risk studies have demonstrated that tourists who have more knowledge and previous travel experiences would be much less sensitive to the potential travel risks (Promsivapallop & Kannaovakun, 2018; Adam, 2015; Fuchs & Reichel, 2011; Lepp & Gibson, 2003). Fortunately, knowledge of specific destinations and attractions can be easily acquired, as information is extensively available online, including social media platforms and travel-related websites. Taecharungroj and Mathayomchan (2019) argued that online reviews provide abundant important information and word-ofmouth recommendations. This information accurately reflects the real experiences and emotions of the reviewers and is generally free from commercial influences. Therefore, tourists increasingly opt to search and read online reviews to give them knowledge and a clearer sense of products at the destination. Therefore, online reviews offer to reduce the tourists' travel risk perceptions and enable them to maximize their holiday experiences and enjoyment at the destination. Due to these benefits, more and more tourists rely on online reviews to make travel and holiday purchase decisions (Buhalis & Law, 2008; Fang et al., 2016). As online reviews continue to play a growing significant role in travel decision-making, there is a continued surge in destination and tourist experience research that utilizes online reviews as data for the studies.

Regarding the online review platforms used in tourist experience research, TripAdvisor has been most often used to supply the data in the studies. These studies tend to adopt the qualitative approach by conducting a content analysis of a small sample of reviews. Kladou and Mavragani (2015), for example, analyzed 203 systematically sampled online reviews on social media by tourists visiting Istanbul, focusing on the TripAdvisor website. The study content analyzed the selected reviews based on three components of destination image, namely, cognitive, affective, and conative. In addition, a number of studies have recently emerged to take a further step in text mining analysis by adopting machine learning techniques to analyze online reviews (Jia, 2020; Guo et al., 2017; Liu et al., 2019). As discussed in the previous sections, Taecharungroj and Mathayomchan (2019) employed machine learning analytical techniques to analyze online reviews and derive dimensions of tourist experiences at tourist attractions of the beach destinations on Phuket island.

Methods

Data Collection and Preparation

After reviewing the popularity of online platforms by the researchers, Google Review platform was found to show on average the most reviews of night markets in Phuket by international tourists, among all the platforms available to tourists for expressing their comments online. Although TripAdvisor has been widely used both by online reviewers and researchers, it offers a far fewer number of reviews of the night markets in Phuket than the Google Review. Therefore, Google Review was chosen as the online review platform for this study.

Only original online English review comments without translation were included in the study to ensure the precision of the meaning of the comments. Based on the keywords "night market in Phuket" searched on Google in English mode, only the nine most popular markets in Phuket each had a total number of reviews exceeding 1,000 reviews and were included in the study. The review data were extracted for each market on the Google website on the 10th of April, 2020. We monitored the review data closely while extracting. The review data extracting operation was ceased from each of the selected markets once no written comments but rating scores were found in consecutive pages (comments).

The next step involved filtering the review comments to include only valid reviews for the study. First, to exclude the major crisis event of COVID-19 pandemic period in Thailand, only reviews that were published before January 2020 were included in the study. This was to ensure that the results would not be biased by this major crisis event, which involved many irregular practices such as social distancing rules and extra concerns of sanitation. Second, all the reviews that show only scores without any comments were once again screened and excluded from the study because this study focuses on the wording of comments. Then, the document was created by converting a string to a document.

Data Preprocessing

The review data were preprocessed by using the open-source program KNIME analytics Platform 4.1.2. This analytics platform had been widely used to perform sentimental analyses in prior tourism research, such as Taecharungroj and Mathayomchan's (2019). The preprocessing began with converting all reviews to documents and removing punctuation from the reviews. Then, part of speech (POS) tagger and lemmatization to tokenize and convert each word to its root form (e.g., converting "is," "am," "are" to "be") were implemented by utilizing the functions provided in KNIME analytics platform. This was then followed by filtering the reviews with several filters, including number filter (removal of all numbers in the reviews), N Char (removing words with fewer than three characters), and case converter (converting all uppercase letters to lower case letters). Next, stop words (such as a, an, the, by, etc.) were filtered by MySQL FullText features, including some specific words to the context of analysis in the night market area such as Bangla, night, Patong, and so forth. Lastly, all reviews were stemmed (e.g., conversion from "shopping" to "shop") by Porter stemmer algorithm at the last step.

Document Vector Creation

After data preprocessing was completed, the document vector was further generated by creating a Bag of Words from all documents. Term frequency (TF: frequency of each word in each document being counted) and inverse document frequency (IDF: count of number of documents that the word was found in) were applied to filter unimportant common words and only the meaningful words in each document were retained. In order to obtain a reliable document vector, the comparatively low-frequency words in the previous step from all documents were considered less significant. They were thus removed to improve the accuracy of principal component analysis (PCA), cluster analysis, and predictions by machine learning in the next step.

Dimension Extraction, Elbow Method and Predictive Modelling and Scoring

To identify the dimensions of the reviews after preprocessing, a process to reduce the dimensionality of the feature space of the document vectors was required. PCA is typically used to serve this purpose (it is a linear dimensionality reduction algorithm), followed by K-means clustering using the sum of squared errors to determine the number of dimensions. The number of clusters or dimensions was further used to extract factors of each dimension by using parallel latent Dirichlet allocation (LDA) method. The document vector was also partitioned into two groups (training and test data, in 70:30 proportions) and analyzed by using naive Bayes modeling to predict the sentiments of Google reviews.

Data Analysis Procedures

The current study employed a two-phase data analysis process. The first phase follows the two machine learning techniques implemented by Taecharungroj and Mathayomchan (2019) to identify dimensions that determine tourist experiences at night markets. Then, key themes and dimensions identified in the first phase were further content analyzed to gain an in-depth understanding of the tourists' experiences.

The quantitative big data analysis with the machine learning method followed a typical workflow, shown in Figure 1, and was analyzed by the dimensional salience-valence analysis (DSVA) and the lexical salience-valence analysis (LSVA). These procedures were suggested by Taecharungroj and Mathayomchan (2019).

Dimensional salience-valence (DSV) identified by the parallel LDA was used to reveal the dimensionality of concerns from tourists' experiences in night markets.

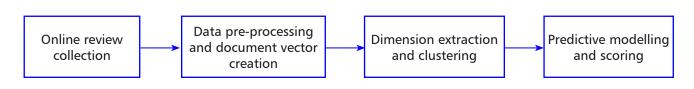


Figure 1. Typical Workflow of Sentiment Analysis of Online Reviews

Salience indicates the degree of frequency of the term, valence of the term represents the extent of positivity or negativity of the reviews. Salience analysis is based on the total number of reviews that the term presents in, divided by the total number of reviews in the study. The valence of a dimension, on the other hand, was calculated by the proportion of the number exceeding observed positive reviews from the expected number of positive reviews divided by the total number of reviews.

Then, lexical salience-valence (LSV) by naive Bayes modeling was used to predict 10 factors (words) per dimension underlying each dimension and was further analyzed and plotted on the lexical salience valence analysis grid to determine the importance and performance of each dimension and factor. These were grouped into four quadrants, including (a) High Salience – Positive Valence, (b) High Salience – Negative Valence, (c) Low Salience – Negative Valence, and (d) Low Salience – Positive Valence.

The median of salience (3.045) was calculated to separate high salience and low salience along the y-axis, whereas the origin on the x-axis (zero) was used to separate high valence and low valence to form the four quadrants (Figure 3). This method was adopted from the importance performance analysis (IPA).

Sentimental Category and Rating

This study adopted the sentimental category, similar to prior research by Taecharungroj and Mathayomchan (2019). "Positive" category was determined by a rating of 4 or 5 from the reviewers, whereas a 1 to 3 rating represented "Negative" category.

Content Analysis of Key Terms

The second phase included steps in manual content analysis of the key terms used in the reviews, which were identified in the first phase. First, pairs of terms that appear in the same reviews were counted for frequency in the Excel program to demonstrate the associations of key terms, as used by the reviewers to describe their visit experiences. Then, positive and negative comments in each dimension were selected by systematic random technique to include 100 comments in each category. The samples were consistent with previous online studies in tourism settings, such as Kladou and Mavragani (2015). These selected comments were then further content analyzed to increase understanding of the nature and phenomena of the tourist experiences at the night markets in each dimension. To ensure inter-judge reliability, two researchers analyzed the data separately, then met to discuss and resolve discrepancies of the analysis.

Results

Details of the selected online reviews for analysis are reported in Table 1. In total, 13,833 reviews of the total 41,678 reviews for the nine most frequently commented markets were included in the study. The sample accounts for approximately 33.19% of the total review population. On average, the ratings of both the population and the sampling were comparable, both of which represent high levels of satisfaction averaging at 4.29 out of 5.00.

LDA Results

Based on the elbow method, which runs k-means clustering to indicate the appropriate number of clusters (Taecharungroj & Mathayomchan, 2019), two clusters or dimensions of night market reviews were specified. The LDA algorithm was further used to extract the two dimensions using KNIME analytics platform. These two dimensions were named "market experience" and "food experience." Each dimension is presented with underlying terms and their respective weights (Table 2). The first dimension is characterized by general shopping experiences, atmosphere, and a variety of activities that tourists can enjoy when visiting night markets. Key terms include food, shop, street, price, and local. Food experience is the second

Table 1

Overall Market Rating and Average Review Rating Comparison

| No. | Market | Google Reviews | Data Scraping | Overall Market Rating (Mean 1 - 5) | Average Review Rating from Data Extraction (Mean 1- 5) |
|-------|------------------------------------|----------------|---------------|--|---|
| 1 | Sunday Walking Street, Lard Yai | 3,474 | 1,510 | 4.40 | 4.44 |
| 2 | Malin Plaza | 3,341 | 1,550 | 4.30 | 4.33 |
| 3 | Phuket Weekend Market -Naka | 4,137 | 1,643 | 4.30 | 4.33 |
| 4 | Bangla Night Market | 5,838 | 2,030 | 4.30 | 4.36 |
| 5 | Chillva Market | 3,284 | 1,500 | 4.30 | 4.26 |
| 6 | Kata Market | 3,086 | 1,520 | 4.20 | 4.18 |
| 7 | Banzaan Fresh Market (Patong) | 8,398 | 1,860 | 4.20 | 4.21 |
| 8 | Jungceylon Night Market | 1,489 | 660 | 4.40 | 4.34 |
| 9 | OTOP Patong Market | 3,572 | 1,560 | 4.20 | 4.15 |
| Total | | 41,678 | 13,833 | 4.289 | 4.288 |

Table 2

Dimensions and Underlying Terms of Night Markets

| Dimension | 10 Terms of each dimension | Weight / Frequency | Standardized Weight | |
|-------------------|----------------------------|--------------------|---------------------|--|
| | Food | 7107 | 1.00 | |
| | Good | 4164 | 0.59 | |
| | Great | 2457 | 0.35 | |
| | Lot | 2424 | 0.34 | |
| Market Experience | Shop | 2422 | 0.34 | |
| | Nice | 2032 | 0.29 | |
| | Street | 1898 | 0.27 | |
| | Price | 1431 | 0.20 | |
| | Visit | 1386 | 0.20 | |
| Local | | 1208 | 0.17 | |
| | Food | 2659 | 1.00 | |
| | Price | 1947 | 0.73 | |
| | Fresh | 1694 | 0.64 | |
| | Seafood | 1550 | 0.58 | |
| Food Experience | Fruit | 1236 | 0.46 | |
| rood Experience | Buy | 1193 | 0.45 | |
| | Eat | 1138 | 0.43 | |
| | Good | 924 | 0.35 | |
| | Cook | 861 | 0.32 | |
| | Thai | 718 | 0.27 | |

dimension, which has food as the main term describing the particular experience of food and eating at the markets. Although this term overlaps with the first dimension, food in this dimension is represented by the quality of food, freshness, types of food (such as seafood, fruits, and Thai food), price, eating, and cooking methods. In contrast, food within the market experience dimension refers to an important leisure activity within the market experience.

Naive Bayes Modelling Results

Based on the LDA results, the salience and valence of each dimension were further analyzed. The descriptive statistics of each dimension are summarized in Table 3, depicting the crosstab evaluation results of each dimension. The salience and valence of each dimension were calculated based on the procedure explained in the methods section. The DSVA of night

Table 3

Cross Tabulation of Evaluation Results of Each Dimension

markets is presented in chart format in Figure 2. Market experience appears to be both more salient (71.65%) than food experience (28.35%) and more positive in terms of valence (2.13%) as compared to a food experience that shows a negative result of -5.38%. The naive Bayes modeling accuracy illustrates a satisfactory accuracy level of 70.5%. The accuracy level is in line with the standard level in hospitality and tourism research of 70%, as indicated by Taecharungroj and Mathayomchan (2019).

The LSVA of night markets is illustrated in Figure 3. Overall, eight of the nine market experience terms appear in positive comments compared to only four from the total of 10 of food experience terms. Therefore, most of the negative comments are associated more with the food experience, whereas the market experience includes most components that belong to positive comments. In addition, food has the

| Торіс | Positive Observed | Positive Expected | Total Positive Reviewers | Total Reviewers | Salience | Valence |
|-------------------|----------------------|----------------------|-----------------------------|--------------------|----------|---------|
| Market experience | 7,017 | 6,840.901 | 8,276 | 11,551 | 71.65% | 2.13% |
| Food experience | 2,531 | 2,707.099 | 3,275 | 11,551 | 28.35% | -5.38% |

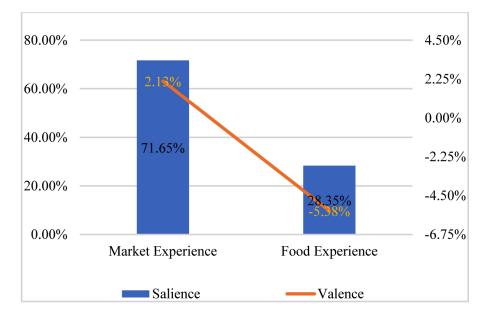


Figure 2. Dimensional Salience Valence Analysis (DSVA) of Night Markets

highest standardized positive weight of valence of both market experience and food experience dimensions, suggesting that food is the most frequently mentioned word in both dimensions. In terms of salience, which reflects the positive experience and comments, great has the highest standardized weight for the market experience dimension, and fresh has the highest value for the food experience dimension.

The terms of the two dimensions were grouped into four quadrants. The first quadrant, High Salience – Positive Valence, refers to the components of the dimensions that were more frequently mentioned and also appeared in positive comments. In other words, these are frequent complements of reviewers on the night markets. Terms that are located in this quadrant include four market experience components (food, good, lot, and great), whereas three terms of food experience (food, good, and eat) belong to this category. It is noted that food and good, which are parts of both market experience and food experience dimensions, are the most frequently used terms in the comments.

The second quadrant is High Salience – Negative Valence. Terms appearing in this quadrant are used

frequently but in negative comments. Therefore, these are basically frequent complaints that reflect the dissatisfaction of reviewers. Three components, two from the market experience dimension and one from the food experience dimension, are found in this quadrant (price and shop for market experience and price for the food experience).

The third quadrant refers to Low Salience – Negative Valence, indicating terms that reflect negative comments but are less frequently used. Although these terms reflect dissatisfaction, they were less frequently used to complain. These include three components of the food experience dimension (buy, seafood, and cook).

The final quadrant is Low Salience – Positive Valence include terms that tend to appear in positive comments but are less frequently mentioned. Four terms of market experience (nice, visit, street, and local) and three terms of food experience (fresh, fruit, and Thai) are located in this quadrant.

Analysis of Terms Used in the Reviews

According to LSVA, terms underlying the two dimensions were further analyzed to understand in-

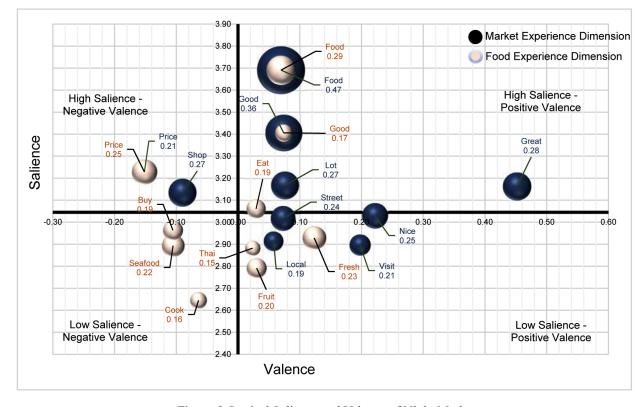


Figure 3. Lexical Salience and Valence of Night Markets

depth the nature of these terms as used by the online reviewers in their comments. This involves a two-step analysis—frequency analysis and content analysis.

First, the key terms were analyzed manually to count for frequency when they appeared in pairs together in the comments. Table 4 shows the number of documents (comments) with the corresponding terms and the number of documents with pair terms found in each document as ranked by their frequency.

Among the reviews of the sampled online comments, the terms "Good," "Great," and "Lot" expressed the experience traits of the reviewers and described the characteristics of the activities at the night markets and were further analyzed. These terms are most frequently found together with "Food," "Price," and "Shop" in the reviews, as illustrated in Table 4. These imply that, overall, tourists positively describe the markets to offer good food, good price and good shops, great food, great price and great shops, and a variety of food and shops to choose from. As food appeared to be associated with these complement words most frequently, followed by price and shop, it can be interpreted that reviewers were likely to be most satisfied with food, then prices and shops at the night markets.

Table 4

Terms that Appeared in Pairs Most Frequently in Online Reviews of Night Markets

| Tomma | Frequency (No. of Reviews) | | | | |
|-------|----------------------------|-------|-----|--|--|
| Terms | Good | Great | Lot | | |
| Food | 1,057 | 730 | 726 | | |
| Price | 515 | 248 | 231 | | |
| Shop | 324 | 212 | 198 | | |

The next step involves content analysis of the terms using thematic analysis. In order to gain insights into the nature and meaning of the terms used in the online reviews to reflect extreme experiences of satisfaction and dissatisfaction of the night market visitors, key components of each dimension were further content analyzed. The data were divided into two groups, one for extreme positive reviews and another one for extreme negative reviews. One hundred comments from the positive reviews and another 100 comments from the negative reviews were systematically selected. An equal sample size of the two groups was employed to permit comparative analysis. Extreme comments were identified as the population at this stage of study to provide clarity of the meaning of the comments. A total of 4,838 positive reviews scoring the maximum 5, and 152 negative reviews that score the lowest 1 were included as the population and the sampling frame. Every 48th of the positive comments, giving 100 reviews in total, were selected from the list, whereas every 3rd of the negative reviews was removed and the rest 100 reviews were included in the analysis. This gave a total of 200 reviews for analysis, a sample size comparable to previous online studies such as that of Kladou and Mavragani (2015). It is important to emphasize that the analysis in this section aimed to explore in-depth the experiences and the meanings of words and expressions in both positive and negative review categories, rather than generalize the meaning of reviews for the markets. Therefore, although the findings so far have suggested that the majority of tourists have expressed very high levels of satisfaction for their night market visit experiences, this part of data analysis seeks to equally understand in more detail the experiences in both highly satisfied and highly dissatisfied reviews.

Positive Reviews

Words found to appear most frequently in the selected positive reviews include food, market, good, and great. Most of the words appearing in the positive review category reflect the variety of activities (e.g., food, market, eat, clothes, buy, shopping, souvenirs, and street), and an enjoyable experience and satisfaction (lots, cheap, nice, beautiful, fresh, experience, and delicious). These keywords are consistent with the findings from the machine learning analysis in the previous section.

Thematic analysis was carried out to gain an in-depth understanding of the meaning of words used by reviewers. The analysis was based on the two dimensions of visit experience identified in the previous section. Key factors emerging from the reviews are summarized in Table 5.

Three main factors under market experience in positive reviews were uncovered from the thematic analysis. These include variety and selection of shops, affordability and value for money, and atmosphere and entertainment. On the other hand, the analysis within the food experience dimension reveals three main factors, comprising variety and selection of

Table 5

Summary of Night Market Experience Factors Based on Qualitative Analysis

| Positiv | e Reviews | Negative Reviews | | |
|-----------------------------------|-----------------------------------|--------------------------------------|-------------------------------|--|
| Market Experience | Food Experience | Market Experience | Food Experience | |
| Variety and selection of shops | Variety and selection of food | Overall cleanliness of the market | Seafood | |
| Affordability and value for money | Affordability and value for money | Crowdedness | Staff dishonesty and attitude | |
| Atmosphere and entertainment | Tastiness | Lack of souvenir and product variety | Hygiene and food safety | |
| | | Overpricing | Overpricing | |

food, affordability and value for money, and tastiness of the food.

Based on the sampled positive reviews, night market visitors were impressed with their market experience and food experience at the night markets. Further analysis reveals that they were particularly prepared to accept the negative sides of night markets, such as problems with sanitation and crowdedness, as they pointed out that these problems are common downsides of night markets. However, they emphasized the enjoyment with the positive sides the markets have to offer with low prices, variety of shops and food, atmosphere, and food taste outweighing the negative factors. This made the entire night market experience delightful and worth the visit. The following examples of positive online reviews demonstrate these points:

"A crazy madhouse of stalls and vendors. Lots of food to choose from. Sanitation is not a high point, but that is the risk of all-night markets. They do make great smoothies. Definitely worth the experience at least once. Everything is negotiable in terms of price. Good luck!"

"A lively street filled with crafts, arts, food, and music. Worth visiting during the weekends even though it is not a long walk. Just enjoy the atmosphere, surroundings, and street food."

"It was a sensory overload, so much things were going around. Felt like I have died and gone to street food heaven, couldn't decide what to eat, everything looked yummy. My whole family had a blast specifically my wife who did drained my wallet with her shopping (mostly useless stuff). On the other hand it was crowded, hot and humid, but still the aroma of all the yummy grubs made me forget about the heat. Once a life time experience."

Negative Reviews

Keywords appearing in the selected negative reviews include similar words describing various activities available at the night markets such as food, market, seafood, place, price, and people. As these words appear in the negative reviews, further analysis is required to reveal the true meaning and reflection of the experience of the reviewers as they may be mentioned in a negative sense. Furthermore, certain words that imply negative meaning were also highlighted in the word clouds, including expensive, poisoning, avoid, bad, rude, don't, and rip. Although appearing in the negative review category, certain positive words were also available in the comments, such as good, friendly, and tasty. Again, these words require further analysis to gain an in-depth understanding of the meaning of the reviews. The two dimensions of visit experience, including market experience and food experience, were used as the analysis framework. A summary of the key factors discovered from the analysis is offered in Table 5.

The analysis of negative reviews reveals four key factors within the market experience. These include the overall cleanliness of the market, crowdedness, lack of souvenir and product variety, and overpricing. Under the food experience dimension, four key factors were identified. Seafood was most frequently complained about, which relates to many other negative aspects, including staff dishonesty and attitude, hygiene and food safety, and overpricing.

Many reviewers in the negative review category expressed their disappointment with the food experience at the markets. A large proportion of the comments relate to the expressions of dissatisfaction with the seafood served and with the attitude and dishonesty of service staff. Several complaints were recorded specifically pointing out that they were tricked by the staff to buy seafood but ended up being overcharged or being cheated with the use of an unfair weighing scale or getting only a small serving. Reviewers expressed their unhappiness with their experience with the use of strong words such as "rip off" and "rude" in their reviews. They questioned whether they got a smaller serving of seafood than what they paid for. The prices of seafood were too high, not providing expected value for money to the reviewers.

In addition to the dishonesty of staff, tourists also experienced inappropriate attitudes and behaviors displayed by the staff, such as showing aggressiveness or unhappy faces when tourists declined to purchase the seafood after being insistently persuaded. Furthermore, there were notable concerns regarding sanitation and food safety that inhibited food consumption at the markets. Some comments expressed actual food poisoning experiences or fear of risking food poisoning. These were strong concerns to a number of tourists. As a result, not only indicating that they would never return to the night market, they also discouraged other tourists from visiting the place. This type of concern is illustrated by the following example reviews.

"After you've browsed 5 stalls, you've browsed them all. The focus is probably the food rather than the items on sale."

"You may pay much more expensive at the end because of they do lot of tricky things on weighing while you negotiate the price. And sure you will get angry faces from them. I will not go there anymore for seafood."

"I find the sanitation condition of the food section to be poor. Most vendors will not cover their food from flies. Although there were lots of varieties to choose from I hesitated to try any food stand that did not have their food covered." "Low standard food with international price. It is not cheaper and not better than eating in restaurants."

Discussion

This study aimed to analyze online reviews by international tourists to identify the dimensions of night market visit experiences. The findings reveal that night market experiences had two key dimensions: market experience and food experience. Food was the single most important factor in both dimensions as dining at night markets was found to be a major part of the market atmosphere and shopping experience, as well as central to the food experience itself. These findings are consistent with previous night market studies (Taecharungroj & Mathayomchan, 2019; Sun et al., 2012; Chang & Hsieh, 2006). The importance of variety of products on offer, service quality of the vendors, affordable prices, and atmosphere, confirms the results of the study by Chung et al. (2014).

Although the local and cultural aspects of the night market are recognized as an important part of the night market experience in the literature (Kuo et al., 2012; Chuang et al., 2014), this study has found the discussion of the cultural factors to be relatively minor in the online reviews. This finding leads to an important conclusion concerning the night market visit experiences. Factors that drive night market experience may vary based on the characteristics and the tourists' expectations of the highlights of a particular destination. Tourists may have high expectations of the seafood experience at beach destinations, which is what Phuket has to offer, whereas historical and cultural experiences may form an integral part of the night market experience at cultural destinations. As a result, the locality and cultural dimensions are not dominant in the visit experience of night markets in Phuket. Instead, enjoyment of seafood was clearly a major influence on tourist satisfaction at the night markets in Phuket. This result may also apply to other beach destinations.

The findings provide destination managers with insights relevant to the efforts in enhancing tourists' night market experiences. According to the LSVA, food is the single most important element affecting tourist satisfaction with the night market experiences, as it shows high levels of salience and valence. On the other hand, price appears to be most frequently mentioned but in a negative context. Further analysis into both extremely positive and extremely negative reviews suggests that the tourists were satisfied with variety, affordability, atmosphere, and tastiness of the food. Conversely, the tourists were dissatisfied with overpricing, dishonesty, and bad attitude, as well as sanitation and quality of seafood. Therefore, food experiences can have both positive and negative aspects. There are many areas of negativity that lead night market experiences to disappointment. In other words, this may become a dissatisfaction factor if not managed properly. The findings are consistent with previous research that has found similar problems with food consumption by tourists, such as Promsivapallop and Kannaovakun (2019), Poolklai (2015), Sun et al. (2012), and Yiamjanya and Wongleedee (2013).

As the night markets have rapidly increased in number and have become an important part of tourist destinations, it is vital that they are properly managed and controlled. Destination managers are therefore advised to improve tourists' night market experiences by improving the two key aspects of night market experiences-the market experience and the food experience. Although night markets offer local products and services to enhance international tourists' experiences, they need to be offered in a manner that complies with international standards and expectations. In addition, the variety of shops and food, atmosphere, and cleanliness are also keys to satisfaction, and thus should be integrated into the night market standards to be implemented to raise the quality of night markets across the destination.

Specifically, issues surrounding food raised in this study clearly signal that food and food service fall short of internationally acceptable levels. Therefore, food quality and service standards, including food hygiene and safety, pricing, and service staff attitudes, should be established at levels acceptable to international tourists. The existing *Clean Food Good Taste* and *Amazing Thailand Safety and Health Administration* (SHA) campaigns by the government that award certificates to restaurants to ensure cleanliness, food safety, and hygiene should be extended to include regulations on fair pricing and service staff attitudes. Visible price displays should be made compulsory for food and shop vendors to prevent overcharging problems. Furthermore, intercultural communication and service attitude training should also be provided as part of the night market quality standards. All street food vendors at night markets should be trained, certified, and monitored by the authorities to strictly maintain the standards. In addition, destination managers should promote the established standards and certification to boost night market visits and food consumption confidence among international tourists. These practices can solve current problems identified in the study and, as a consequence, raise satisfaction and quality of tourist visit experience levels at night markets, which will in turn increase customer loyalty.

Although this study has a large sample size and covers all the major night markets in Phuket, there are a number of limitations that should be borne in mind when interpreting the results. First, the sample included only English language reviews and discarded all non-English reviews. Therefore, the findings may not be applicable to non-English speaking tourists. In addition, the night markets selected for the study are located in Phuket, a world-famous beach destination in a developing country. The findings of the study may not fully generalize to other types of destinations, such as city destinations, cultural and historical destinations, emerging destinations, and destinations in the developed countries. Therefore, it would be interesting for future research to include non-English reviews and different types of tourist destinations and compare the results. Moreover, research into night market and street food standards from the points of view of all stakeholders involved should also be conducted. The night market quality standards that are established based on scientific research are more likely to meet international tourists' expectations and be practical to implement.

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References

- Adam, I. (2015). Backpackers' risk perceptions and risk reduction strategies in Ghana. *Tourism Management*, 49, 99-108. https://doi.org/10.1016/j.tourman.2015.02.016
- Amuquandoh, F. E. (2011). International tourists' concerns about traditional foods in Ghana. *Journal of Hospitality* and Tourism Management, 18(1), 1–9. https://doi. org/10.1375/jhtm.18.1.1
- Ayeh, J. K., Au, N., & Law, R. (2016). Investigating cross-national heterogeneity in the adoption of online hotel reviews. *International Journal of Hospitality Management*, 55, 142–153. https://doi.org/10.1016/j. ijhm.2016.04.003
- Bammel, G., & Burres-Bammel, L. L. (1992). Leisure and human behavior (2nd ed.). William C. Brown.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism Management*, 29(4), 609–623. https:// doi.org/10.1016/j.tourman.2008.01.005
- Cetin, G. (2020). Experience vs quality: Predicting satisfaction and loyalty in services. *The Service Industries Journal*, 40(15–16), 1–16. <u>https://doi.org/10</u> .1080/02642069.2020.1807005
- Cetin, G., Kizilirmak, I., & Balik, M. (2017). The superior destination experience. *Journal of Tourismology*, 3(2), 33–37. https://doi.org/<u>10.26650/JOT.2017.3.2.0004</u>
- Chang, J., & Hsieh, A. T. (2006). Leisure motives of eating out in night markets. *Journal of Business Research*, 59(12), 1276–1278. https://doi.org/10.1016/j. jbusres.2006.10.002
- Chang, J., Min, Y., & Lin, Y. H.-P., & Chiang, C. H. (2007). Profiling Japanese tourists visiting night markets in Taiwan. Journal of Quality Assurance in Hospitality & Tourism, 8(2), 25–44. https://doi.org/10.1300/ J162v08n02 02
- Chou, H. J. (2013). The effect of the visitor's consumption experience and tourism image on tourist satisfaction and revisit intention of Taiwan's night markets. *GSTF Journal on Business Review (GBR)*, 3(1), 129–134. https://doi.org/10.7603/s40706-013-0006-2
- Chuang, Y. F., Hwang, S. N., Wong, J. Y., & Chen, C. D. (2014). The attractiveness of tourist night markets in Taiwan–a supply-side view. *International Journal of Culture, Tourism and Hospitality Research*, 8(3), 333– 344. https://doi.org/10.1108/IJCTHR-09-2013-0067
- Correia, A., & Kozak, M. (2016). Tourists' shopping experiences at street markets: Cross-country research.

Tourism Management, 56, 85–95. https://doi. org/10.1016/j.tourman.2016.03.026

- C9 Hotelwors. (2020). *Robust arrivals in 2nd half and India growth rebalance Phuket tourism market*. Retrieved November 13, 2020, from https://www.c9hotelworks.com/wp-content/uploads/2020/02/phuket-market-update-2020-01.pdf
- Fang, B., Ye, Q., Kucukusta, D., & Law, R. (2016). Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics. *Tourism Management*, 52, 498–506. https://doi. org/10.1016/j.tourman.2015.07.018
- Feng, C. L., & Wu, C. T. (2016). Literary overview of night market in South East Asia: Local tourists' selection criteria for night market visitation in Taiwan. *International Journal of Organizational Innovation* (Online), 9(2), 105-117.
- Fuchs, G., & Reichel, A. (2011). An exploratory inquiry into destination risk perceptions and risk reduction strategies of first time vs. repeat visitors to a highly volatile destination. *Tourism Management*, 32(2), 266–276. https://doi.org/10.1016/j.tourman.2010.01.012
- Guo, Y., Barnes, S. J., & Jia, Q. (2017). Mining meaning from online ratings and reviews: Tourist satisfaction analysis using latent dirichlet allocation. *Tourism Management*, 59, 467–483. https://doi.org/10.1016/j. tourman.2016.09.009
- Hsieh, A. T., & Chang, J. (2006). Shopping and tourist night markets in Taiwan. *Tourism Management*, 27(1), 138–145. https://doi.org/10.1016/j.tourman.2004.06.017
- Huifeng, P., Ha, H. Y., & Lee, J. W. (2020). Perceived risks and restaurant visit intentions in China: Do online customer reviews matter? *Journal of Hospitality* and Tourism Management, 43, 179–189. https://doi. org/10.1016/j.jhtm.2020.04.005
- Hung, H. K., & Wu, C.-C. (2020). Impact of night markets on residents' quality of life. Social Behavior and Personality: An International Journal, 48(8). https:// doi.org/10.2224/sbp.8316
- Jia, S. S. (2020). Motivation and satisfaction of Chinese and U.S. tourists in restaurants: A cross-cultural text mining of online reviews. *Tourism Management*, 78, 104071. https://doi.org/10.1016/j.tourman.2019.104071
- Khorsand, R., Rafiee, M., & Kayvanfar, V. (2020). Insights into TripAdvisor's online reviews: The case of Tehran's hotels. *Tourism Management Perspectives*, 34. https:// doi.org/10.1016/j.tmp.2020.100673
- Kikuchi, A., & Ryan, C. (2007). Street markets as tourist attractions – Victoria Market, Auckland, New Zealand. *International Journal of Tourism Research*, 9(4), 297– 300. https://doi.org/10.1002/jtr.606
- Kirilenko, A. P., Stepchenkova, S. O., & Hernandez, J. M. (2019). Comparative clustering of destination attractions for different origin markets with network and spatial

analyses of online reviews. *Tourism Management*, 72, 400–410. https://doi.org/10.1016/j.tourman.2019.01.001

- Kladou, S., & Mavragani, E. (2015). Assessing destination image: An online marketing approach and the case of TripAdvisor. *Journal of Destination Marketing & Management*, 4(3), 187–193. https://doi.org/10.1016/j. jdmm.2015.04.003
- Kuo, C. T., Chung, M. L., & Kuo, F. C. (2012). To explore Taiwanese night markets culture and tourism experience and behaviour. *Procedia-Social and Behavioral Sciences*, 40, 435-440. doi.org/10.1016/j.sbspro.2012.03.212
- Lee, S. H., Chang, S. C., Hou, J. S., & Lin, C. H. (2008). Night market experience and image of temporary residents and foreign visitors. *International Journal* of Culture, Tourism and Hospitality Research, 2(3), 217–233. https://doi.org/10.1108/17506180810891591
- Lepp, A., & Gibson, H. (2003). Tourist roles, perceived risk and international tourism. *Annals of Tourism Research*, 30(3), 606–624. https://doi.org/10.1016/ S0160-7383(03)00024-0
- Liu, Y., Huang, K., Bao, J., & Chen, K. (2019). Listen to the voices from home: An analysis of Chinese tourists' sentiments regarding Australian destinations. *Tourism Management*, *71*, 337–347. https://doi.org/10.1016/j. tourman.2018.10.004
- Mak, A. H. (2017). Online destination image: Comparing national tourism organisation's and tourists' perspectives. *Tourism Management*, 60, 280–297. https://doi. org/10.1016/j.tourman.2016.12.012
- Padma, P., & Ahn, J. (2020). Guest satisfaction & dissatisfaction in luxury hotels: An application of big data. *International Journal of Hospitality Management*, 84. https://doi.org/10.1016/j.ijhm.2019.102318
- Poolklai, S. (2015). Food safety in Thailand: A case of international senior tourists. *Procedia-Social and Behavioral Sciences*, 197, 2120–2124. https://doi. org/10.1016/j.sbspro.2015.07.334
- Promsivapallop, P., & Kannaovakun, P. (2017). A comparative assessment of destination image, travel risk perceptions and travel intention by young travellers across three ASEAN countries: A study of German students. *Asia Pacific Journal of Tourism Research*, 22(6), 634–650. https://doi.org/10.1080/10941665.20 17.1308391
- Promsivapallop, P., & Kannaovakun, P. (2018). Travel risk dimensions, personal-related factors, and intention to visit a destination: A study of young educated German adults. *Asia Pacific Journal of Tourism Research*, 23(7), 639–655. https://doi.org/10.1080/10941665.2018.148 5718
- Promsivapallop, P., & Kannaovakun, P. (2019). Destination food image dimensions and their effects on food preference and consumption. *Journal of Destination*

Marketing & Management, 11, 89–100. https://doi. org/10.1016/j.jdmm.2018.12.003

- Promsivapallop, P., & Kannaovakun, P. (2020). Factors influencing tourists' destination food consumption and satisfaction: A cross-cultural analysis. *Asia-Pacific Social Science Review*, 20(2), 87–105.
- Promsivapallop, P., & Jarumaneerat, T. (2018). A crossnational comparative analysis of destination satisfaction and loyalty between Chinese and Australian independent tourists: A study of Phuket. *Asia-Pacific Social Science Review*, 17(3), 30–43.
- Ritchie, J. B., Tung, V. W. S., & Ritchie, R. J. (2011). Tourism experience management research. *International Journal of Contemporary Hospitality Management*, 23(4), 419–438.
- Rittichainuwat, B. N., & Chakraborty, G. (2009). Perceived travel risks regarding terrorism and disease: The case of Thailand. *Tourism Management*, 30(3), 410–418. https:// doi.org/10.1016/j.tourman.2008.08.001
- Sangpikul, A. (2018). The effects of travel experience dimensions on tourist satisfaction and destination loyalty: The case of an island destination. *International Journal of Culture, Tourism and Hospitality Research*, 12(1), 106– 123. https://doi.org/10.1108/IJCTHR-06-2017-0067
- Simeon, M. I., Buonincontri, P., Cinquegrani, F., & Martone, A. (2017). Exploring tourists' cultural experiences in Naples through online reviews. *Journal of Hospitality* and Tourism Technology, 8(2), 220–238. https://doi. org/10.1108/JHTT-10-2016-0067
- Sönmez, S. F., & Graefe, A. R. (1998). Influence of terrorism risk on foreign tourism decisions. *Annals of Tourism Research*, 25(1), 112–144. https://doi.org/10.1016/ S0160-7383(97)00072-8
- Sun, Y. M., Wang, S. T., & Huang, K. W. (2012). Hygiene knowledge and practices of night market food vendors in Tainan City, Taiwan. *Food Control*, 23(1), 159–164. https://doi.org/10.1016/j.foodcont.2011.07.003
- Svasti, P. (2016, May 12). Bangkok boasts numerous night markets, which are paradise for collectors of vintage artefacts. *Bangkok Post*. https://www.bangkokpost.com/ travel/969709/nocturnal-indulgence
- Taecharungroj, V., & Mathayomchan, B. (2019). Analysing TripAdvisor reviews of tourist attractions in Phuket, Thailand. *Tourism Management*, 75, 550–568. https:// doi.org/10.1016/j.tourman.2019.06.020
- Tsai, C. T. L. (2013). Culinary tourism and night markets in Taiwan. *International Journal of Business and Information*, 8(2), 247–266.
- Widjaja, D. C., Jokom, R., Kristanti, M., & Wijaya, S. (2020). Tourist behavioural intentions towards gastronomy destination: Evidence from international tourists in Indonesia. *Anatolia*, 31(3), 376–392. https:// doi.org/10.1080/13032917.2020.1732433

- Wong, C. U. I., & Qi, S. (2017). Tracking the evolution of a destination's image by text-mining online reviews-the case of Macau. *Tourism Management Perspectives*, 23, 19–29. https://doi.org/10.1016/j.tmp.2017.03.009
- Wongleedee, K. (2013). Food safety management: Concerns from EU tourists in Thailand. *International Scholarly* and Scientific Research & Innovation, 7(1), 94–97. https://doi.org/10.5281/zenodo.1055655
- Wu, H. C., Cheng, C. C., & Hsu, F. S. (2014). An assessment of visitors' behavioral intentions in the Taiwan tourist night market using a multilevel and hierarchical approach. *Tourism Analysis*, 19(2), 185–197. https://doi. org/10.3727/108354214X13963557455685
- Wu, M. Y., Wall, G., & Pearce, P. L. (2014). Shopping experiences: International tourists in Beijing's silk market. *Tourism Management*, 41, 96–106. https://doi. org/10.1016/j.tourman.2013.09.010

- Yasami, M., Promsivapallop, P., & Kannaovakun, P. (in press). Food image and loyalty intentions: Chinese tourists' destination food satisfaction. *Journal of China Tourism Research*. https://doi.org/10.1080/19388160.2 020.1784814
- Yiamjanya, S., & Wongleedee, K. (2013). Food safety and perceived risk: A case study of Khao San Road, Bangkok, Thailand. *International Journal of Biological*, *Biomolecular, Agricultural, Food and Biotechnological Engineering*, 7(1), 61–67. https://doi.org/10.5281/ zenodo.1071122