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## EXPECTATIONS OF DOMESTIC WOMEN BUSINESS TRAVELERS FROM HOTEL ACCOMMODATION: A PERSPECTIVE OF HOTEL MANAGERS

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### ABSTRACT

The objective of this paper is to ascertain the perception of hotel managers concerning the expectations of domestic women business travelers (DWBT) through qualitative analysis. This research was performed using synchronous focus group discussions (FGDs) virtually on Microsoft Teams. Participants belonged to the management of 5-star hotels in Delhi and Gurugram (cities in the National Capital Region, India). Transcripts were analyzed thematically using NVivo (Release 1.0) software. The authors have proposed seven core themes associated with female symbols of expectations looked forward to by DWBT from their hotel stay. These are guest room as the expectation of servicescape and design, hotel services as the expectation of comfort, amenities as the expectation of quality and value, hotel security as the expectation of assurance and trust, augmented specials being the expectation of personalization, selection triggers being the expectation of convenience and suitability, and customized meal requirements being the expectation of health and wellbeing. Hospitality marketers may apply strategic planning and decision-making to devise focused communication strategies to accomplish the expectations of this segment. To the best of our knowledge, this research is the first to break new ground to assess findings using synchronous FGDs for understanding the expectations of DWBT from the management perspective.

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## INTRODUCTION

Expectations are beliefs accompanying service provision, serving as a benchmark against which the actual service performance is assessed (Zeithaml et al., 2006). Hotel guests evaluate service quality based on their perceptions. Quality can be perceived by hotel guests as “fitness of use, performance, service, features, grade, warranty, price, reputation, degree of preference and, degree of excellence” (Tewari, 2009). Quality enhancement measures require managers to differentiate the expectations of guests’ segment-wise. Hotels falling short of guests’ expectations face a higher level of perceived risk with a decline in the perceived service quality (Wu et al., 2012).

The purpose of a hotel visit has a profound impact on the guest's expectations (Umasuthan et al., 2017). Leisure and business travelers, the two key market segments catered by hotels, differ remarkably in their expectations (Rohani et al., 2017). Hotel marketers need to comprehend the difference in guest expectations based on trip purpose. Consequently, positioning strategies need to be designed as per the needs of the target market. Guest satisfaction can be achieved by meeting the desired level of guest expectations which implies that the lesser the gap between management perceptions and guest expectations, the higher the satisfaction (Hussain, 2017).

Furthermore, the formation of hotel expectations varies according to gender (Ariffin & Maghzi, 2012). Cobanoglu *et al.* (2003) revealed significant differences in the attributes important for male and female business travelers. Hotel marketers need to design strategies from a gendered perspective as the micro-segment of women business travelers differs from the males in hotel selection criteria and expectation formation. An increase in the women-business travelers (Brownell, 2011) makes it vital for hotel managers to incorporate gender-based segmentation for strategizing services and promotions since women travelers are a lucrative market segment (Juwaheer, 2011).

A research report stated that 85% of the purchase decisions are taken by 47% of the women who pursue work-based travel (Garcia, 2014). The growth of a specific market segment leads to many novel developments within the hospitality sector. Identifying the exact needs of women business guests supports directing the hotel's resources and facilities in a channeled way to retain and attract them. Survival in this competitive hospitality market is possible only if the management's perception conforms to the expectations of this ever-growing segment of women.



Guest expectations and perception in the hotel industry is a majorly addressed research topic (Deng et al., 2008; Hussain & Khanna, 2019; Lockyer, 2002; Mohsin et al., 2019). Cetin and Walls (2016) affirmed the awareness possessed by the hotel managers for creating exceptional guest experiences concerning strategies designed for differentiation, generating positive word of mouth, and guest loyalty. Brownell (2011) re-confirmed that the perceptions of hotel managers concerning the preferences of women travelers are a vital link in the sequence of guest satisfaction. The responsibility for creating an environment preferred by women guests from their stay in a hotel remains on the managers, and incorporating their viewpoint is essential for creating an experiential stay for the women guests. Employee perception for fostering guest experience is equally crucial for effective brand management (King & Grace, 2008). However, scant research exists on the expectations of DWBT from the perception of hotel management, specifically in the milieu of the Indian hotel sector, using an online synchronous internet-based focus group. Hence, this study tries to address this research gap using a phenomenological approach through qualitative analysis. This research makes a meaningful contribution to the already existent literature by conveying the seven symbols of expectations for DWBT from their hotel accommodation. Performing synchronous focus groups with the management of five-star hotels located in Delhi and Gurugram has helped in accomplishing the same. Findings reveal the opinion of participants significant to DWBT for selecting hotel accommodation.

In the following sections of the research study, a brief literature review has been presented followed by the research design and methodology. The findings obtained have been discussed in view of the reviewed literature. Theoretical and practical implications, limitations, and future research ideas are presented in the final section of the study.

## LITERATURE REVIEW

### **Expectations of Women Business Guests from Hotel Accommodation**

Business travel empowers women (Newth, 2009), and being in a powerful state enhances the desire for exclusivity (Kim, 2018). A dramatic rise in the women business traveler segment points towards addressing the needs of this segment (Brownell, 2011). Gender also plays a predominant role in the emergence of expectations and the perceived importance of accommodation attributes specific for business travel (Meng & Uysal, 2008).

Features such as promotion, previous encounters, individual requirements, goodwill of service providers have a determining effect on guest expectations (Michel, 2001). The consumer decision-making process entails a three-step sequence where consumers identify the needs they want to be fulfilled, search for information, and finally evaluate all available alternatives (Blackwell et al., 2006). The veteran business travelers are seasoned professionals and assign significant value to hotel attributes. Effective communication of hotel services and products with preferences influences their decision-making process.

Well-maintained hotels are a prime factor for selection considered by the niche segment of businesswomen guests. Quality hotel accommodations offering comfort, safety (Hao & Har, 2014), and satisfaction to women business travelers are the core expectations forming the basis of hotel selection by women (Juwaheer, 2011). Moreover, female guests hailing from Asia place significance on the concept of women-only floors (Chan & Lam, 2013). Women expect reassurance from hotels concerning security features for a safe stay (Chan & Lam, 2013; Cobanoglu et al., 2003) and are willing to pay more for these enhanced features (Feickert et al., 2006). Provision of clean guestrooms with comfortable sleeping facilities (Gumaste, 2019; Liu et al., 2013) and hygienically maintained guest washrooms (Tsai et al., 2011) are of utmost importance for single women business travelers. Women also expect hotel staff to render services with a personal touch with an excellent variety of in-room facilities and amenities (Gumaste, 2019). Convenient transport and a strategic location helps a hotel attract female customers traveling (Liu et al., 2013).

Safety and security with cleanliness and hygiene are of utmost importance and form basic expectations for women business travelers (McCleary et al., 1994). Designing guestrooms to offer maximum relaxation by providing peaceful and quiet bedrooms with comfortable bedding and pillows can augment the experience of women guests traveling for work (Mao et al., 2018). Proficient front-office services (Chan & Wong, 2006) and behavior of hotel staff are equally significant in creating a positive experiential and satisfactory hotel stay (Sánchez-Franco et al., 2018). Trained employees sensitized towards the needs of women business guests and adept at handling their requests promptly with utmost care are a must for generating satisfaction.

Food has an equivalent impact on the hotel choice made by business travelers. Women on a domestic business trip expect hotels to provide healthy food and beverage options in the room service menu (Chen, 2019).

DWBT prefer maintaining a healthy lifestyle while traveling and seek quality meals from the hotels.

The literature shows that intangible aspects of service quality for creating an experiential stay (Sánchez-Franco et al., 2018), a prime hotel location (Masiero et al., 2019; Tsai et al., 2011), and a favorable price on offer (Kim et al., 2020; Lockyer, 2005a) act as key trigger points for selecting a hotel for a business stay. To limit the in-city travel time to the workplace, the proximity of a hotel plays an important role. Proximity is also associated with work productivity since the time saved from traveling can be directed towards the procurement of work goals.

Women are generous spenders who are willing to pay (Garcia, 2014) for the services delivered to them (Juwaheer, 2011). Apart from hotel features, positive emotional responses influence women's purchase and selection decisions (Brownell, 2011). The fact that women guests show greater dissatisfaction than male hotel guests (Salleh et al., 2016) can be attributed to their attention towards social and interpersonal interaction with hotel employees during moments of truth (Iacobucci & Ostrom, 1993). Extraordinary and memorable experiences for women travelers need to be emphasized upon by hotel staff. Satisfaction can be engendered through fulfilling and exceeding the expectations of domestic women business travelers. If the expectations of DWBT from hotels are not met adequately, this may impact their decision-making for future reservations. Consequently, the hotels may continue to delight the DWBT by creating personalized and luxurious experiences.

### **Perception of Hotel Managers for Women Business Guests**

Investigating employee perception has become increasingly important for managing a hotel brand (King & Grace, 2008; Tsang et al., 2011). The highly competitive nature of the hotel sector makes it crucial for the managers to be thoughtful towards the business facets significant to their guests for meeting their expectations. Intense competition and proliferation of niche market segments necessitate an astute understanding by hotel managers for taking accurate decisions regarding the apt channelization of their resources (Hu & Trivedi, 2020).

For successful delivery of service, the expectations of guests and perceptions of hotel management must be concurrent. The magnitude of the gap increases between the two when there is a lack of knowledge (Luk & Layton, 2002). Previous studies have identified gaps prevailing between the

perceptions of hotel employees and expectations of business guests (Chan & Lam, 2013; Lockyer, 2002). Hussain (2017) also established that there were differences between the hotel employee's perception of guest expectations and the guests' actual expectations from the 5-star deluxe hotels of Delhi. This challenge could be managed by training employees regularly. Meticulous planning and consideration by the hotel management is significant for monitoring the service quality through appropriate resource allocation. The purpose of hotel management is to provide guest satisfaction, which can be achieved when there is correct wisdom about guest perception regarding service quality (Hussain & Khanna, 2019). Cetin (2020) argued that experience is a better predictor of guest satisfaction and loyalty when compared to service quality as the quality of service provides a meager fulfillment of guest expectations. The author stated that even though service quality and experience are the chief antecedents vital for the success of an organization, an exceptional guest experience significantly impacts customer loyalty and satisfaction.

Perception of hotel managers regarding the preferences of women business travelers is a key component vital for satisfaction. Hoteliers need to amalgamate hotel facilities, services, and amenities for a holistic stay experience for the female business segment. This is essential for creating the ideal affective environment favored by women business guests. Managers need to work continuously for making the women business guests feel valued and cared for, by reinforcing the feeling of safety and comfort, and through embodying the feeling of empowerment.

Hotel managers need to ensure that service quality delivered through appropriately designed standards results in positive guest experiences (Blesic et al., 2011). Clarity regarding the tangible and intangible hotel features wished for by women travelers on domestic travel also need to be better understood as guests evaluate their hotel experience based on varied need-based aspects.

## **RESEARCH DESIGN AND METHODOLOGY**

A qualitative research design with a phenomenological approach has been implemented in the study as the authors probed perceptions, understandings, points of view, conduct, and reasoning of hotel managers. The phenomenological approach was considered for the study since the perceptions regarding the expectations of DWBT (a phenomenon) by the hotel managers have been investigated. According to Lester (1999, p. 1), "the purpose of the phenomenological approach is to illuminate the

specific, to identify phenomena through how they are perceived by the actors in a situation".

### **Sampling and Data Collection**

The National Integrated Database of Hospitality Industry in India (NIDHI); was accessed for collecting data related to the listed five-star hotels in Delhi and Gurugram as these are a part of the National Capital Region, possessing a higher inventory of branded hotels. Moreover, Gurugram is a prominent commercial and business center in Northern India (Khanna & Tyagi, 2019).

The five-star hotels in Delhi and Gurugram were selected using the total purposive sampling technique. Since the population of 5-star hotels in Delhi and Gurugram is forty-two, which is relatively small and is well defined, all the hotels were included in the research study. The authors contacted the human resource department of the hotels through e-mails. Only nine hotels responded to the e-mails sent and gave their consent for participation in the study.

Five-star hotels were selected for the study as luxury hotel employees are more aware of guest expectations (Hussain & Khanna, 2019). Also, employees of five-star hotels are more connected with their guests than the four-star hotel employees (Seal et al., 2018). The objective of the study was explained to the human resource department of these hotels. Thereafter, the researchers were provided with the prospective participants' details. Using non-probability judgmental sampling, the researchers shortlisted forty-six participants based on certain qualities (Zikmund, 2003). The participants holding management positions in operations departments of Front Office, Housekeeping, Food and Beverage Services, and Food Production were chosen and approached.

Out of the forty-six, senior industry personnel contacted through e-mails, fifteen participants gave consent to participate in the virtual synchronous focus group discussions due to challenges of responsibility faced during adverse situations put forth by the pandemic for the hospitality sector. Keeping the Covid-19 pandemic situation in mind, online synchronous focus group discussion was considered to be safe. Virtual FGDs are time-saving and cost-efficient since participants can log in at a similar period from the convenience of their residence or place of work (Hennink, 2014). The conceptual generation of ideas in online FGDs is equivalent to the traditional focus groups for hospitality research. Also, the

quality of ideas in terms of feasibility and novelty are similar (Richard et al., 2018).

The synchronous FGD was pursued with the help of Microsoft Teams by using text and audio-visual modes, unlike the asynchronous focus groups that are text-based only (Hinkes, 2021). Most hospitality professionals were already familiar with the software as it is user-friendly and is used extensively for online sessions. This qualitative stance of research was the most suited as critical insights could be generated from the same.

The questions were designed based on current literature available on women business travelers, their expectations, and perceptions of hotel managers. Gathering responses through open-ended questions enhances the flexibility of the participants for sharing their experiences and perceptions (Maguth & Yamaguchi, 2020). Facilitating the analysis necessitated informing the respondents that there were no right or wrong answers, but different points of view (McIntosh & Siggs, 2005). The focus group questions put forth during the discussion were classified under the following related topics:

- i. Importance of the women business traveler segment to the hotels, the reasons behind targeting this particular market segment, and the benefits gained.
- ii. The nature of expectations of DWBT from the hotels during their stay from the perception of the managers for all the four core hotel departments- housekeeping, front office, food & beverage service, and food production; any department-specific requirements or any requests put forth by DWBT during the period of stay.
- iii. Special provisions made available by the hotels keeping in mind the needs of DWBT along with exclusively designed standards.
- iv. Factors responsible for the specific expectations of DWBT and the difference between their requirements from the other guests staying at the hotel.

The participants were informed beforehand, that the responses obtained would be kept anonymous and utilized only for academic research purpose and that they need not answer any particular question and were free to leave the session at any time.



### **Administration of Focus Groups**

The number of group sessions, for FGDs, has been a contradictory topic as there is no thumb rule for the same. Time, resources, the interest of the researcher, and the features of the study are a few other considerations for planning group meetings (Kitzinger, 1994). Three FGDs were conducted with four participants in each discussion. Three members could not join at the prescribed time because of unexpected professional accountabilities. Due to the pandemic, hotels operated with severe staff shortages, therefore three meetings were considered sufficient for the study. Synchronous FGDs conducted using the audio-visual mode should appropriately have 4 to 6 participants to prevent overcrowding of the screen in view (Lobe, 2017).

The FGDs lasted for approximately an hour and fifteen minutes and were led by the same moderator. Comprehensible focus groups last between 1 to 2 hours (Morgan, 1997).

### **Focus Group Data Analysis**

The meetings conducted were recorded and downloaded using Microsoft Teams after obtaining prior consent from the respective participants. The downloaded recordings were transliterated verbatim within a single day after the conduct of the FGDs by the authors. Transcripts produced in word format from the downloaded recordings were imported and analyzed using Computer Assisted Qualitative Data Analysis Software (CAQDAS) NVivo (Release 1.0). The authors created nodes (Richards, 2005) for the hotel attributes defined by all the participants. The nodes were then linked with sources individually to identify the emerging patterns and concepts.

Thematic analysis resultant from the discussion of the industry practitioners leads to the generation of several key themes. The findings generated were validated through comparison with the previously established literature.

### **Sample Characteristics**

Table 1 represents a summary of the participant profiles representing the four core departments of five-star hotels. All participants belonged to the management level in the hotels and had regular interactions with the guests.

Table 1. *Participants' profiles*

Participant Codes & Gender	Organization	Department	Designation	Star Category & Region	Age of Participants	Total Work Experience (In years)
P1 (M)	Hospitality-Hotels	Food and Beverage	F & B Director	5 Star / New Delhi	37	16
P2 (M)	Hospitality-Hotels	Housekeeping	Director of Services	5 Star / New Delhi	38	17
P3 (F)	Hospitality-Hotels	Front Office	Guest Services Manager	5 Star / New Delhi	38	15
P4 (M)	Hospitality-Hotels	Food and Beverage Production	Executive Pastry Chef	5 Star / New Delhi	43	22
P5 (M)	Hospitality-Hotels	Food and Beverage	F & B Manager	5 Star / New Delhi	37	16
P6 (M)	Hospitality-Hotels	Housekeeping	Executive Housekeeper	5 Star / Gurugram	31	11
P7 (M)	Hospitality-Hotels	Front Office	Front Office Manager	5 Star / New Delhi	36	12
P8 (M)	Hospitality-Hotels	Food and Beverage Production	Junior Sous Chef	5 Star / Gurugram	30	7
P9 (F)	Hospitality-Hotels	Front Office	Assistant Front Office Manager	5 Star / Gurugram	25	3
P10 (F)	Hospitality-Hotels	Housekeeping	Housekeeping Manager	5 Star / Gurugram	26	3
P11 (F)	Hospitality-Hotels	Food and Beverage	Assistant Coffee Shop Manager	5 Star / New Delhi	29	5
P12(F)	Hospitality-Hotels	Front Office	Duty Manager	5 Star / Gurugram	26	3

## FINDINGS AND DISCUSSION

For a resourceful and rigorous interpretation of findings, data was analyzed using NVivo (Release1.0) software. The synchronous FGD resulted in a thirty-one-page transcript which was checked for accurateness and imported into the NVivo software for thematic analysis. Even though NVivo aided the researchers in the coding process, the authors manually coded the data for ensuring accuracy and possessing a better understanding (Auld et al., 2007). The expectations of DWBT perceived by managers were highlighted and color-coded in the transcript followed by categorizing them under different dimensions in the manual coding process.

### Thematic Analysis

Thematic analysis can be defined as an approach, for the identification, analysis, and creation of thematic patterns within the data. The process permits the creation of preliminary and initial coding groups (Braun & Clarke, 2006). Identification of recurring themes from the data generates valuable and methodical findings. The open-ended questions designed for the focus group allowed participants to talk about a varied and comprehensive range of dimensions related to the expectations of women business travelers from their stay at a five-star hotel. The researchers



reviewed the coded data to determine if a logical pattern was recognizable (Thyme et al., 2013). Common features, patterns, and sub-themes were extracted and grouped under the most significant clusters (Creswell, 2007). The common features and patterns were finally organized according to the literature reviewed (Bryman, 2012) and the core themes extracted from the transliterated data. A total of 79 dimensions (presented in Table 2) were identified from the transcripts which were grouped under seven major themes (presented in Table 3). Findings of the study are also presented with augmentation and quotations from the responses received from managers during the FGD (inductive analysis). These results were also corroborated by theory and discussions from the existent literature (deductive analysis) (Gummesson, 2000).

The businesswomen know that the services rendered to them are symbols of recognition that help fulfill their needs (Urry, 1991). These symbols are consumed, and the providers of these symbols must ensure the assurance ingrained in the symbol. The authors have categorized every theme as a female symbol of expectation. These seven symbols of expectations (Table 3) are what DWBT look forward to, from their accommodation at five-star hotels and play a pivotal role in their stay.

Table 2. *Sub-themes and codes*

Theme: Guest Room	Theme: Hotel Services	Theme: Amenities	Theme: Hotel Security
<p><b>Codes:</b>  <b>Guestroom Design and Ambiance</b>                      Guestroom décor                      Guestroom design                      Good architecture and design                      Lighting in the guestroom                      Proper working space                      Writing table and comfortable chair.                      Guestroom bed is the focal point.                      Spacious guestrooms.                      Design of guest bathroom                      Room furnishing.                      Guestroom elegance                      Luxurious room.  <b>Theme based Guestrooms</b>                      Thematic room for women business travelers                      Theme based rooms.  <b>Guestroom Comfort</b>                      Business travelers get tired and need to rest in the room.                      Comfort in guestrooms is equally important.                      Warm and inviting.                      Comfortable furniture                      Comfortable bed.  <b>Room Type</b>                      Room preference</p>	<p><b>Codes:</b>  <b>Laundry Service</b>                      Ironing of their business attire.                      Laundry services required for the day.  <b>Butler Service</b>                      Allocating a female butler.                      Butler service for personally taking care.                      Female butler is there to greet them on arrival and check any special requirements.  <b>Turndown Service</b>                      Specific time of turndown service.                      Evening service in guestrooms.  <b>Room Service</b>                      Meal plans are taken care in orders placed through in room dining.                      Pre order given to the butler for in room dining.  <b>Front Office Service</b>                      Express check in goes without saying.                      High speed internet service.  <b>Transport Service</b>                      Transportation is also carefully planned.                      The way we provide drops and transport facility.                      Organization of airport pick up                      Request for the car so we give emergency numbers of the hotel.</p>	<p><b>Codes:</b>  <b>Welcome Amenities</b>                      Family pictures as welcome amenities.                      Dark chocolate and chocolate flowers.                      Chocolate frames with the picture of guest.  <b>Special Amenities</b>                      Small snack baskets using organic food ingredients.                      Small gestures like placing gold fish in the guestroom.                      Manicure sets.                      Special vanity kits for women travelers having an under-eye cream, skin toner and moisturizer.                      Take away kit as a small gesture.  <b>Regular Amenities</b>                      Single lady kits placed in the guest washrooms.                      A mini travelers kit which has a small bottle of lotion and a small bottle of skin toner.                      Silk bathrobes and scented candles.  <b>Brand Choice</b>                      Specific choice in terms of brands.</p>	<p><b>Codes:</b>  <b>Room Allocation</b>                      Room shouldn't be blocked close to the elevator.                      Proper room allocation.                      Being allocated rooms near to the elevators and not just in front of them.                      Strategic room location.                      Room location has to be kept in mind.  <b>Safety Features</b>                      Call screening                      Video cameras installed on every room door, also covering the entire hotel premises                      Doorbell camera                      Video doorbells                      Protective environment with safety protocols.                      Separate floor for women.                      Safety in the guestroom.</p>

Theme: Augmented Specials	Theme: Selection Triggers	Theme: Customized Meal Requirements	
<b>Codes:</b>  <b>Personalized Restaurant Service</b> Personalized services in the restaurant. Female butler personally taking care of the table. Delightful meal at the pool side. Outdoor seating as per their choice Nice table location which gives a good view. <b>Personalized Food Service</b> Chef on call. Special master class. Customizing the menu according to dietary plans. <b>Personalized Special Service</b> Personal preferences before arrival.	<b>Codes:</b> <b>Location</b> Hotel location matters to women. Shopping centers near the hotel. <b>Price</b> Pay premium price for comfort. Price inelastic. Flexible as far as hotel prices are concerned. Money and high price are not so much of a concern to business travelers.	<b>Codes:</b> <b>Special Food Preferences</b> Breakfast specials as a part of our menu. Special salads. Light salads. Gluten free food. Sugar free food items.	

Table 3. Core Themes Based on Management Perceptions

Themes	Sub-Theme	References	Female symbols of Expectations
Guest room	Guestroom Design and Ambiance, Theme Based Guest room, Guest room Comfort, Room type	20	Expectation of Servicescape and Design
Hotel Services	Laundry Service, Butler service, Turndown service Room Service, Front Office Service, Transport service	15	Expectation of Comfort
Amenities	Welcome, Regular, Special, Amenities, Brand Choice	12	Expectation of Quality and Value
Hotel Security	Room Allocation, Safety Features	12	Expectation of Assurance and Trust
Augmented Specials	Personalized Restaurant Service, Personalized Food Service, Personalized Special Service	9	Expectation of Personalization
Selection Triggers	Location and Price	6	Expectation of Convenience and Suitability
Customized Meal Requirements	Special Food Preferences	5	Expectation of Health and Well-being.

Hotel *guest rooms* emerged as a key theme from the management perspective concerning the expectations of DWBT. The guestroom theme (Table 3) comprising of the guestroom design and ambiance, theme, comfort, and room type depicts the female symbol of expectation as the "Expectation of servicescape and design." Since business trips are stressful, guestroom features that enhance relaxation are significant for business travelers. A well-designed guestroom encompasses a holistic blend of the components and standards of design. A true expression of a hotel's service spirit is conveyed through a feel-good, aesthetically appealing, and comfortable décor. The ambiance and décor act as physical evidence as

signs offering judgment concerning the care and thoughtfulness of a hotel for the DWBT. The findings are concurrent with previous findings which cited those well-designed aesthetic aspects create lasting emotional responses amongst hotel guests (Kim & Perdue, 2013; Lockwood & Pyun, 2019; Walls et al., 2011). Comfortable and elegant guestrooms are a part of the core service element for business travelers (Babakus et al., 2005; Choi & Chu, 2001; Chung et al., 2004; Mao et al., 2018; Ogle, 2009; Wang et al., 2020). Feelings of comfort are valued by women business travelers (Brownell, 2011), thus retaining the guestrooms as an essence for hotel selection. In this regard P2 specifically mentioned:

*"We have thematic guestrooms for the domestic women business travelers. Guestroom design and décor have a long-lasting impact on the satisfaction of women business guests. We take care of the same in our hotel."*

The theme- *hotel services* (Table 3), comprising laundry, butler, turndown, room, front office, and transport services depicts the female symbol of expectation as "Expectation of comfort." Services offered by luxury hotels are valued by women guests while impacting their hotel selection decision as well (Ariffin & Maghzi, 2012; Hao & Har, 2014). The study reveals that DWBT construe the quality of services and facilities offered as the hotel's concern for their comfort and well-being. Moreover, the concern is also judged by DWBT from the variety of hotel offerings to accommodate their unique requirements. These services provided by the hotels add to the feeling of comfort by taking away the pain of "making an effort" by women guests. These services are symbolized as expectations because the guest is taken care of, is understood, and valued. P9 voiced a similar opinion on the services provided to DWBT:

*"People traveling away from home staying in hotels for business tend to feel lonely and expect the hotel to look after them. Women business travelers are just looking for an assurance that they are being valued and cared for."*

The *amenities* theme (Table 3) comprising of welcome, regular, and special amenities, with the brand choice depicts the female symbol of expectation as "Expectation of quality and value." Women travelers always value the spectrum of amenities offered to them during their stay (Howell et al., 1993; Juwaheer, 2011; Marzuki et al., 2012; Khoo-Lattimore et al., 2018). Branded personal care products given by luxury hotels are reminisced by the women guests (Heo & Hyun, 2015). The presentation, packaging, and placement of amenities are vital to enrich the tangible aspects by appealing to women guests' feeling of aesthetics. Being thoughtful towards the provision of in-room amenities amalgamated with

the guestroom design helps in reducing stress while enhancing the relaxation of DWBT by offering sensory enjoyment and pleasure. Cetin and Walls (2016) mentioned that the décor, ambiance, amenities, interaction with professional and attentive hotel staff are the facets imperative for creating a positive guest experience in a luxury hotel. About the importance of amenities, P5 stated:

*"I think the smallest things like the amenities have a big role to play once women are alone. They can help in revitalizing their mood."*

The *Hotel Security* theme (Table 3) comprising of room allocation and safety features signifies the female symbol of expectation as "Expectation of assurance and trust." Feeling safe is a fundamental emotion when women travel independently (Brownell, 2011; Wilson & Little, 2008). Regardless of the purpose of travel, business travelers place a lot of emphasis on hotel safety (McCleary et al., 1994). Previous studies have accentuated the importance of hotel safety and security features for women travelers (Feickert et al., 2006; Hao & Har, 2014).

Having a safe and secure environment without any worry of threats throughout the stay is an expectation that needs to be acknowledged. Equally vital is to lessen the unease felt by DWBT while using the public area facilities like the bar or restaurant. P12 poured out her thoughts regarding the safety of women business travelers by mentioning:

*"When it comes to women business travelers, the stakes are higher. If women business travelers start choosing a particular hotel, it will showcase their trust in terms of safety and security".*

P4 put forth the efforts taken by hoteliers to ensure the safety of DWBT:

*"We have video cameras which are installed on every room door along with the doorbell so that there is a two-way communication before they open the door. In case of an emergency, we have the speed dial numbers of the duty managers available on the landline of the guestrooms".*

P7 supported his fellow participant by stating:

*"Safety and security are important, and we have special provisions for women business travelers. Allocation of rooms is done properly; room location has to be kept in mind with express check-in and check-out facility. Also, video cameras are covering the entire hotel premises."*

Generating satisfaction amongst DWBT through memorable experiences is significant for the hospitality industry. Therefore, the fifth

identifiable theme has been cited as augmented specials. The *Augmented Specials* theme (Table 3) comprising of personalized restaurant service, personalized food service, and personalized special service symbolize the expectations of women as "Expectation of personalization." Devoting attention to the personal preferences of making arrangements that cater to the needs and desires of the women business travelers before her arrival augment the feeling of being acknowledged as a valued guest by the hotel. Making the business trip more stimulating through the involvement of women business guests in stress-relieving activities like yoga, aerobics, and cookery classes with master chefs can be used as a means to connect and develop bonds with them. The findings are in accord with the work of Cetin and Walls (2016) where the authors concluded that exceeding guest expectations are crucial for guest satisfaction and loyalty. Pragmatic and first-hand experiences through guest involvement can help hotels in developing an emotional connection with the women business guests. P3 detailed the significance of delivering personalized services through female staff:

*"We prefer female staff for handling women business travelers to give them a sense of comfort and a sense of belonging to that place. The moment they come out of the flight and see a woman chauffeur standing for them, it's like a comfort factor for them. Then in our hotel, we also arrange women-only staff for the check-in, butler service, in-room dining, and housekeeping".*

Grounded on the responses received, *selection triggers* formed the sixth theme encompassing hotel location and price. The selection triggers (Table 3) depict a symbol of expectation for women as "Expectation of Convenience & Suitability." Convenient transport service and an advanced location can help a hotel attract female customers traveling (Liu et al., 2013). Price is an important factor to consider since it has a complex association with accommodation selection because hotel selection based on the preferred location may mean paying a higher price at times (Baruca & Civre, 2012; Lockyer, 2005b). Carefully planned transportation services for DWBT to their workplace where female executives can accompany them or especially available transport by female chauffeurs can augment the feeling of being taken care of by the hotels. Similarly, offering shuttle bus services to various recreational and shopping centers or city center locations can provide a competitive edge to hotels. DWBT making frequent business trips to similar destinations must feel at ease with the hotel employees and environment to select the same hotel for their stay.

The *customized meal requirements* theme incorporating special food preferences depict the symbol of expectation for women as "Expectation of

health and well-being” since nutritious and wholesome food is important for women business travelers. These findings are similar to the findings of previous researchers (Chen, 2019; Khoo-Lattimore et al., 2018). Menu designing and planning for restaurants and room service, healthy and light menu options, the taste of food, efficient service by skilled staff, and value for money are a few expectations of women business travelers. Adding on a surprise organic food preparation, customized as per the taste and preference when room service is selected, can add to an element of surprise for the women business guest. Restaurant dining experiences for DWBT can be enhanced by offering flexibility in portion sizes of food items so that the women business guests can taste various dishes. P7 shared his thoughts by stating:

*“Guests are having special dietary requirements like the keto or paleo diet so they prefer having specific meals according to the particular diet plan they are having. Therefore, to follow that we ensure that the ingredients used are mentioned prior to the preparation of food.”*

## CONCLUSION

Qualitative studies using online data collections have gained popularity in recent times where the generalizability of findings is not the key motive. As stated by Austin and Sutton (2014, p. 436), "Practitioners do not seek to generalize their findings to a wider population. Rather, they attempt to find examples of behavior, to clarify the thoughts and feelings of study participants, and to interpret participants' experiences of the phenomena of interest, to find explanations for human behavior in a given context".

The findings demonstrated by this research are in agreement with the factors that are rated important for business guests (Baruca & Civre, 2012; Hao & Har, 2014; Khoo-Lattimore et al. 2018; Kim et al., 2019; Lockyer, 2005a; Mao et al., 2018; Wang et al., 2020). The study symbolizes these factors with expectations for domestic women business travelers as the expectation of servicescape and design, the expectation of comfort, the expectation of quality and value, the expectation of assurance and trust, the expectation of personalization, expectation of convenience, and suitability and, expectation of health and well-being. Defining these expectations is important because satisfaction and repeat purchase intention can be achieved through fulfilling the needs and desires of guests.

This exploratory research is the first to break new ground to assess findings using synchronous FGDs for understanding expectations of



women business travelers from the management perspective. Through a relatively unmapped research method for understanding hotel management perceptions using the synchronous FGDs technique, this research assists in making a skillful effort to the existing hospitality literature. Lastly, the focus of the study pertains to the context of the Indian hotel industry, making it a crucial and distinguishing aspect whereas the theoretical and managerial contribution should be assessed as an essential input in the country's milieu.

### **Theoretical Implications**

This study adds to the prevailing literature of the perception of hotel managers on expectations of female business travelers. By building on expectancy disconfirmation theory (Oliver, 1980) the study establishes DWBTs' expectations work as a forecast of hotels' future performance by anticipating and incorporating their needs. The study concurs with Oliver's (1980) theory as hotel managers who participated in the FGDs reiterated that services, experiences, and products fulfilling high expectations are predicted to generate more satisfaction than services, experiences, and products meeting lower expectations. The study puts forth the high quality of service and guest experiences since the hotel managers tend to overvalue guests' expectations (Radder, 2006). Such discussions of high quality associated with service and guest experiences will not only elevate the standard of hotel practices but also add to the theory for superior learning and development for both industry and academia.

### **Practical Implications**

With a constant rise in the number of women who travel for work (Brownell, 2011), hotels need to be familiar with their complex decision-making process related to hotel selection. Enhancing the hotel offerings to create an experiential stay should align with the concerns of DWBT. Cetin et al. (2014) demonstrated that creating value from the customer perspective is essential for organizations aspiring to craft guest experiences. Hotel managers should focus on creating exceptional experiences for the guests through an appropriate amalgamation of organizational resources.

Hotels should be a sort of home office for the DWBT during their trip. Strengthening aspects that augment the sense of comfort, well-being, and relaxation which help the women guests adapt to the new hotel environment without unease should be focused upon. The concern of care should be visible and communicated through the tangible aspects and

intangible service processes of a hotel. Functional, sensory, and result-oriented processes should be integrated to craft memorable experiences for the DWBT.

Concerning hotel attributes, the factor guestroom concerning comfort is of utmost significance. Since women face travel-related stress associated with maintaining a work-life balance (Moser, 2021), hotels should emphasize engendering feelings of comfort during their stay. Guestroom design and ambiance should be given utmost attention. Regular updates, maintenance and renovation should be undertaken and a budget should be allocated for the same. Improvements and innovations in the guestroom design through a careful blend and contrast of interiors for creating the ambiance of theme-based guestrooms can help in enhancing the sense of relaxation. Proper placement and planning of lighting sources can be taken care of through easily accessible switches while designing the guestroom. A well-planned work setup offering convenience through prominently positioned electricity sockets, work-light, and a comfortable chair add an essence to the rooms allocated to DWBT. Hotels can even create a relaxation den in the guestroom by offering comfortable couches, rocking chairs, or arm-chairs where women can retreat after a hectic day of work. Spacious guestrooms with large windows with a good view, provision of extra shelves in the bathroom for keeping makeup, accessories, and clothes are a few functional aspects that can be incorporated in the guestroom design and layout.

Experience-oriented services should be designed to fulfill the functional value while evoking an affective response amongst the DWBT. Hotels can offer personal women staff assistant services to DWBT during their business trips. These female assistants can help with business center facilities, getting the attire ready for meetings, assist in tailor services in case needed, or even interact with chefs/restaurant staff on behalf of the women business guests for the provision of special seating requirements during meals. Customized services designed to create "moments of wow" for delivering a seamless experience to the women business guests can offer differentiation to hotels. Clothing items can be readied and kept in the guestroom for women business travelers before they leave for meetings. Replenishment of the minibar fridge in the guestroom with the women guests' favorite drinks keeping in mind the health-conscious aspect is another custom-made service that can be offered by hotels.

The amenities should be decided upon with utmost care and regular feedback on the same should be taken. The quality, brand, packaging and



placement have an enormous appeal for DWBT. Focusing on the aesthetic aspect of the in-room amenities is a factor of key significance especially for the DWBT. Hotels can go the extra mile by providing a premium tea/coffee collection, full-length mirrors, two-sided magnifying mirrors in the bathroom, hair straighteners, silk bathrobes, plush bath linen to make them feel 'cared for' during their stay. Welcome messages on behalf of the hotel, personalized messages signed by the housekeeper during the turndown service can work as a warranty for service quality.

Safety and security are always a matter of concern for women travelers. Assuring the DWBT of safety and security by incorporating high vigilance and care for privacy during check-in and check-out, screening of calls and visitors, extra security on floors with cameras, alarms in the guestroom and the bathroom, elevator access to the floors through key-cards, interactive doorbells would help convey the message of care to the DWBT.

Women nowadays are fitness enthusiasts, also believing in natural remedies and mind relaxation (Lee et al., 2019). Introducing planned yoga and aerobic sessions are great means for the DWBT to relax and rejuvenate. Light and low fat/low-calorie food can be packed and offered to the women guests on the go. Cocktail services provided to DWBT in the comfort of their rooms can be another added feature.

Incorporation of local art, design, and architecture can be more fulfilling experientially for DWBT. Hoteliers need to enhance the practical aspect of the facilities in sync with the interior design for comfort, convenience, accessibility, and ease of use for the DWBT. Minimizing effort and increasing user-friendliness enhances the guest's comfort.

### **Limitations and Future Research**

The study is not free from limitations while providing directions for future research. The researchers have adopted the qualitative analysis of data gathered through synchronous focus groups conducted for the management personnel of the hotel industry; generalization of results may not be justifiable. A lot of technical issues were faced by the participants while the FGDs were conducted. The study has explored a single side of the coin by accumulating views of hotel managers only. Another limitation of the study is that these perceptions pertain to the Indian context, where the focus group participants belonged to the five-star hotels located in Delhi and Gurugram, and the discussion pertained to only one market segment

of hotel guests. Replicating the study in different cultural and geographical settings for different guest segments may generate newer findings while revealing different themes. Further empirical investigations with a larger sample size, based on rigorous data analysis exploring the sub-themes and core themes, would be beneficial where management perceptions and the expectations of DWBT can be evaluated and explored to narrow down the prevalent gaps.

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## ONLINE TRAVEL AGENCIES AND THEIR ROLE IN THE TOURISM INDUSTRY

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### ABSTRACT

This article aims to present the evolution of online travel agencies, the main themes, authors, and methodologies, through a systematized review. The analysis has focused on 61 papers published from 2009 until 2020. The research was limited by the journal ranking in the subject category tourism, leisure and hospitality management in the Scimago Journal and Country Rank. Field research is the most frequent in studies in the area. However, the interest in experiments and content analysis grows, using the content generated by customers in the online travel agencies. This study helps to collaborate in the authors' decision-making regarding the methodology to be used and which authors are being negotiated in future research. The results showed how the theme has evolved, changes in approaches, the way online travel agencies report to their partners (often in a conflictual way) and customers, pointing out new trends to be studied. There was no literature review about online travel agencies published in the journals used for this research, to the best of our knowledge. Cover many years and expand the search to other academic journals is our suggestion for future research.

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### INTRODUCTION

The first Online Travel Agencies (OTA) emerged at the end of the last century and became an important asset of the distribution channel in the travel industry in the last two decades. They were the first to make online sales and invest heavily in technology, promotions, online and offline

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advertisements (Mellinas, 2019). In the beginning, the main focus of OTAs was the airline companies. However, due to the low margins and crisis in the airline industry, lately, commissioning has decreased, and the focus has shifted to other touristic services, such as hotel bookings (Dutta et al., 2017).

The rapid expansion of OTAs around the world, their growing popularity and intense market competition, has been reflected in the growing interest in academic research on consumer behavior using platforms (Talwar et al., 2020). The first OTAs to appear on the market were Expedia in 1996 in the United States by Microsoft and in 1997 Priceline in Europe (Barthel & Perret, 2015).

OTAs arose to expand the distribution channels of hotels and increase business opportunities (Lv et al., 2020), thus playing a critical role in the distribution of tourism products, facilitating the reach of potential customers from all over the world (Park et al., 2019). There is an exchange between these partners, while the hotel feeds OTAs websites with information and OTAs attracts customers to hotels (Chang et al., 2019). However, in this relationship between hotels and OTAs, as high commission rates charged by the platforms, can reduce the profit margins of the hotels (Lv et al., 2020). In addition, in a multichannel environment, hotels and OTAs also compete with each other. (Chang et al., 2019).

Many OTAs on the market attract their customers by selling various tourist products, in addition to accommodation, such as airfare and car rental, as they seek to offer the full service, where customers can make a complete purchase in one channel (Ku & Fan, 2009). By offering several options of hotel prices, the OTAs end up being the best alternative for casual travelers or those not used to the destination, as they are not loyal to a specific brand (Toh et al., 2011). For this reason, there is a great need for hotels, especially small ones, to be available in OTAs for greater visibility when searching by customers (Toh et al., 2011). The reasons for the expansion of online reservations and OTA include: (1) the intangibility factor of services, mostly hotels, since there is no need for physical verification of the product, as the detailed description of the items is enough to make the purchase decision; (2) the expectation that customers find lower prices on the Internet due to lower distribution costs (Toh et al., 2011); and (3) the direct connection to the seller, without the need for intermediaries (Toh et al., 2011).

Tourists often share their travel experiences in OTAs and thus influence others and provide information for those are seeking (Hou et al., 2020). According to Verma et al. (2012, p.184), *when a hotel has negative*



*comments, we found that the respondents gave a probability of about 2 out of 5 that they'd book that hotel. When they see a positive review, they estimated a likelihood of 3.5 to 4 out of 5 that they'd book that hotel.* Different contexts obtained in the academic area about OTAs, as they form partnerships with various branches of tourism and online reviews are a secondary source of information that can be easily accessed for those seeking a greater understanding of consumer behavior. This research is justified by the scarcity of systematic reviews addressing OTAs, to improve knowledge in this type of company, which in addition to the tourism area, is also part of the technology area and is in constant innovation, in addition to its importance for the tourism industry.

OTAs have been approached from different points of view in the literature, therefore, there is a large volume of research addressing the theme. Therefore, it was chosen by the researchers used only as the first 20 journals in the Scimago classification. The SCImago Journal Rank (SJR indicator) is updated based on the number of citations received by a journal. High values indicate the importance and brand of the journal. In this case, we consider a reliable indicator for choosing the journals used for this research.

This article aims to present the evolution of OTAs, their positioning in the market and how they relate to customers, partners, and suppliers. Through a systematized review, the main themes mentioned in the existing literature on OTAs are presented. We sought to present the most used research methodologies; the topics being covered in the research; and more prolific countries and authors. The results showed the way OTAs relate to their partners, how the theme has evolved over the past 10 years and changes in approaches, pointing out new trends to be studied.

In this paper, we discuss the evolution of online travel agencies. The section 2 presents the methodology followed for the research. In Section 3, we introduce the reader to the data driven OTAs sector and presents the results of the systematized literature review. Finally, Section 4 discuss the findings, the main conclusions and indicate some directions for future work.

## RESEARCH DESIGN

This research was focused on studying papers published in journals of acknowledged prestige in the fields of Hospitality and Tourism (Gonzalez et al., 2019). The analysis has focused on 61 papers published between 2009

and 2020. The research was limited by the journal ranking in the subject category Tourism, Leisure and Hospitality Management from the Scimago Journal and Country Rank, following the criteria defined by Gonzalez et al. (2019) in which the study was based on articles published in periodicals of recognized prestige in the field of tourism and hospitality. Therefore, just the articles published in the 22 first journals in the ranking were revised. The authors used to develop the research methodology based on the studies conducted by Gonzalez et al. (2019) and Zupic and Čater (2014).

The type of analysis and the counting method from the VOSviewer Software for map formation were based on bibliographic data. The type of analysis was based on the co-author relationship; the analysis unit was authors; the counting method was completed; the maximum number of authors per document was 25; the minimum number of authors per document was one; the number of authors selected was 146. Co-author analysis can analyze co-authorship patterns among contributing scientists and produce a social network of the research field (Zupic & Čater, 2014).

The co-word analysis tries to answer the dynamics of a field's conceptual structure: to uncover the conceptual building blocks of literature, what the topics associated with a particular line of research are, and to track the evolution of the concept. *Co-word analysis uses the text of the titles, author-designated keywords, abstracts, or even full texts to construct a semantic map of the field* (Zupic & Čater, 2014, p. 440).

In the present research, keywords were used for the construction of the co-word map. The themes were analyzed inductively, through content analysis, without necessarily falling into pre-existing themes or categories (Thorpe et al., 2005). Some topics were selected by the study by Gonzalez et al. (2019) due to the similarity of the theme treated by ICTs (Information and Communication Technologies) in hotel management. From the analysis of co-words performed in the VOSviewer Software, new topics were used.

Our study used bibliometric methods with a quantitative approach to describe, evaluate, and monitor registered research. However, seeking to find a better classification of this study, we also can not consider this paper a systematic review, as it does not aim to answer a specific question, such as the systematic review produced by Perkins et al. (2020). Gonzalez et al. (2019) classified their review as a research review, but they are limited to a review of only seven journals. Given this aspect, we consider our research a systematized review that includes one or more elements of the systematic review process adopted by Grant and Booth (2009). We prioritize our data collection or focus on knowledge, how it evolved and how researchers

contributed. This scenario should be the starting point for all studies, without it being able to declare an exhaustive literature review effectively.

## RESULTS

From the individual search for journals with the phrase *online travel agency* by keyword or abstract, in the 22 journals with the best positioning in the Scimago ranking in 2019, only nine journals reverted results. Table 1 shows the researched journals, as well as their classification. The ranking shows seven journals from the United States, 13 from the United Kingdom, and two from Netherlands.

Table 1. *Ranking of the 22 Best Journals Classified by Scimago*

N	Journal	Country	N	Journal	Country
1	Journal of Travel Research	USA	12	Journal of Hospitality Marketing and Management	USA
2	Tourism Management	UK	13	International Journal of Tourism Research	UK
3	Annals of Tourism Research	USA	14	Journal of Service Management	UK
4	International Journal of Hospitality Management	UK	15	European Sport Management Quarterly	UK
5	Journal of Hospitality and Tourism Research	USA	16	Applied Geography	NL
6	International Journal of Contemporary Hospitality Management	UK	17	Scandinavian Journal of Hospitality and Tourism	UK
7	Current Issues in Tourism	UK	18	Cornell Hospitality Quarterly	USA
8	Sport Management Review	NL	19	Tourism Geographies	UK
9	Cities	UK	20	Journal of Vacation Marketing	USA
10	Journal of Travel and Tourism Marketing	USA	21	Tourism Management Perspectives	USA
11	Journal of Sustainable Tourism	UK	22	Leisure Sciences	UK

Source: Scimago

### Journals and Authors of the Articles

After searching for the keyword used in the study, Chart 1 shows the journals that have publications about online travel agencies and how many articles were published by each of them between 2009 and 2019. The 61 articles are distributed in 9 academic journals. Only American and English magazines had publications on OTAs.

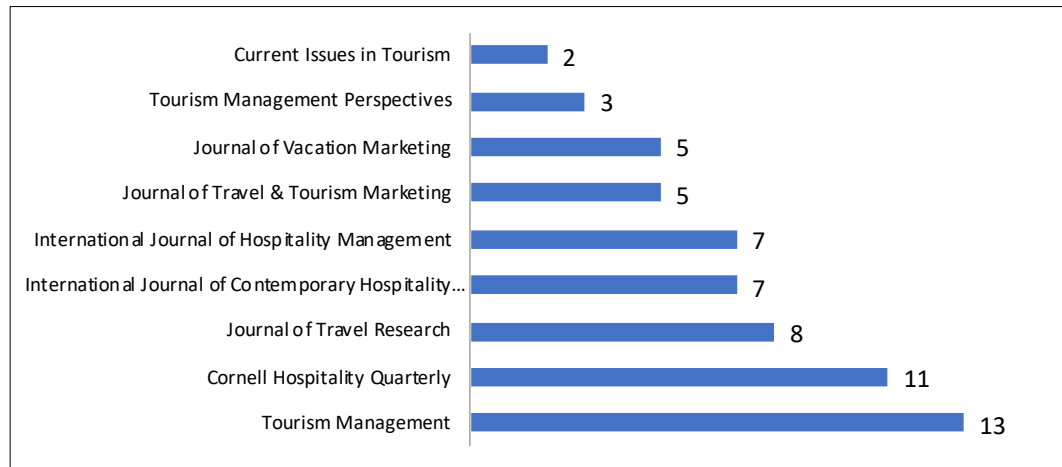


Chart 1. *Journals and number of publications about “online travel agency”*

Among the publications on the proposed theme, 21% are in *Tourism Management*, 18% in *Cornell Hospitality Quarterly*, and 13% in *Journal of Travel Research*. A predominance of American and English academic journals addressing the theme can be noticed as shown in Chart 1. Chart 2 shows the production of scientific articles by country, not considering the author’s nationality, but his/her university.

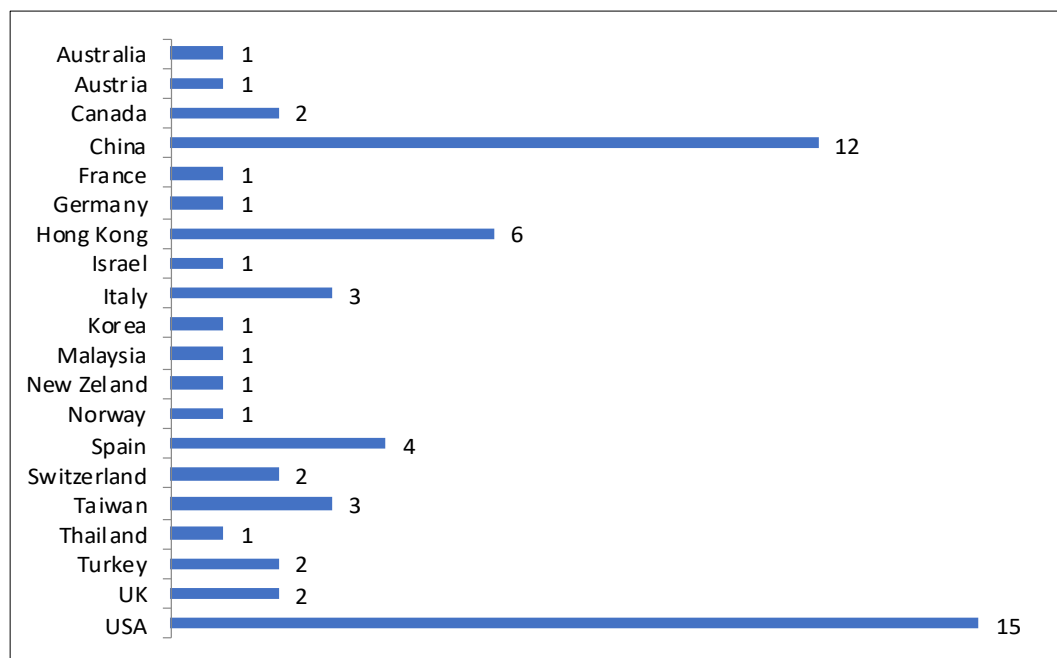


Chart 2. *Production by country from the first author’s university*

From the university of the main author of the articles, the United States still maintains its high production on the theme; China appears in second place, with relevant production, followed by Hong Kong. However,

despite many British academic journals, the country's universities did not present a volume of publications on the subject.

### **Topics of the Articles**

The reading of abstracts and keywords of the 61 articles used for this review was considered other topics of articles with bibliometric analysis (Gonzalez et al., 2019) with similar themes those treated in this article. Analysis of keywords was carried out in the VOSviewer software, and the 16 topics were defined. An open format was adopted (Gonzalez et al., 2019), and a new topic about OTAs was included in the research. Co-word analysis with VOSviewer Software was used to search new terms and perspectives.

As seen in Figure 1, the viewer's graphic contains four clusters: (1) green cluster with seven terms directly related to OTA; (2) yellow cluster with six terms, highlighting the word website and words relating to hotels and OTA; (3) blue cluster with six terms and the word hotel highlighted; and (4) red cluster with eight terms related to the strategy.

The analysis of co-words shows a network with relations that represent a conceptual structure of the field. For emerging research fields, it is especially useful for mapping new fields (Zupic & Čater, 2014), mainly in online travel agencies that are continually changing and innovating in their services. Some of the following terms were based on the keywords presented in Figure 1: relationship, distribution, customer satisfaction, cooperation. Chart 3 shows the frequency and incidence for years when the terms are referred to in the paper.

The revised papers were segmented from the client, hotels, and OTAs presented in chart 4 for every two years, and chart 5 with the evolution per year. Subsequently, a new subdivision was carried out on topics that are being researched by the academy. The papers that used customer information and opinions were subdivided into disintermediation, quality service, online booking, e-WoM/user-generated content, social media, customer satisfaction, perceived value, customer experience, competition, and cooperation.



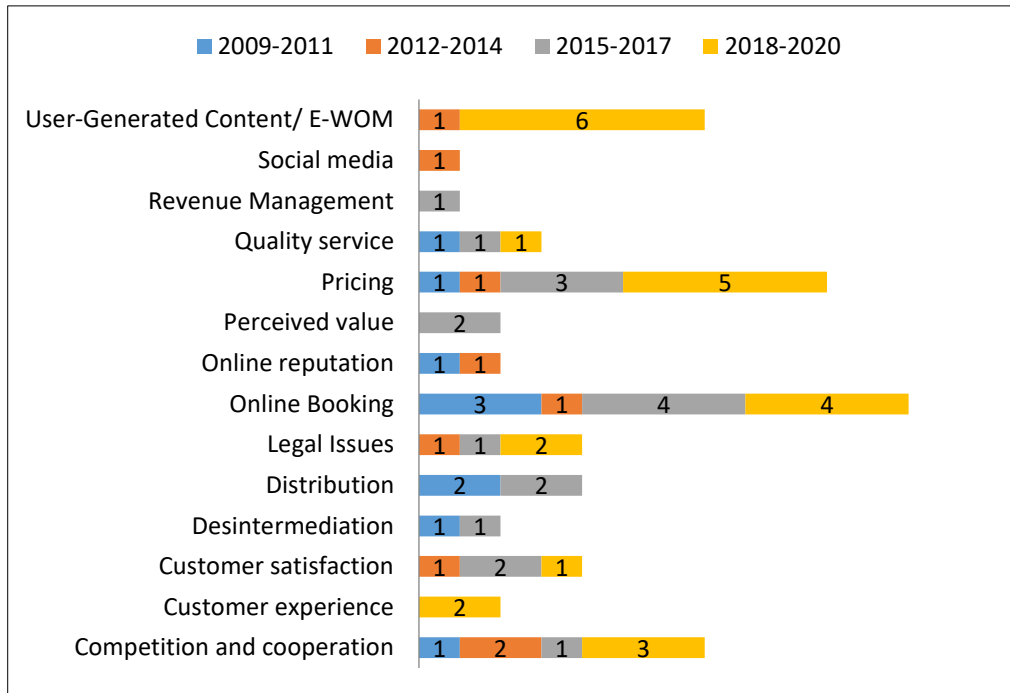


Chart 3. *Topics related to OTAs*

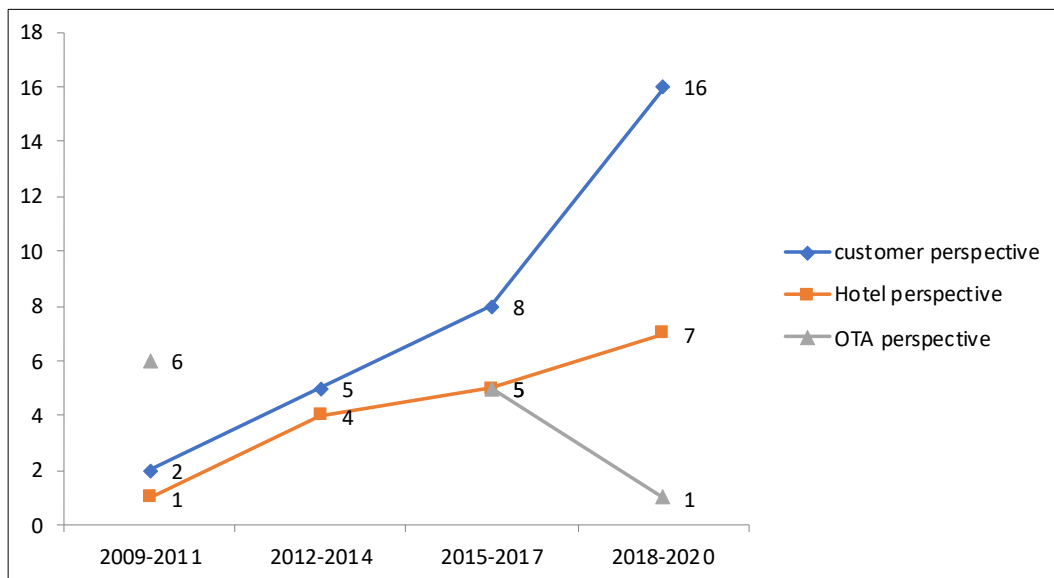


Chart 4. *Topics and perspectives*

The papers that present the hotel’s perspective and OTAs dealt mostly with strategies, solutions, and companies’ cases. Therefore, the papers from the hotel’s perspective were subdivided into pricing, competition and cooperation, distribution, legal issues, and revenue management; the articles were showing the OTA’s perspectives were separated into: disintermediation, online bookings, e-WoM/user-generated



content, customer satisfaction, pricing, competition and cooperation, distribution and online reputation (See Table 2).

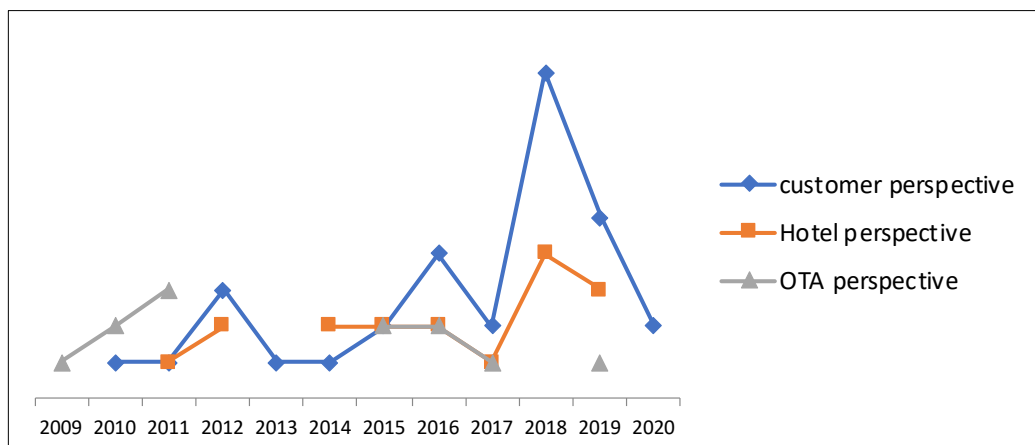


Chart 5. *Topics and perspectives by year*

Competition and cooperation between hotels and OTA were researched by authors (Chang et al., 2019; Christodoulidou et al., 2010; Guo et al., 2014; Long & Shi, 2017; Yin et al., 2019), presented by the three perspectives (client, hotel, and OTA). The study by Chang et al. (2019) presented, through field research with the client, how the channels (hotel and OTA) attract the client and how they compete to attract future visits, based on the O2O model (online for offline), also adopted by Long and Shi (2017). They approached tour operators and OTAs' ideal pricing strategies through cooperation between channels. The research by Christodoulidou et al. (2010) also presented yet another intermediary involved in the complex travel distribution system, which are the meta-search engines (such as Tripadvisor). Yin et al. (2019) point to an even more complicated future scenario for the hotel distribution scenario and suggest that to build a long-term sustainable relationship, OTAs will need to innovate and develop a strategic relationship capable of contributing to the tourism value chain.

Travel agencies and agents, one of the first vocations in the world, needed to reformulate themselves to remain in the market since the Internet-enabled the direct interaction between the consumer and the supplier, eliminating the intermediary (Díaz et al., 2015; Grønflaten, 2009). The disintermediation topic was addressed between 2009 and 2015, when after the growth of online sales, travel agents and physical agencies' future began to be questioned. Grønflaten (2009) used binomial logistic regression to predict the result of travelers' choice between two sources (travel agent vs. service provider) and two information channels (in-person vs. internet).



Table 2. Authors, Perspectives, and Themes

	AUTHORS	THEMES												
		Disintermediation	Service Quality	Online Booking	User-Generated Content / E-Wom	Social Media	Customer Satisfaction	Perceived Value	Customer Experience	Pricing	Competition And Cooperation	Distribution	Legal Issues	Revenue Management
CUSTOMER PERSPECTIVE	(Grønflaten, 2009)	x												
	(Fu Tsang et al., 2010)		x											
	(Toh et al., 2011)			x										
	(Pan et al., 2013)			x										
	(Horster & Gottschalk, 2012)				x									
	(Verma et al., 2012)					x								
	(Del Chiappa, 2013)				x									
	(Aslanzadeh & Keating, 2014)						x							
	(Ha & Janda, 2015)		x											
	(Hao et al., 2015)						x							
	(Sabiote-Ortiz et al., 2016)							x						
	(Beritelli & Schegg, 2016)			x										
	(Ozturk et al., 2016)							x						
	(Rianthong et al., 2016)			x										
	(Melis & Piga, 2017)								x					
	(Xie et al., 2017)			x										
	(Rajaobelina, 2018)								x					
	(Mohseni et al., 2018)								x					
	(Kirillova & Chan, 2018)		x											
	(Falk & Vieru, 2018)			x										
	(Belarmino & Koh, 2018)				x									
	(Toral et al., 2018)				x									
	(Park & Jang, 2018)								x					
	(Park et al., 2019)			x										
	(Leung et al., 2018)			x										
	(Casaló & Romero, 2019)				x									
	(Chang et al., 2019)									x				
	(Liu et al., 2019a)				x									
	(Kim et al., 2019)								x					
	(Li et al., 2019b)				x									
	(Sun et al., 2020)			x										
	(Chen et al., 2020)						x							

AUTHORS		THEMES														
		Disintermediation	Service Quality	Online Booking	User-Generated Content / E-Wom	Social Media	Customer Satisfaction	Perceived Value	Customer Experience	Pricing	Competition And Cooperation	Distribution	Legal Issues	Revenue Management	Online Reputation	
HOTEL PERSPECTIVE	(Toh et al., 2011)											x				
	(Lee et al., 2013)										x					
	(Hamilton et al., 2012)												x			
	(Ling et al., 2014)									x						
	(Guo et al., 2014)										x					
	(Ling et al., 2015)											x				
	(Haynes & Egan, 2015)													x		
	(Stangl et al., 2016)											x				
	(Viglia et al., 2016)									x						
	(Ivanov & Ayas, 2017)														x	
	(Tekin Bilbil, 2018)											x				
	(Yang & Leung, 2018)										x					
	(Mcleod et al., 2018)													x		
	(Anderson & Han, 2018)													x		
	(Nicolau & Sharma, 2019)									x						
	(Yin et al., 2019)											x				
	(Guizzardi et al., 2019)										x					
	OTAS PERSPECTIVE	(Ku & Fan, 2009).			x											
		(Christodoulidou et al., 2010)										x				
(Law et al., 2010)										x						
(Yacouel & Fleischer, 2012)															x	
(Chiou et al., 2011)				x												
(Koo et al., 2011)												x				
(Díaz et al., 2015)		x														
(Bui et al., 2015)								x								
(Murphy & Chen, 2016)				x												
(Sun et al., 2016)											x					
(Long & Shi, 2017)											x	x				
(Hou et al., 2019)					x											

The relationship between hotels and OTAs, often present in a conflictual way involving legal issues, as shown (Anderson & Han, 2018; Hamilton et al., 2012; Haynes & Egan, 2015; Mcleod et al., 2018) ended up provoking the exit of hotel chains and cities from online distribution

platforms, showing the results of being out of OTAs. The Columbus case was addressed by Mcleod et al. (2018) and Anderson and Han (2018) and reported the impacts of the case in 2006, when Columbus had all its hotels removed from the OTAs for more than four years. The authors presented the differences in occupation during the departure and after returning to OTAs and the reflexes in the drop in occupation in neighboring cities.

Parity clauses are often widely discussed in the market, and each country has defined different approaches. The broad parity clause guarantees OTA the possibility of offering prices, room availability, and more advantageous conditions to customers in relation to those offered directly by the hotel in the sales channels or in another competing OTA, which results in limiting competition and entry of a new OTA on the market, since a lower commission charge would not reflect prices for the final consumer (Hoskins & Arnesson, 2018). Haynes and Egan (2015) assessed the long-term effects of parity agreements in the UK perspective from in-depth interviews with experts responsible for hotel price decision making. The removal of parity agreements for closed groups can bring benefits to customers through greater knowledge of prices and increasing power in negotiations; it will also be an opportunity for small OTAs to compete with large OTAs, using more aggressive discounts their competitive strengths. (Haynes & Egan, 2015).

Thematic distribution was addressed in 4 articles from different points of view. The survey considers that there is a dominance of OTAs in hotel distribution (Stangl et al., 2016; Toh et al., 2011); others considered the ways of managing availability through the cooperation of distribution platforms in the hotel industry (Ling et al., 2015), and in the air (Koo et al., 2011). The online presence in the distribution process was also investigated (Pan et al., 2013). The offline and online distribution channels that are often chosen by hoteliers in Austria, Germany, and Switzerland were investigated by Stangl et al. (2016). The authors stressed the dominant role of traditional channels (telephone, fax, letters, and walk-ins), especially for German and Swiss hoteliers. In Austria, e-mail reservations were the most used.

Tierean (2018) conceptualized Revenue Management (RM) as a way to optimize revenue from fixed and perishable inventory, such as housing units, conference rooms, restaurants, and airplane seats, so that they are sold to the appropriate customer, at the right price and at the ideal time, this being the real challenge of revenue management. The main objective of RM is to maximize yields (Wang & Bowie, 2009) and, through it, to get as close

as possible to the goal potential (Cross, 1997). Revenue management practices were investigated in Turkey by Ivanov and Ayas (2017) from a sample of 105 managers. The study results showed that there is no standard in RM practices in the country; in many properties, there is no revenue manager and no intention of hiring, leaving this responsibility to the General Manager, Front Office, or Marketing manager. Revenue Management practices are generally better developed in high-class hotels, which are part of chains and have many rooms.

The most qualified hoteliers regularly monitor OTAs, managing their presence, prices, and parity rate to maximize profits and occupancy (Toh et al., 2011). Different pricing dynamics scenarios, such as last-minute discounts applied to mobile apps and competitive rate strategies between hotels (Kim et al., 2019). Price strategies used in platforms and hotels were the subject of 10 articles presented from the guest, the hotel, and the OTA (Guizzardi et al., 2019; Law et al., 2010; Ling et al., 2014; Long & Shi, 2017; Park & Jang, 2018; Yang & Leung, 2018). Among the topics covered are tariff parity (Nicolau & Sharma, 2019; Yang & Leung, 2018) and tariff fluctuation (Melis & Piga, 2017; Sun et al., 2016; Viglia et al., 2016).

Seeking to understand how tourism companies set their prices online, Melis and Piga (2017) analyzed hotel prices in hotels of four destinations in Mediterranean. They observed the trend of not fluctuating rates except in 4 and 5-star hotels. What is the impact of different degrees of price dispersion on hotel preference? According to Kim et al. (2019), travelers prefer a hotel option with a wide dispersion of price dominance. Online reservations were presented from the customer's perspective (Beritelli & Schegg, 2016; Falk & Vieru, 2018; Leung et al., 2018; Pan et al., 2013; Park et al., 2019; Rianthong et al., 2016; Sun et al., 2020; Toh et al., 2011) and in the perspective of OTAs (Chiou et al., 2011; Ku & Fan, 2009; Murphy & Chen, 2016; Yang & Leung, 2018). Chiou et al. (2011) applied a strategic structure to evaluate sites to examine the consistency of the site's presence and its intended strategies. Sun et al. (2020) investigated how aspects of functionality and usability affect the intention to repurchase in mobile payment for hotel reservations. The results showed that subjective norms and perceived behavioral control are mediators in the relationship between mobile usability and customer satisfaction. However, they are not mediators in the relationship between mobile functionality and customer satisfaction.

Multi-channel strategies have also been investigated to increase online sales (Beritelli & Schegg, 2016; Ku & Fan, 2009; Murphy & Chen,

2016; Sun et al., 2016; Rianthong et al., 2016; Falk & Vieru, 2018) rate fluctuation and booking cancellation are among the topics covered in online reservations. The study by Murphy & Chen (2016) sought to understand the relevance of using information sources. The results reinforced the importance of OTAs as an entry point and reference for information. The studies by Park et al. (2019) investigated the buying behavior of online travel consumers to identify the factors that affect each stage of the process, using observation and research methods. The results corroborate the findings of Murphy & Chen (2016) and add that, in addition to being sources of information, they also enable customers to share their experiences through a uniform platform.

Customer behavior in purchases made through virtual platforms and mobile devices when planning a trip, when using an OTA to research brands, services, rates, and the experience reported by other travelers has been addressed in different perceptions such as: Customer Experience (Mohseni et al., 2018; Rajaobelina, 2018); Customer Satisfaction (Aslanzadeh & Keating, 2014; Bui et al., 2015; Chen et al., 2020; Hao et al., 2015); Perceived Value (Ozturk et al., 2016; Sabiote-Ortiz et al., 2016). Customer satisfaction was surveyed through technology using a learning algorithm (Hao et al., 2015) and how customer opinion is formed on booking platforms based on quality in communication and services (Bui et al., 2015). Also, customer satisfaction on the cruise was discussed (Chen et al., 2020). The impact of the customer experience on the quality of the relationship with travel agencies in a multi-channel environment (in-store and online) was researched by Rajaobelina (2018). The study results showed that the cognitive and affective dimensions were the factors that most positively affected the quality of the relationship. The participant's gender also affected the customer experience in the impact of the relationship (Rajaobelina, 2018).

The comparison between Spanish and British tourists' perceptions in the formation of the perceived value in the hotel purchase decision process was researched by Sabiote-Ortiz et al. (2016). The study showed that the relationship between responsiveness and satisfaction with travel agencies is significant for Spanish tourists with collectivist cultural characteristics, while for the British, with individualist characteristics, it was not significant. The ease of use of the electronic medium has positively affected British tourists' satisfaction, but Spaniards do not consider ease of use to be a determinant of satisfaction.

The concern of tourism companies with the quality of the services provided is constant. How will the quality of the electronic service affect customer satisfaction? Does the experience on the website and the quality of the electronic service affect customer satisfaction? How do these channels attract and retain customers? These were some of the questions raised by the authors about customer satisfaction. (Fu Tsang et al., 2010; Ha & Janda, 2016; Kirillova & Chan, 2018). The findings that stood out were the importance of personal value as a distinguishing factor of the user that can affect the intention to purchase online (Mohseni et al., 2018) and the mediating effects between mobile usability and customer satisfaction (Sun et al., 2020). Personal value was considered a distinguishing factor of the user that can affect the intention to purchase online (Mohseni et al., 2018) and the mediating effects between mobile usability and customer satisfaction. (Sun et al., 2020).

In the context of service quality, Fu Tsang et al. (2010) examined online customers' perceptions about the quality of the electronic service provided by online travel agencies. From a regression analysis, four factors of perceived quality of service that were significant for customer satisfaction were identified: (1) functionality of the website, (2) content and quality of information, (3) relationship with the customer, and (4) safety and protection. The high-quality reviews shared on the websites are essential for both customers and websites (Liu et al., 2019a). The motivation to write reviews (Belarmino & Koh, 2018; Liu et al., 2019a) and the co-creation of value through the sharing of tourist experiences (Casaló & Romero, 2019) were some of the ways of approaching e-word to mouth, a theme that has been highlighted by five articles in the last two years and that did not appear in studies before 2018. The attributes of destinations were also studied through customer reviews (Liu et al., 2019b; Hou et al., 2019; Toral et al., 2018).

Based on the equity theory, Belarmino and Koh (2018) investigated whether guests write comments on different sites for different internal motivations. From the collection of 12,000 reviews of 40 hotels in the United States, the study showed differences in star rating on different channels (hotel website, OTA website, and third-party website), with the hotel website having the best star rating, followed by OTAs. When investigating the motivations for writing reviews, Liu et al. (2019a) found that the increasing number of reviews for a hotel can also induce future users to commit themselves to comment. From 36,148 online comments from Chinese tourists, the authors Liu et al. (2019b) realized that Chinese tourists often have more critical feelings than other international tourists. The

differences between occasional, moderate, and frequent online shoppers were also investigated by Del Chiappa (2013) and showed that frequent shoppers are more optimistic about hotel bookings over the Internet compared to moderate or occasional shoppers.

The business case for investing in online reputation has received increasing attention in recent years (Xie et al., 2014). OTAs play an essential role in building the hotel's reputation and contribute to the quality of service, encouraging better hoteliers' performance, since the information provided by previous guests generates value for hotels of good reputation (Yacouel & Fleischer, 2012). Consumers are participating in information processes through social media and can shape the reputation of companies and influence the booking decision (Horster & Gottschalk, 2012). The authors (Verma et al., 2012) investigated the use of technology by consumers to search and purchase electronic media and social media's impact in the hospitality sector.

### Methodologies of the Articles

According to the methodology, the classification of articles was segmented by theorists, which are based on conceptual and empirical ideas and structures. The empiricists were subdivided into field research, expert panel, content analysis, case study, and experiment. The review was carried out from the individual reading of the articles and classified using the EXCEL software. The references for classifying the articles were from the authors Gonzalez et al. (2013). Some studies combined two research methods. However, the present study opted for only one classification. Like the study by (Fu Tsang et al., 2010), which carried out a panel with specialists and subsequently carried out a field study, it was classified as a field study, as with the panel of experts, the results cannot be generalized.

Table 3. Methodologies Used at Each Two Years

Methodologies	Total	%	2009-2011	%	2012-2014	%	2015-2017	%	2018-2020	%
<i>Empirical</i>	56	92%	8	13%	7	11%	17	28%	24	40%
Case studies	6	11%	1	2%	2	3%			3	5%
Content analysis	16	29%	1	2%			3	5%	12	20%
Experimental	12	21%			3	5%	6	10%	3	5%
Experts' panel	4	7%	2	3%			1	2%	1	2%
Field studies	18	32%	4	6%	2	3%	7	11%	5	8%
<i>Theoretical</i>	5	8%	2	3%	2	3%	1	2%		
<i>Total</i>	61	100%	10		9		18		24	



The study showed an increase in articles on the 2015 OTA theme. From 2009 to 2011, 31% of all articles reviewed were published. Content analysis, which uses secondary sources already available in databases and websites (Gonzalez et al., 2019), was the method chosen by 29% of the authors. 12 out of a total of 16 articles were published between 2018 to 2020. Often, the content analyzed was collected by the online travel reviews (Belarmino & Koh, 2018; Beritelli & Schegg, 2016; Casaló & Romero, 2019; Chen et al., 2020; Falk & Vieru, 2018; Guizzard et al., 2019; Hou et al., 2019; Law et al., 2010; Leung et al., 2018; Liu et al., 2019b; Melis & Piga, 2017; Nicolau & Sharma, 2019; Sun et al., 2016; Toral et al., 2018; Yang & Leung, 2018).

The field research represented 32% of the published articles (Bui et al., 2015; Chang et al., 2019; Del Chiappa, 2013; Fu Tsang et al., 2010; Grønflaten, 2009; Hao et al., 2015; Ivanov & Ayas, 2017; Ku & Fan, 2009; Mohseni et al., 2018; Ozturk et al., 2016; Park & Jang, 2018; Rajaobelina, 2018; Stangl et al., 2016; Sun et al., 2020; Toh et al., 2011; Verma et al., 2012). The method usually uses a quantitative perspective to collect data, gather information about uncontrolled situations, and avoid possible changes in its object of study (Gonzalez et al., 2019).

Experiment was the method chosen by 21% of the articles (Aslanzadeh & Keating, 2014; Ha & Janda, 2015; Kim et al., 2019; Kirillova & Chan, 2018; Long & Shi, 2017; Murphy & Chen, 2016; Pan et al., 2013; Park et al., 2019; Rianthong et al., 2016; Viglia et al., 2016; Ling, et al., 2014; Xie et al., 2017). The method analyzes a phenomenon within a scenario (an environment) causing a simulation of certain circumstances, which can be a set of equations or symbolic representation of a problem (Gonzalez et al., 2019).

The case study examines the phenomenon in its natural environment, obtaining data through interviews and analyzing documents or direct observation, being this the method chosen by 11% of the studies as seen in Table 4 (Anderson & Han, 2018; Christodoulidou et al., 2010; Díaz et al., 2015; Hamilton et al., 2012; Lee et al., 2013; Mcleod et al., 2018; Sabiote-Ortiz et al., 2016; Tekin Bilbil, 2018).

The expert panel was used in 7% of the reviewed articles (Chiou et al., 2011; Haynes & Egan, 2015; Toh et al., 2011; Yin et al., 2019). It uses interviews with specialists in a given subject. Researchers recognized the importance of recruiting experts from diverse backgrounds in the tourism and hospitality industry, industry operators, public policymakers, tourism and travel associations/organizations, and government and general public

tourism departments (Lin & Song, 2015). As seen in Table 4, of the 61 articles reviewed; 64% were qualitative, 33% were quantitative, and 3% used both methodologies. Of the 61 articles surveyed, 8% were theoretical, and 92% empirical.

Table 4. *Methodologies X Academic Journals*

Journal	N	Case Studies	Experimental	Experts' Panel	Field Studies	Content Analysis	Theoretical	Empirical	Quantitative	Qualitative	Mixed Method
Cornell Hospitality Quarterly	11	4	3	1	3			11	4	7	
Current Issues in Tourism	2	1			1			2	1	1	
International Journal of Contemporary Hospitality Management	7	1	1			5		7	6	1	
International Journal of Hospitality Management	7		1		3	2	1	6	5	2	
Journal of Travel & Tourism Marketing	5		1	2	2			5	2	2	1
Journal of Travel Research	8		2		4	1	1	7	7		1
Journal of Vacation Marketing	5		1		1	2	1	4	3	2	
Tourism Management	13		1	1	3	6	2	11	9	4	
Tourism Management Perspectives	3		2		1			3	2	1	
<i>Total</i>	61	6	12	4	18	16	5	56	39	20	2

## DISCUSSION AND CONCLUSIONS

The OTAs brought about many changes to the tourism and hotel market. As a result of media modernity and evolution, it brought agility and dynamics to the tourist market. This bibliometric review aimed, based on the Scimago Image Ranking, along with the best academic journals, to present what has been published about OTAs in recent years, the methodologies that have been used, authors, and countries with greater production and approached topics. From 22 journals surveyed, 8 contained some publications on the topic. This study helps make the current body of knowledge about Online Travel Agencies and their evolution in the scientific field more organized. From the analysis of different issues addressed in the literature, a basis is created to search for gaps for future research. The comprehensive literature investigated in this study can be used as a literature guide for academics and professionals in the tourism market, contributing to stimulating new interests and deepening the theme.

Due to the characteristic of intermediation of OTAs, which offers services from other companies, the article showed what has been published regarding those partnerships. With the emergence of OTAs in the early 2000s, researchers began to question physical travel agencies' future, which have reinvented themselves to remain in the market, focusing mainly on corporate customers. We can see that the approach to physical travel agencies has decreased over the years. Some articles present the challenges that OTAs have to face to stand above the competition, frequently change, revise strategies, improve customer experience, and invest in new products and promotions. The entire tourism market undergoes a re-adaptation, especially in the world pandemic scenario. Some articles present a relationship between agencies and airlines, which have also ended up, in recent years, infrequently appearing, possibly due to new sales strategies with direct sales by airlines. The number of airlines is significantly less than the number of hotels; competition in the hotel sector is greater, making the market dependent on this means of distribution (Toh et al., 2011). For this reason, hotels have been frequently related in OTAs surveys, as it is a critical accommodation partner, and that end up having a meaningful impact on hotel sales.

### **Theoretical Implications**

As a contribution, this work shows a new perspective of online travel agencies and their importance, not only as an intermediary but also a new dynamic to the market. The way it relates to its partners, often conflicting, as shown by some articles dealing with legal issues and new solutions that need to be rethought, such as parity, online reputation, and e-WoM. From the analysis of words in the VOSviewer, it was possible to detect new trends to be studied and that deserve attention in future research. It was noticed that comments are an increasingly frequent source used in content analysis methods, as they show the customers' view. Based on the topics analyzed, this article shows that some topics initially approached were updated in a decade as technological innovations were emerging and reflected in the market.

OTAs, which are technology companies, are characterized by constant innovation, distinguishing themselves from other branches of tourism, which do not advance with such speed because they are small companies and do not have the resources to invest in technological innovation, as an example of individual hotels, which do not belong to a chain and do not invest in their websites.

Another factor highlighted in the research for the relationship of OTAs. There is an evident competition, when OTAs reduce to bringing new customers to the hotel and after the hosting experience, the customer can book again through the same channel that he booked directly through the hotel, at this moment the competition between companies starts, because the quality of service on OTA sites negatively affects the customer's intention to book again through hotel sites (Chang et al., 2019). Thus, OTAs need to strive to improve the quality of the website to attract repeat customers and hotels can take advantage of direct contact with the customer during the hosting experience to increase the customer's perception of value during an interaction and try to do with the customer to return by direct channel with the hotel.

### **Managerial Implications**

OTAs are platforms that offer tourism products and services. Some of them offer specific services, such as *Airbnb* with room rental in houses and apartments, and *Rentalcars* specializing in car rental. *Booking.com*, which was once a hosting site, now includes booking home and airline tickets among its services. This review can be a source of search for other articles, especially for hotels, being possible to extract distribution strategies, revenue management, channel management, and relationship with platforms. It also contributes to a better understanding of the client since many articles used in this article present their perspective. The themes related to customer behavior on online platforms show the greatest growth, such as e-WoM. Online bookings demonstrate growth in researchers' interest because, increasingly, the customer becomes a co-creator together with the company, being essential for consolidating and defending the brand and creating new services.

### **Limitations and Future Research**

The research's relevance must be constant in the evolution of OTAs, always seeking to implement new strategies and services. There was no review of the literature on OTAs published in the journals used for this research, to the best of our knowledge. This article does not cover the entire publication on OTAs, and only the past 10 years have been revised. The searches were carried out using keywords, so there may be articles that dealt with OTAs, but the term was not included among the keywords. Little was discussed about the internal management of OTAs, about the management of employees and strategies. For the next research, it is suggested to cover a larger number of years and expand the search to other academic journals.

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## KNOWLEDGE DEVELOPMENT IN TOURISM DISTRIBUTION CHANNELS: FROM SINGLE CHANNEL TO OMNICHANNEL

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### ABSTRACT

The aim of this paper is to examine the periodic changes within the content of tourism distribution channels and identify key themes in this field. The study will be able to identify changes and trends by examining through scientific/academic research. A bibliometric method was employed. About 6245 publications in the Web of Science database were analyzed using VOS viewer, as the study tool. The results show an increasing trend in scientific publications on distribution channels in field of tourism by the last decade. The year 2019 held highest rank in terms of the total number of scientific papers published per year with 813 articles, and the highest citation rate belongs to 2017 with 10037 citations. Also, the majority of the publications in this field were original research articles (57.90%), and Law R., Buhalis D., Pan B., and Xiang Z. were identified as the most productive and most-cited researchers. Besides, co-authorship network visualization of journals in the field of tourism distribution channels was implemented. Co-word analysis was then used to track the evolution of research themes over time. The key themes are Single-channel, Dual-channel, Multi-channel, Cross-channel, and Omni-channel. Finally, this study calls for future research in the field of tourism distribution channels.

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## INTRODUCTION

While there are numerous approaches towards epistemological understanding and scientific knowledge of a domain, a typical approach involves researchers' analysis and the content of journals (Hall, 2011). Over the past couple of decades, various efforts have been made to determine the most productive and influential researchers, institutions, and journals in the field of tourism, including ranking tourism journals, researchers, and institutions in terms of productivity and the number of citations (Ryan, 2005; Jamal et al., 2008; McKercher, 2008; Hall, 2011; Benckendorff & Zehrer, 2013; Johnson & Samakovlis, 2019).

Yet, all of these studies have addressed tourism with a macro perspective; and some scholars reported no progress in the subfields of tourism research (Koseoglu et al., 2016). Thus, a research gap has opened up between what has been done and what some researchers expect to be done –which is studying subfields of tourism management. At this level, tourism distribution decisions are regarded among the most significant subfields of tourism (Buhalis, 2000). Research in the tourism distribution literature is asymmetrical (Pearce & Schott, 2005) and due to the quick changes in the technology and business environment, findings of previous research may not exactly reflect the present situation (Law et al., 2015). Also functionally, the useful use of channels of distribution depends on an adequate understanding of the evolution of these channels in the tourism industry (Kracht & Wang, 2010). Bibliometrics is a tool for analyzing how disciplines have evolved based on intellectual structure, social structure, and conceptual structure (Koseoglu et al., 2016) which is rarely used in tourism research and has potential if applied (Pestana et al., 2020). Therefore, this study uses bibliometrics in order to examine the evolution of tourism distribution channels as one of the most important subfields of tourism that has not been studied so far. It would be useful to detail the contributions of the study to theory and practice. In this regard, academic publications are reviewed in the WOS (Web of Science) database (Li et al., 2018) on the topic of tourism distribution channels from 1983 to 2020. Co-occurrence and co-citation analysis are used to explore research themes and future research agendas (Pestana et al., 2020). This study makes several contributions:

- By using bibliometric analysis, a comprehensive understanding of the evolution of tourism distribution channels over a period of 37 years is provided for researchers.

- We used bibliometric analysis to develop the subfields of tourism research (Koseoglu et al., 2016). This research covers a lengthy publication in tourism distribution channel research by using a syntactic of keyword co-occurrence and co-citation analysis.
- In order to create a database and provide results, we use the world's leading scientific citation search and analytical information platform, Web-of-Science (WoS) (Li et al., 2018); and
- We provide a clear understanding of key themes in the evolution of tourism distribution channels (Kracht & Wang, 2010) which will assist researchers in future research.

## LITERATURE REVIEW

### **Tourism distribution**

Jorgensen (2017) considers distribution in the field of tourism as a dynamic and continuous process of intermediaries in a communication. In general, a channel refers to different ways of interacting with the customer, and different types of channels, ways of transmitting a product or information. But what is neglected is that the types of channels for various interactions with customers are different during the customer purchasing process and are managed by several agents. Therefore, tourism distribution includes channels and consumer touchpoints with the brand. Touchpoints are all direct and indirect consumer interactions with a brand (Rosenbaum et al., 2017).

### **What is bibliometric analysis?**

Bibliometric analysis was first introduced in 1969 and afterward was acknowledged as the quantitative analysis of bibliographic characteristics of a collection of literature for identifying measures including academic productivity rate of researchers, countries, institutions, journals, collaborative networks, old paradigm and paradigm shift, visualization of scientific productions by diverse bibliographic maps (Khasseh et al., 2016; Vosner et al., 2016). Sengupta (1988) refers to bibliometrics as classification, organization, and quantitative analysis of publication. Bibliometrics is a means for analyzing how disciplines evolve according to conceptual, social, and intellectual structures (Koseoglu et al., 2016). Bibliometrics considers research information including citations, author names, keywords, research methods, and statistical techniques used from written publications such as books, conference proceedings, journals, and articles (McBurney & Novak,

2002). Zupic and Čater (2015) suggest that bibliometric methods complement traditional paper-based methods of literature review and raise the objectivity of such studies. Bibliometrics is used for assessing the publication performance of authors and institutions and by mapping the structure and dynamics of the sciences via data (Cobo et al., 2011).

### **Bibliometrics in tourism research**

Bibliometrics represents an increasingly important topic in tourism studies (Jiang et al., 2019; Johnson & Samakovlis, 2019; Nusair et al., 2019). A variety of reasons account for this, including tourism studies growth being reflected as a scientific discipline, researcher engagement, journal publication reviewing tourism literature, and evaluation of research performance (Hall, 2011). Since bibliometric studies are applied for developing the hierarchy of authors, journals, and research quality, they have been among the topics of vital importance in tourism, just like in other academic fields (Page, 2005; McKercher et al., 2006). Koseoglu et al. (2016) in a study entitled "Bibliometric Studies in Tourism", reviewed articles in top tourism and hospitality journals. The period under review was until 2014, and the top 5 journals in the field of tourism and the top 4 journals in the field of hospitality were selected for review. Benckendorf and Zehrer (2013) identified researchers and leading research activities in a study entitled "Tourism Research Network Analysis" using network analysis. Bibliometric techniques have been used in this study. Hall (2011), in a study entitled "Bibliometric Analysis, journal Ranking, and Evaluating the Quality of Tourism Research," reviewed articles from the Scopus and SCImago databases. In this study, only some of the bibliometric issues related to the evaluation of the quality of research in tourism and the ranking of journals have been investigated.

## **METHODOLOGY**

Bibliometric analysis is performed on the dataset (Ruhanen et al., 2019). Bibliometrics helps researchers identify major themes through literature reviews (Leung et al., 2017). The use of keyword lists in bibliometric studies makes it possible to search comprehensively in tourism and non-tourism journals (Vizcaino & Díaz, 2019). To identify publications from 1983 to 2020, the titles of the papers, together with their abstracts and keywords, were searched on December 25, 2020, in searches of web of science (WOS). The scope of current study includes such terms as:



“Tourism Distribution Channel” and closely related semantic terms such as “Distribution Channel,” “Distribution,” “Channel,” “Channel of distribution,” “Intermediate,” “Operator,” and “Supply chain,” together with subject area terms such as “tourism,” “tourist,” “hospitality,” “Leisure,” “hotel,” “tour” and “travel.”

Bibliometrics involves various methods of analysis (Van Raan, 2005; Leung et al., 2017). Co-word (keyword co-occurrence) analysis, co-authorship analysis, and citation-based analysis are the most frequently used methods of analysis (Van Eck & Waltman, 2014; Leung et al., 2017;). In this research, citation and co-citation analysis, journals, and authors analysis; analysis of countries and institutions; and co-occurrence analysis of keywords were used. The initial sample included 6245 publications. Analysis was performed with the VOS viewer. The VOS display provides a graphical representation of the network display, and there are two features for an item: "links" (the number of links that one item refers to the other) and "total link strength" (total link strength to other items) (Leong et al., 2020).

In this research, citation and co-citation analysis, authors and journals analysis and analysis of institutions and countries are used to show the hybrid image of the knowledge collection of tourism distribution channels, also co-word and co-occurrence analysis are applied to manifest the thematic and themes evolution of this study field.

## RESULTS

### Publications by genres and years

Table 1 shows the published studies (6245 studies) in the field of tourism distribution channel by genre between 1983 and 2020. A review of the results of the table shows that studies have been conducted in four different genres. Most types of documents are related to articles (3880) and proceedings papers (2131) which account for 96.253% of the total publications. Therefore, it can be concluded that most of the studies conducted in this field are articles and proceedings papers, on the other hand, the researchers prefer review and evaluation publications less.

According to Figure 1, since 2008, the number of publications in the field of tourism distribution channels has been increasing. The number of publications in 2019 has reached 813, which stands for a significant amount of research. This can be for two main reasons. 1) Increasing the number of scientists in the world in the field of tourism distribution channels. 2)



Facilitate collaboration between researchers and information gathering through advances in the Internet and computer technology (Merigo et al., 2015; Leong et al., 2020).

Table 1. *Distribution of the publications by genres*

Document Types	Frequency (n)	(%)
Article	3,880	62.130
Proceedings Paper	2,131	34.123
Review	195	3.123
Editorial material	39	0.624
Total	6245	100

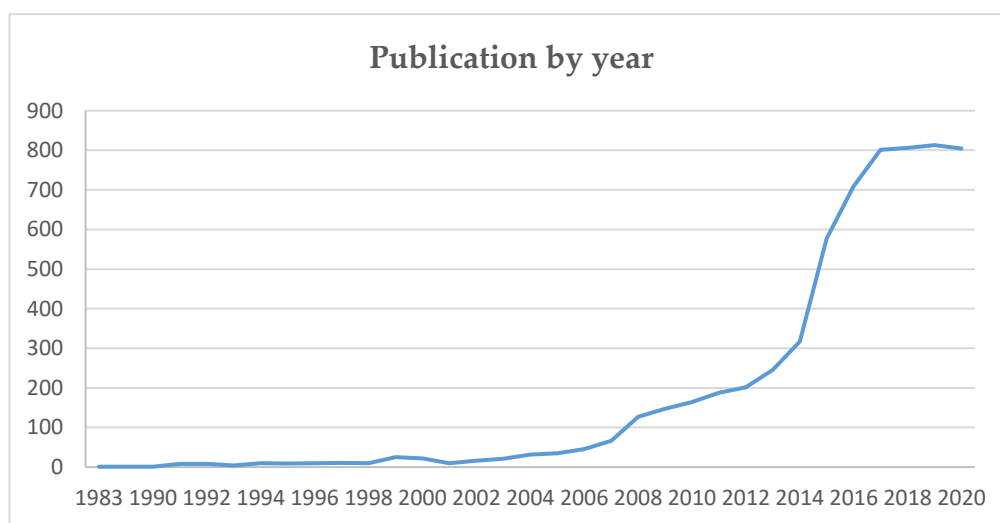


Figure 1. *Yearly number of publications*

### Citation analysis and Co-citation network

Table 2 presents the characteristics of the top five most cited articles between 1983 and 2020. Article with the title "The Role of Social Media in Online Travel Information Search" is the most cited article with 816 citations. This article was published by Xiang and Gretzel (2010) in the journal of *Tourism Management*.

From the cited sources in articles on tourism distribution channels, the journal co-citation network is divided into 4 clusters, each depicted in distinct color in Figure 2. Also, the source co-citation network showed that *Tourism Management*, *Journal of Travel Research*, and *Annals of Tourism Research*, are the three most frequently co-cited journals.



Table 3. Top 24 leading journals, authors, institutions and countries

R	Journal	TP	Author	TP	Institution	TP	Country	TP
1	Tourism Management	134	Law, R.	81	Hong Kong Polytech	123	Usa	968
2	Lecture Notes In Computer Science	85	Buhalis, D.	24	Bournemouth Univ	44	China	726
3	Int. Journal of Contemporary Hospitality Man.	80	Pan, B.	18	Queensland	39	Spain	363
4	Journal of Travel&Tourism Mar.	70	Xiang, Z.	18	Univ Cent Florida	37	England	352
5	Journal of Travel Research	47	Zhang, Y.	14	Temple Univ	35	Australia	253
6	International Journal of Hospitality Man.	42	Chung, N.	13	Harbin Inst Technol	34	Italy	215
7	Annals of Tourism Research	36	Fesenmaier, Dr.	12	Univ Granada	33	Taiwan	196
8	Transportation Research Record	36	Gretzel, U.	12	Penn State Univ	32	India	152
9	Information Technology & Tourism	35	Wang, Y.	12	Purdue Univ	30	Germany	138
10	Asia Pacific Journal of Tourism Research	33	Li, X.	11	Kyung Hee Univ	29	Canada	134
11	Procedia - Social and Behavioral Sciences	32	Yang, Y.	11	Univ Florida	26	France	115
12	Journal of Hospitality and Tourism Technology	31	Cantoni, L.	10	Univ Illinois	26	Malaysia	101
13	International Journal of Tourism Research	30	Chen, Cc.	10	MIT	23	Portugal	101
14	Sustainability	30	Huang, L.	10	Univ Valencia	23	South Korea	91
15	Current Issues in Tourism	27	Inversini, A.	10	Chinese Acad of Sci	22	Japan	88
16	Journal of Destination Marketing & Management	27	Kim, S.	10	Bucharest Univ of Economic Studies	21	Greece	80
17	Transportation Research Part C: Emerging Technologies	27	Li, J.	10	Griffith Univ	20	Indonesia	80
18	Journal of Hospitality Marketing & Management	26	Li, L.	10	Monash Univ	20	Romania	78
19	PLOS ONE	24	Liu, Y.	10	Peking Univ	20	Switzerland	75
20	Cornell Hospitality Quarterly	23	Marine-Roig, E.	10	Virginia Tech	20	Netherlands	70
21	Advances in Social Science, Education and Humanities Research	21	Okumus, F.	10	Xiamen Univ	20	Austria	64
22	Tourism Economics	21	Park, S.	10	Columbia Univ	19	Brazil	60
23	Springer Proceedings in Business and Economics	20	Rita, P.	10	Univ Washington	19	Sweden	58
24	Tourism Management Perspectives	20	Schuckert, M.	10	Zhejiang University	19	Turkey	58

Notes: R = rank; TP = total number of publications

### Most prolific journals, authors, institutions, and countries

We used the citation criteria of each journal to analyze the most productive journals and their impact by using WOS report. In terms of the most prolific authors based on total publications, Law, R. (The Hong Kong

Polytechnic University, China) tops the list with 81 records followed by Buhalis, D. (Bournemouth University, United Kingdom) with 24 records (Table 3). Among the most productive institution, Hong Kong Polytechnic University stands first with 123 scientific outputs and Bournemouth University with 44 scientific outputs, and Queensland University having 39 published works are ranked second and third, respectively (Table 3). According to the country analysis, the total number of scientific productions being retrieved consisted of 25 countries. The United States produced the highest number of scientific publications worldwide, with 968 articles (21.308%), followed by China (15.981%), Spain (7.99%), England (7.748%), and Australia (5.569%), all as the top five academically productive countries.

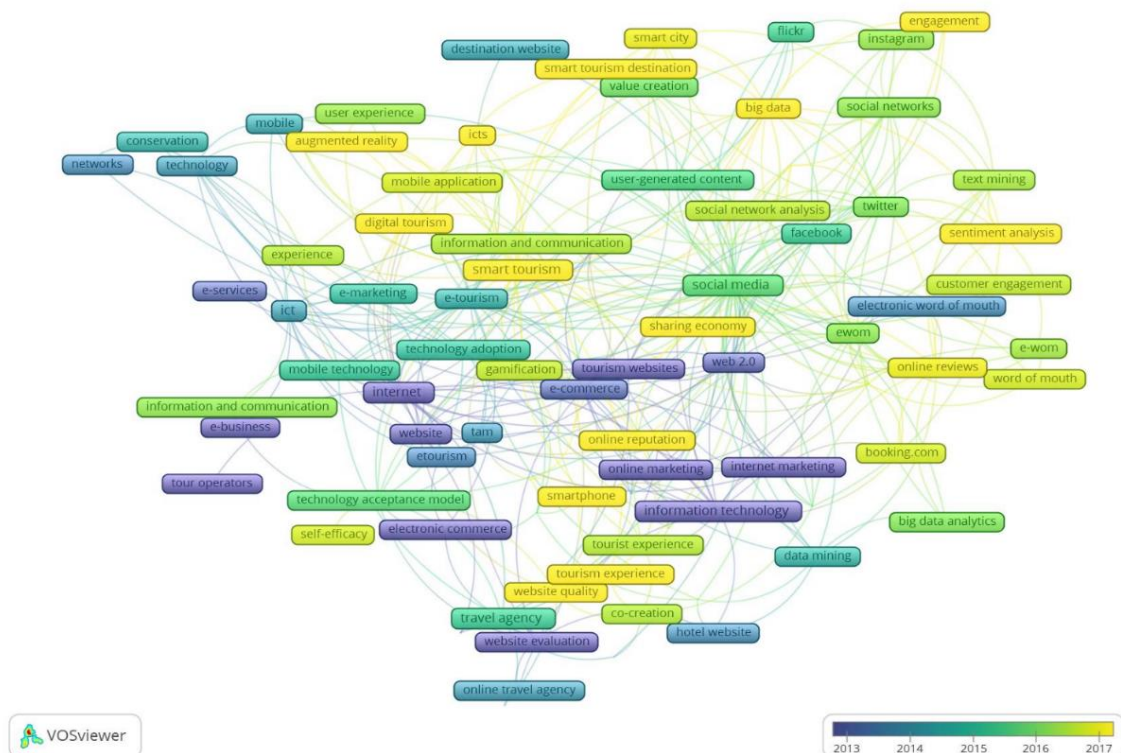


Figure 3. Co-word network of tourism distribution channel

### Research themes

We used keyword analysis in this study because this type of analysis and its synchronization makes it possible to draw the subjective structure of a field and its changes for a period of time (Ding et al., 2001). In addition, the use of keywords in different periods helps to identify the research process (Pestana et al., 2020). Therefore, we analyzed all the keywords to examine their relationship with the research flow of the "Tourism Distribution

Channel". It should be noted that we have removed irrelevant keywords on the assumption that they are not related to the topic. Finally, a final sample of 674 associated keywords was obtained. Figure 3 presents the visualized co-word network. Bubble size indicates the number of frequencies and line thickness indicates the synchronous power of the keywords (Leung et al., 2017). The five themes of keywords were identified as *single-channel*, *dual-channel*, *multi-channel*, *cross-channel*, and *omnichannel* (Table 4).

Table 4. *Tourism distribution channel research thematic evolution*

Themes 1&2	Keywords 1983-2013	Themes 3&4	Keywords 2014-2015	Themes 5	Keywords 2016-2020
<b>Single channel &amp; Dual channel</b>	tour operators Website online service online travel agency Information technology adoption Internet Web 2.0 online tourism	<b>Multi-channel &amp; Cross-channel</b>	social media networks Twitter Instagram Facebook travel agency user-generated content (UGC) mobile technology Flickr Booking.com	<b>Omnichannel</b>	smart tourism augmented reality Gamification Tourist involvement tourist experience collective economy online browsing mobile applications smartphone self-efficacy

## DISCUSSION AND CONCLUSIONS

This study provides an overview of the history of tourism distribution channels in the WOS database between 1983 and 2020. Different bibliometric variables are used, such as the most productive authors, journals, nations, and organizations, to conduct bibliometric studies of publications. Bibliometric analytic methods (keywords, co-word, citation, and co-citation analyses) were used to review published tourism distribution channel publications in this study. The hybrid image of the knowledge collection and the thematic evolution of tourism distribution channel research were explored.

Regarding the trends in scientific productions, the overall number of articles published before 2007 was less than 66, and it has gradually increased, as shown in Figure 1. The largest increase in the growth rate and several publications occurred from 2008 onwards. Concerning several citations per year, the results depicted an increasing trend with a modest positive slope until 2009, while from 2009 to 2020, the slope became steeper. The documents examined in the present study mostly include journal articles. The top journals listed in order of productivity are as follows: *Tourism Management*, *Lecture Notes in Computer Science*, *Journal of Travel Tourism Marketing*, *Journal of Travel Tourism Marketing*, and

Journal of Travel Research. The most productive authors are Law, R., Buhalis, D., Pan, B., and Xiang, Z. This study highlighted the top five countries producing the greatest amount of academic papers on the topic, namely the United States, China, Spain, England, and Australia.

Based on categorization existing in the retailing literature about distribution channels, this research analyzed thematic trends of tourism distribution channel research by categorizing keywords into five themes. As shown in Table 4, the five themes of keywords are Single channel & Dual channel, Multi-channel & Cross-channel, and Omnichannel. In the next section, each of these themes will be reviewed and finally, the future research trends (Agenda) will be stated.

### **Single and dual channel distribution**

It can be concluded that the trends in scientific development in the case of tourism distribution channels were initially aimed at single-channel distribution (physical distribution or Internet-based distribution). If a company obtains 100 percent of its sales from a single channel, thus, it is called single channel distribution (Coelho et al., 2003). A large number of wholesalers were encouraged by the introduction of e-commerce, in addition to the conventional retail channel (e.g., physical tour operators), to sell products via a web-based channel (e.g., website or online travel agency) which is called dual-channel distribution (Chiang, 2010; Lu & Liu, 2015). Wholesalers and online retailers offer the same product in a dual-channel distribution system, and the client chooses the channel that best meets his or her needs (Chiang, 2010).

### **Multi and cross channel distribution**

The second paradigm, as shown in the diagram, namely multi and cross-channel distribution, wholesalers, in today's world, are not solely relying on an incumbent retail channel and internet-based channel and have employed third-party channels such as social media, social networks like Instagram, Twitter, Facebook, Booking.com, mobile technologies, user-generated content, and Flickr to supply products and services of tourism. The distribution system encountered some changes with these channels being introduced and integrated with online and offline retailing (Verhoef et al., 2015). If there is no integration across channels, it is referred to as a multi-channel distribution; when at least two, but not all, channels are fully integrated, it is referred to as cross channel distribution (Berman & Thelen, 2018). Overall, multi-channel retail may be defined as the actions included



in selling items and services over more than all accessible channels or one channel, while the consumer is unable to engage with the retailer and/or the retailer is unable to regulate channel integration. As a result, channels coexist without the ability for customers to initiate contact or for retailers to regulate integration (Beck & Rygl, 2015). The phrase "multi-channel" refers to channels that lack combination and interplay (Verhoef et al., 2007; Avery et al., 2012). A cross-channel retailer, on the other hand, sells services or products through all accessible channels or more than one channel, with the consumer having partial control over partly integrated channels and/or the retailer having control over the partially integrated channels (Beck & Rygl, 2015). One of the most important aspects of the cross-channel strategy is that separate channels or touchpoints be interconnected and integrated (De Faultrier et al., 2014).

### **Omnichannel distribution**

The third paradigm, omnichannel distribution, is currently among the hottest topics in retail and supply chain publications. This paradigm embraces keywords such as smart tourism, gamification, augmented reality, mobile applications and smartphones, collective economy, tourist experience, tourist engagement, and online browsing. Technology (e.g., smartphones, apps, communal economy, gamification, and augmented reality) serves as an infrastructure in smart tourism, combining hardware, software, and network technologies to assist stakeholders in making better-informed decisions (Gretzel et al., 2015; Dorcic et al., 2019; Zhu et al., 2019). It also helps the decision-making process by enhancing visitor experience and engagement by collaborating with local people and other tourists in locations (Buhalis & Amaranggana, 2014; Xu et al., 2017; Dorcic et al., 2019; Garcia et al., 2019). For instance, gamification serves as a new way for tourists to engage in all travel stages; not only does it let destinations influence tourists' behavior, it also provides new opportunities to gain insight into the actual behavior of tourists (Negrusa et al., 2015).

Much of the existing literature considers tourism distribution channels as a tool at wholesaler's disposal for communicating with customers, yet, Jørgensen (2017) claimed in the article titled "Reframing Tourism Distribution" that giving out system is composed of three basic components: Tourist, supplier, and intermediary, hence, distribution can be regarded as the interaction among these three actors. As noted in the third paradigm, the role of technology in integrating different elements of distribution and in immediately creating constant interaction and communication with tourists to improve their experience was observed.



This paradigm is known as omnichannel distribution because it allows for complete engagement and integration of all channels from the customer's and retailer's viewpoints (Berman & Thelen, 2018), providing a similar experience for the customer across different channels (Saghiri et al., 2017). Omni-channel distribution system offers multiple selling channels like online and offline channels, including mobile, telephone, print catalogs, etc. Nowadays, the tourism industry ought to upgrade tourist facilities innovatively and integrate all marketing channels to raise revenue and achieve essential competencies. In this system, the tourist can search, buy, and give feedback by using all channels and information (Park & Park, 2016). In general, omnichannel retailing refers to all actions included in selling products or services across all accessible channels, with the consumer having full control over the channels and the merchant having complete control over the channels. As a result, because the consumer may interact completely and/or the retailer can control fully integrated channels, an omnichannel retailer sells goods and services through all accessible channels (Beck & Rygl, 2015).

As previously stated in the preceding sections, omnichannel distribution is the current paradigm of tourist distribution channels, which underlines full integration and full interaction. In this regard, in the following section, a future research trend within this context is examined.

### **Future research agenda**

This paper tended to stress the importance of tourism distribution channels as an appealing area with potential development in the future. Reviewing prior studies confirmed the research growth in the field of tourism distribution channels so that 776 articles were published in this context and citations reached the total number of 10037 in 2018, expressing a remarkable growth when compared with previous years. From our perspective, further investigation of tourism distribution channels can be administered in these regards.

In omnichannel literature, concepts of full interaction and full integration are employed to explain omnichannel (Beck & Rygl, 2015). Interaction refers to the customer's communication with channels and touchpoints, in turn, integration denotes the retailer's efforts to provide channels and touchpoints for the customer. Despite studies on interaction and integration in the field of retailing (Saghiri et al., 2017; Wiener et al., 2018; Marchet et al., 2018), there is a gap in tourism and leisure research. It is therefore recommended to succeeding researchers in this field to provide

frameworks for applying the full integration of tourism distribution channels from business owners' perspective. In addition, studies should be carried out to develop frameworks for tourists' full interaction with brands. As claimed in previous literature, omnichannel research can be executed in three phases; developing, running, and monitoring (Saghiri et al., 2018). With literature review, it has been determined that research has been accomplished in regard to developing and running omnichannel retailing (Manser Payne et al., 2017; Saghiri et al., 2017; Larke et al., 2018; Rasini et al., 2018; Wiener et al., 2018; Berman & Thelen, 2018; Marchet et al., 2018). Yet, no study has been executed concerning monitoring omnichannel retailing. This study also revealed that in the tourist and leisure industry no research has been carried out so far to provide frameworks for developing, running, and monitoring omnichannel systems. Thus, researchers are advised to investigate tourism distribution channels in future studies for establishing frameworks to create, maintain, and track omnichannel systems in the tourism and leisure field.

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## HOW HOTEL BRAND WEBSITE CONTRIBUTES TO ONLINE HOTEL RESERVATION ON CONSUMER REVIEW WEBSITE?

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### ABSTRACT

While past research only attempted to investigate the impact of consumer review website characteristics on the hotel reservation behavior, this study incorporated both characteristics of hotel brand website and consumer review website into consideration. Impacts of the two types of websites on reservation behaviors in consumer review websites were examined. The moderating effects of consumer involvement and risk aversion factors were also considered. Three hundred and two respondents from the questionnaire survey were chosen from Bangkok metropolitan population aged 25-60, who experienced with online hotel reservations. The findings show that apart from the review website's ease of use, information usefulness and price offered, brand website's information usefulness also has positive impact on consumers' decisions on the review website. However, brand website's ease of use discourages the usage of the review website. High-risk aversion consumers tend to use the review websites, while high-involvement consumers pay less attention to the review websites' information usefulness and are unlikely to use them. These findings will help managers effectively manage and design decision algorithm for their multi-channels of hotel e-commerce. The results explain dynamic, search sequence and interrelationship of current traveler's behaviors. The source of their hotel search is both consumer review website and hotel brand website.

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## INTRODUCTION

Today's consumers alter their ways in decision making toward purchases, especially their information search behaviors (Gursoy, 2019). This, in turn, has affected how marketers communicate to their customers. In the travel industry, consumers regard the Internet information search as a significant process in vacation preparation (Sun et al., 2017; Xiang & Gretzel, 2010).

Generally, companies use hotel brand website to market their products and services. However, consumers rely on the more popular consumer review websites, i.e., Agoda, Booking.com, Expedia.com, etc., due to the consumer review websites' review feature. This evolution encouraged researchers to investigate the way people look for information online as well as its effect on consumer decisions.

In an early study, Flanagin and Metzger (2000) found that the information from the Internet as reliable as other traditional media, but not as trustworthy as a newspaper. In the hotel industry, the emergence of e-commerce led some hotels to develop hotel reservation features on their official websites, which drew researchers to investigate the factors that motivated consumers to make reservations through hotel brand website (Bai et al., 2008; Kim & Kim, 2004; Li et al., 2017; Ongsakul et al., 2021; Wang et al., 2015; Yeung & Law, 2004). However, information founded on the Internet was a one-way communication and relatively static in these studies.

Later, the Internet platforms evolved into virtual community websites, i.e., web boards, forums, etc., where information exchange among customers is allowed. Some websites have evolved further by combining more e-commerce functions. As a result, the Internet community website has transformed the way consumers shop online by integrating user's review with marketplace functions. This has set a new standard and shifted more studies on the topic of online communities (Sigala, 2011a, 2011b). Some studies explored the influence of consumer review website feature on consumer purchase intention and trust (Casaló et al., 2010, 2011; Ong, 2012; Park et al., 2007; Sparks & Browning, 2011).

During the hotel reservation process, despite the popularity of consumer review websites, consumers tend to search both consumer review website and hotel brand website for hotel information, and it is possible that customers make reservations on both websites (McCarthy et al., 2010; Sun et al., 2016). Thus, hotel brand website and review website are alternate



channels that compete with and affect each other when customers search for hotels.

However, past research has studied consumer decisions in the context of either hotel brand website or consumer review website. Some studies attempted to compare customer decisions on the two types of websites (Morosan & Jeong, 2008; Liu & Zhang, 2014). However, these studies did not investigate how the two websites affected each other or the interaction effect of the websites in the consumer decision process. In other words, there is little investigation into how hotel brand website contributes to the consumer decision process in consumer review website (Masiero & Law, 2016; Morosan & Jeong, 2008; Liu & Zhang, 2014).

To fill this gap, this study aims to compare the impact of characteristics of hotel brand website and those of consumer review website on consumer decision-making process for consumer review websites. In addition, perceived risk in purchase decision was lowered as a result of online review information (Goldsmith & Horowitz, 2006; Nadiminti et al., 1996). However, it remains untested whether the risk factor has an effect in the context of online hotel reservation when hotel brand website is considered together with consumer review website. Moreover, the degree of consumer involvement is also introduced here because it should have an impact on buyer purchase decision within the information search stage, as it may moderate the effect of hotel brand website and consumer review website. As a result, the consumer risk aversion factor and the degree of consumer involvement factor are incorporated into the research framework as moderators.

It is inevitable that hotel booking through consumer review website plays an important role in the hotel business (Liu & Zhang, 2014; Martin-Fuentes & Mellinas, 2018). However, communication through hotel brand website is indispensable in building a hotel brand (Wang et al., 2015). The results of this study can provide key evidence that guides managers in designing a hotel reservation system on their websites, as well as consumer review websites. This will create a mechanism by which hotel brand website can help support the decision-making process of consumers when making hotel reservation through consumer review website.

## LITERATURE REVIEW

The key factors that impact online hotel booking decisions can be classified into three categories: customer-based antecedents, which refer to the past

experiences of the customer; company-based antecedents, which consist of the reputation of the website owner; and website-based antecedents, which comprise usefulness, ease of use, and website quality (Agag & El-Masr, 2017; Beldad et al., 2010; Filieri et al., 2015). This study aims to examine the antecedents of customer decisions when using consumer review websites compared to hotel brand website, and the analysis level is the website platform. Thus, the antecedents highlighted in this study are the website-based antecedents, which consist of four factors: information usefulness, ease of use and convenience, price and promotion, and review information.

### **Information Usefulness**

The perceived usefulness and perceived ease of use factors are considered the key determining factors in the technology adoption model (TAM), which explains the mechanism behind customers' adoption of new technology (Davis, 1989; Venkatesh & Davis, 2000). In the online hotel reservation environment, perceived usefulness referred as how the tourists think whether online hotel booking is useful, which, in turn, can improve performance, productivity, or effectiveness of the booking process (Agag & El-Masry, 2016; Bhatiasevi & Yoopetch, 2015; Ozturk et al., 2016). Usefulness is a significant factor people consider when making online reservations (Ranganathan & Grandon, 2002; Wong & Law, 2005). It has a positive effect on trust (Li et al., 2017), attitude (Agag & El-Masry, 2016), behavior intention (Agag & El-Masry, 2016; Bhatiasevi & Yoopetch, 2015; Kim & Kim, 2004) and customer loyalty (Ozturk et al., 2016).

Past research found that the availability and efficiency of the information on hotel websites represents the functionality and usability of websites (Yeung & Law, 2004). Based on these results, Bai et al. (2008) found that the two aspects of information usefulness had positive effects on consumer responses in terms of website satisfaction and hotel booking intention, while Wang et al. (2015) found that they had a positive influence on consumer response in terms of online hotel trust and booking intention. The results were also confirmed by Li et al. (2017), who found positive effects of website information usability on e-trust and online booking intention. Hence, it follows that:

*H1: The information usefulness of consumer review websites positively affects consumer response to consumer review websites.*

*H2: The information usefulness of hotel brand website negatively affects consumer response to consumer review websites.*

## **Ease of Use**

Ease of use is another element of website that encourages the customer to conduct information search and make decisions on the website. It refers to how the website is easy to use, easy to understand, and convenient to access (Aziz & Kamaludin, 2014). It is also one of the fundamental factors in TAM, together with the perceived usefulness, and has been adopted to investigate online hotel reservation behavior (Agag & El-Masry, 2016; Lockyer, 2005; Ozturk et al., 2016).

Agag and El-Masry (2016) reported that ease of use positively affected attitude and behavior of consumers on online travel websites. Bhatiasevi and Yoopetch (2015) found a positive effects of ease of use on intention to book hotels or air tickets on online platforms. More specifically, some studies found that the convenience of use of hotel websites had a positive impact on hotel reservation (Kim & Kim, 2004; Kim et al., 2006), while Ozturk et al. (2016) showed that ease of use positively affected customer loyalty. In addition, Morosan and Jeong (2008) found that ease of use had a positive impact on attitudes and intention to use both consumer review websites and hotel brand website. Hence:

*H3: Ease of use of consumer review websites positively affects consumer response to consumer review websites.*

*H4: Ease of use of hotel brand website negatively affects consumer response to consumer review websites.*

## **Price Offered**

Price is one of the major factors in hotel reservations (Law & Hsu, 2006). Research confirmed that price discounts have a positive effect on purchase intentions (Faryabi et al., 2012; Kim et al., 2006). Consumers search for the best price from the Internet (Kim & Gupta, 2009; Wong & Law, 2005). Moreover, it was also found that price affected how consumers evaluate hotel value and thus impacted consumers' intention to purchase (Chiang & Jang, 2007; Lockyer, 2005).

In a study of hotel brand website, it was found that a reasonable price had a positive impact on hotel reservation (Chiang & Jang, 2007; Kim & Kim, 2004; Kim et al., 2017; Lien et al., 2015). A study of consumer review websites also found that price played an importance role in decision-making (Liu & Zhang, 2014). Perceived price led to bias in hotel reviews that indirectly affected booking intention (Li & Hitt, 2010). Therefore, the hypothesis is as follows:

*H5: The price offered on the consumer review website positively affects consumer response to the consumer review website.*

When consumers browse for the most reasonable price, they compare prices between sources, including hotel brand website and consumer review websites. This means that the two websites are competing, and the price information shown on one website will have a negative impact on the other. Thus, we propose the hypothesis as follows:

*H6: The price offered on hotel brand website negatively affects consumer response to consumer review websites.*

### **Peer Experience**

Customer review information or peer experience is a unique characteristic of consumer review websites that is distinctive from the information provided on hotel brand website. Several works have attempted to investigate the impact of customer reviews on hotel performance (Xie et al., 2014), trust (Sparks & Browning, 2011; Sparks et al., 2016), and hotel booking intention (Casaló et al., 2015a; Mauri & Minazzi, 2013; Sparks & Browning, 2011; Tsao et al., 2015). Zhao et al. (2015) empirically showed that online reviews had a direct impact on hotel booking intentions. Kim et al. (2017) reported that online reviews had an impact on hotel trust and online booking intentions.

In the case of a consumer review website, the hotel review is the key feature and provides information about the past experiences of other customers with the hotel. It is expected that the availability of peer experience will help people compare and evaluate hotels, leading to trust, satisfaction and intention to book hotels on the review website. Thus, the following hypothesis is proposed:

*H7: Peer experience on consumer review websites positively affects consumer response to consumer review websites.*

### **Risk Aversion**

Past research found that website security, including privacy and safety, was one of the dominant factors predicting consumer hotel online booking behavior (Kim & Kim, 2004; Wang & Wang, 2010, Wong & Law, 2005). A study focusing on the characteristics of websites investigated the impact of perceived website risk on hotel booking intentions (Agag & El-Masry, 2016, Kim & Kim, 2004; Wang et al., 2015).

Another research stream focuses on the risk aversion characteristics of customers, which is the highlighted factor in this study. Studies suggest that consumers search for more information to lower risk (Goldsmith & Horowitz, 2006; Nadiminti et al., 1996). High risk averse people are most likely to exhaustively seek for information, but the low-risk averse people tend to search from one source of information (Jordan et al., 2013; Money & Crofts, 2003; Quintal et al., 2010). Casaló et al. (2015b) found that high risk averse travelers tend to rely on positive review information than low risk averse travelers.

Risk aversion measurement of past research was employed by several techniques. Most of the research developed ad hoc measurements to scale one's degree of risk aversion (Floyd et al., 2004; Slevitch & Sharma, 2008). Kapferer and Laurent (1993) developed a general scale to measure consumer involvement, which includes the risk importance factor and probability of the error factor as the key dimensions in the measurement. The findings from past research suggest that risk aversion tends to be domain specific. Consumers with different backgrounds have varying tolerance of risk taking in varying domains (Slevitch & Sharma, 2008).

The risk aversion construct is combined into the analysis model to investigate how customer risk aversion moderates the effect of consumer review website and hotel brand website on consumer response to consumer review website. Accordingly, the following hypothesis has been posited:

- H8a: Customer risk aversion moderates the effect of the convenience of consumer review websites on consumer response to Consumer review websites.*
- H8b: Customer risk aversion moderates the effect of the convenience of hotel brand website on consumer response to consumer review websites.*
- H8c: Customer risk aversion moderates the effect of the information usefulness of consumer review websites on consumer response to consumer review websites.*
- H8d: Customer risk aversion moderates the effect of the information usefulness of hotel brand website on consumer response to consumer review websites.*
- H8e: Customer risk aversion moderates the effect of price in the consumer review website on consumer response to the consumer review website.*
- H8f: Customer risk aversion moderates the effect of price in hotel brand website on consumer response to consumer review websites.*
- H8g: Customer risk aversion moderates the effect of review information on consumer response to the consumer review website.*

## Consumer Involvement

Involvement is a popular concept in the consumer research. The concept suggests that the information search behavior of consumers in the decision-making process relies heavily on the magnitude of consumer involvement (Kim et al., 2011; Lehto et al., 2006). Past research suggests that involvement is a situation-specific concept. This means that people's degree of involvement with a product or service is different depending on the decision-making context. For example, travelers' degree of involvement in hotel selection when traveling to a familiar destination may differ from that when traveling to an unfamiliar destination (Laurent & Kapferer, 1985).

Kapferer and Laurent (1993) proposed a multidimensional scale to measure consumer involvement. Their studies introduced five antecedents of consumer involvement: pleasure, interest, sign, probability of error, and risk importance (Kapferer & Laurent, 1993; Laurent & Kapferer, 1985). The risk importance and probability of error antecedents determine the consumer's degree of risk aversion. As risk aversion is treated as a separate moderator in this study. Thus, consumer involvement factor in this study is measured by the three antecedents: interest, pleasure, and sign, proposed by Kapferer and Laurent (1993).

Past studies found that consumers with high involvement focus on the product information in their decision makings (Petty et al., 1983) and concern more on quality of information (Park et al., 2007). On the other hand, low involvement consumers tend to concern more on quantity of information in decision makings (Park et al., 2007), which are ratings and customer reviews (Park & Lee, 2008). In the context of hotel booking, Bandi et al. (2018) found that low involvement consumers tend to make decision on consumer review website, while those with high involvement preferred to search for information from other sources.

Similar to risk aversion factor, the moderating effects of customer involvement on the effects of consumer review website and hotel brand website on consumer response to consumer review website were also tested in this study. Therefore, the associated hypotheses are as follows:

- H9a: Customer involvement moderates the effect of the convenience of consumer review websites on consumer response to consumer review websites.*
- H9b: Customer involvement moderates the effect of the convenience of hotel brand website on consumer response to consumer review websites.*
- H9c: Customer involvement moderates the effect of the information usefulness of consumer review websites on consumer response to consumer review websites.*



*H9d: Customer involvement moderates the effect of the information usefulness of hotel brand website on consumer response to consumer review websites.*

*H9e: Customer involvement moderates the effect of price in consumer review websites on consumer response to consumer review websites.*

*H9f: Customer involvement moderates the effect of price in hotel brand website on consumer response to consumer review websites.*

*H9g: Customer involvement moderates the effect of review information on consumer response to consumer review website.*

## METHODOLOGY

Three hundred and two respondents were selected from Bangkok metropolitan population aged 25-60 using questionnaire survey. Judgmental sampling was utilized with the criteria that the respondents must have experience traveling abroad and decided their own online hotel reservations.

In data collection process, the respondents described their hotel reservation behaviors in a situation where they were to vacation in an unfamiliar destination. The first section of the questionnaire is a set of questions to collect the respondents' socioeconomic profiles. Next, based on five-point Likert scale, the respondents rate their risk aversion in hotel decisions, their involvement with hotels, their motivation to use consumer review websites, and hotel brand website according to the websites' characteristics. Finally, satisfaction, intention, and probability of changing their hotel selection on the consumer review website were collected.

Risk aversion measurement is derived from risk importance factors and the probability of error factors in Kapferer and Laurent's (1993) consumer involvement scale. Additional questions were developed based on the risk concept proposed by Slevitch and Sharma (2008) to cover functional risk, social risk, and financial risk. As a result, there are fourteen questions for risk aversion. The eight questions about consumer involvement were derived from interest factors, pleasure factors, and significant factors in Kapferer and Laurent's (1993) involvement scale. One question in the consumer involvement scale was dropped according to a suggestion from the pretest (Appendix A).

The original 16 questions to evaluate website characteristics are adopted from Kim et al. (2011). After conducting a pretest with ten respondents, several questions were modified and dropped from the measurement because they did not fit with the context of consumer review



websites and hotel brand website in Thailand. Ultimately, there were thirteen questions for hotel brand website and sixteen questions for consumer review websites (Appendix A).

## RESULTS

### Sample Profile

The sample profile and travel behavior are shown in Table 1. The sample was evenly distributed across gender and age groups between 25 and 44 years, with a slight dip in the 45 years and above group. The number of respondents with a bachelor's degree and lower was approximately the same as the number with higher than bachelor's degree. The majority of respondents (57.61) have monthly incomes between 1,001-1,500 Euro. On average, 63.91% of the respondents traveled abroad once a year.

Table 1. *Summary of sample characteristics*

Variables	Categories	Frequency (n = 302)	Percentage (%)
Gender	Male	147	48.68
	Female	155	51.32
Age	25-29	85	28.15
	30-34	60	19.87
	35-39	68	22.52
	40-44	55	18.21
	45 and above	34	11.26
Education	Bachelor's degree and lower	127	42.05
	Higher than bachelor's degree	175	57.95
Monthly income	500 Euro and lower	30	9.93
	501-1,000 Euro	90	29.80
	1,001-1,500 Euro	84	27.81
	1,501-2,000 Euro	43	14.24
	Higher than 2,000 Euro	52	17.22
	N.A.	3	0.99
Status	Single	164	54.30
	Married	129	42.72
	Other	9	2.98
Frequency of travel abroad each year	Less than once a year	39	12.91
	Once a year	193	63.91
	Twice a year	56	18.54
	More than twice a year	14	4.64
How do you search for hotel information online?	Consumer review website	30	9.93
	Hotel brand website	98	32.45
	Consumer review website then Hotel brand website	28	9.27
	Hotel brand website then Consumer review website	146	48.34

As for respondents' online hotel search behavior, the majority (48.34%) started searching from hotel brand website then moved to consumer review websites. Some only searched in one type of websites. Respondents who searched only in hotel brand website were 32.45 percent and only in consumer review websites were 9.93 percent. Only small

proportion of the respondents commenced search from consumer review websites then made further search in hotel brand website (9.27%). These indicated that the hotel brand website plays a more important role than consumer review websites.

### Characteristics of Consumer Review Websites and Hotel brand website

The questions related to consumer review website and hotel brand website characteristics were subjected to principal component analysis with varimax rotation to identify the construct of the measurements. The results revealed seven factor constructs, including four factors for consumer review website characteristics and three factors for hotel brand website characteristics (Table 2). The Kaiser-Meyer-Olkin (KMO) index is equal to 0.814 with 75.98% of cumulative variance explained. The communality values of all questions are greater than 0.600. Some items were dropped from the analysis in this step due to the low factor loadings. The factor loadings of the remaining items were greater than 0.400. Overall, the indicators showed acceptable measurement reliability.

Table 2. *Components of customer review website and hotel brand website characteristics from the principal component analysis*

Variables	Items	Factor loadings	Communality	Rotation Sums of Squared Loadings	% of Variance
RW Information usefulness	RW14	0.687	0.688	1.892	8.225
	RW15	0.856	0.767		
	RW16	0.705	0.706		
RW Ease of use	RW01	0.884	0.833	3.569	15.517
	RW02	0.889	0.830		
	RW04	0.843	0.770		
	RW05	0.806	0.759		
RW Price offered	RW06	0.588	0.656	1.588	6.905
	RW07	0.884	0.837		
	RW08	0.472	0.656		
RW Peer experience	RW09	0.774	0.733	2.436	10.593
	RW10	0.779	0.730		
	RW11	0.793	0.707		
BW Information usefulness	BW14	0.770	0.684	2.016	8.766
	BW15	0.834	0.745		
	BW16	0.754	0.782		
BW Ease of use	BW01	0.882	0.854	3.253	14.142
	BW02	0.833	0.776		
	BW04	0.847	0.792		
	BW05	0.674	0.793		
BW Price offered	BW06	0.759	0.767	2.722	11.833
	BW07	0.834	0.819		
	BW08	0.845	0.792		

Note: 1) RW = Customer review website; BW = Hotel brand website

Considering the questions for the seven factors, the three factors for the hotel brand website characteristics were identified as ease of use, price

offered, and information usefulness. For the characteristics of consumer review website, there were four factors including, ease of use, price offered, information usefulness, and peer experience factors. The results confirmed that the constructs ease of use, price offered, and information factors were the same between the case of the consumer review website and that of the hotel brand website. Thus, we are able to compare the effects of these factors on consumer responses between the two websites.

### Testing Measurement Model

The measurement of the reliability and validity of the seven factors for website characteristics, together with the measurement of the consumer response to Consumer review websites were confirmed using the partial least squares structural equation model (PLS-SEM).

Table 3. Scale composite reliability, validity, and internal consistency

Variables		Coefficients	t	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
RW Information usefulness	RW14	0.688***	12.997	0.726	0.789	0.841	0.640
	RW15	0.823***	27.006				
	RW16	0.878***	48.022				
RW Ease of use	RW01	0.912***	59.906	0.907	0.913	0.935	0.783
	RW02	0.905***	48.073				
	RW04	0.878***	38.145				
	RW05	0.842***	30.541				
RW Price offered	RW06	0.784***	22.662	0.694	0.721	0.827	0.616
	RW07	0.726***	14.008				
	RW08	0.840***	34.691				
RW Peer experience	RW09	0.833***	23.662	0.789	0.796	0.876	0.702
	RW10	0.865***	34.566				
	RW11	0.815***	21.579				
BW Information usefulness	BW14	0.880***	13.796	0.751	0.895	0.843	0.642
	BW15	0.761***	5.662				
	BW16	0.757***	5.758				
BW Ease of use	BW01	0.973***	3.646	0.904	0.943	0.903	0.706
	BW02	0.893***	3.871				
	BW04	0.828***	3.548				
	BW05	0.627**	2.282				
BW Price offered	BW06	0.749***	3.444	0.861	1.162	0.902	0.756
	BW07	0.962***	4.999				
	BW08	0.884***	4.889				
Consumer response	Satisfaction	0.875***	41.117	0.850	0.851	0.909	0.770
	Purchase intention	0.873***	44.067				
	Decision change	0.884***	49.898				

Note: 1) RW = Consumer review website; BW = Hotel brand website

2) \*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.1$

In Table 3, the results suggest that the factor loadings of all items exhibit values above 0.650. The composite reliabilities of the measurement

constructs ranged from 0.827 – 0.935, indicating internal consistency of the measurement. Additionally, the average variance extracted (AVE) indices were between 0.612 and 0.783, which were higher than 0.500, representing convergent validity.

The Fornell and Larcker (1981) criterion was applied to examine the discriminant validity; the square root of each endogenous construct's AVE was compared to its bivariate correlations with all opposing endogenous constructs. Table 4 indicates that correlation coefficients between latent constructs were less than the square root of the AVE indices of the related latent constructs, representing the discriminant validity of the measurement.

Table 4. *Discriminant validity*

Variables	F1	F2	F3	F4	F5	F6	F7	F8
F1 RW Information usefulness	<b><u>0.800</u></b>							
F2 RW Ease of use	0.357	<b><u>0.885</u></b>						
F3 RW Price offered	0.404	0.491	<b><u>0.785</u></b>					
F4 RW Peer experience	0.427	0.388	0.565	<b><u>0.838</u></b>				
F5 BW Information usefulness	0.161	0.205	0.170	0.108	<b><u>0.801</u></b>			
F6 BW Ease of use	0.189	0.219	0.143	0.190	0.253	<b><u>0.840</u></b>		
F7 BW Price offered	0.237	0.133	0.230	0.251	0.292	0.435	<b><u>0.870</u></b>	
F8 Consumer response	0.566	0.515	0.514	0.432	0.242	0.097	0.115	<b><u>0.877</u></b>

Note: 1) *diagonal* = Square root of AVEs.

2) RW = Consumer review website; BW = Hotel brand website

## Structural Model and Hypothesis Testing

The influence of website characteristics on consumer response with the degree of risk aversion and consumer involvement as moderators was examined using PLS-SEM. The method was used because it was most suitable for investigating the effects of independent variables with limited sample size.

There were three submodels in the analysis (Table 5). The first model investigated the impact of Consumer review website characteristics on consumer response. Then, the factors for hotel brand website were introduced in model 2. Finally, the moderating effects of consumer involvement and risk aversion were incorporated in model 3. Table 6 presents the reliability of the risk aversion and consumer involvement measurement. The  $R^2$  value increased from 0.472 in model 1 to 0.494 in model 2 and finally to 0.578 in model 3. The value of  $R^2$  represents the moderate prediction power of the analysis model (Hair et al., 2014). This may due to the reason which there would be some other factors influencing

hotel online booking behavior that were not included in this study, such as customer–manager engagement (Han & Anderson, 2020) or loyalty program from the hotel (O'Connor, 2021). However, the increasing of  $R^2$  suggests that incorporating hotel brand website as well as the effects of risk aversion and consumer involvement in the analysis can contribute to improving the prediction power of the model.

Table 5. *Analysis Results*

	Model 1		Model 2		Model 3	
	Coefficient ( $\beta$ )	t	Coefficient ( $\beta$ )	t	Coefficient ( $\beta$ )	t
<b><math>R^2</math></b>	<b>0.472</b>		<b>0.494</b>		<b>0.578</b>	
RW Information usefulness	0.365***	6.029	0.371***	6.168	0.380***	6.375
RW Ease of use	0.260***	5.223	0.252***	4.349	0.238***	4.056
RW Price offered	0.204***	2.913	0.201***	2.771	0.165**	2.362
RW Peer experience	0.060	1.153	0.082	1.487	0.045	0.810
BW Information usefulness			0.130**	2.048	0.114**	2.125
BW Ease of use			-0.070	0.835	-0.132*	1.941
BW Price offered			-0.082	0.970	-0.059	0.835
Risk aversion					0.126**	2.255
<i>Risk aversion * RW Information usefulness</i>					0.071	1.110
<i>Risk aversion * RW Ease of use</i>					-0.126	1.608
<i>Risk aversion * RW Price offered</i>					-0.026	0.259
<i>Risk aversion * RW Peer experience</i>					0.093	1.157
<i>Risk aversion * BW Information usefulness</i>					-0.060	1.053
<i>Risk aversion * BW Ease of use</i>					-0.065	0.783
<i>Risk aversion * BW Price offered</i>					0.095	1.533
Consumer involvement					-0.060	1.111
<i>Involvement * RW Information usefulness</i>					-0.104**	2.010
<i>Involvement * RW Ease of use</i>					0.123	1.441
<i>Involvement * RW Price offered</i>					0.111	1.202
<i>Involvement * RW Peer experience</i>					-0.087	1.165
<i>Involvement * BW Information usefulness</i>					0.023	0.315
<i>Involvement * BW Ease of use</i>					0.023	0.276
<i>Involvement * BW Price offered</i>					0.039	0.473

Note: 1) RW = Consumer review website; BW = Hotel brand website

2) \*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.1$

The results of model 3 were visualized in Figure 3, the analysis results indicate that the ease of use, price offered and information usefulness factors of consumer review websites positively affected consumer response to review websites. The most influential factor from the consumer review website was information usefulness ( $\beta = 0.380$ ,  $p < 0.01$ ), followed by ease of use ( $\beta = 0.238$ ,  $p < 0.01$ ) and price offered ( $\beta = 0.165$ ,  $p < 0.05$ ). Thus, H1, H3, and H5 were supported. However, the results showed that there was no significant effect on consumer response from peer experience on consumer review websites. Therefore, H7 was not supported.

Table 6. Construct reliability of risk aversion and consumer involvement variables

Variables	Coefficients ( $\beta$ )	t	Cronbach's Alpha	rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
<b>Risk aversion</b>						
Risk01 (Reverse)	0.244***	2.625	0.802	0.820	0.841	0.282
Risk02	0.553***	7.142				
Risk03	0.627***	8.691				
Risk04	0.630***	13.557				
Risk05	0.488***	5.506				
Risk06	0.528***	5.904				
Risk07	0.517***	7.244				
Risk08	0.544***	7.197				
Risk09	0.488***	5.866				
Risk10	0.566***	8.235				
Risk11	0.633***	11.948				
Risk12	0.594***	9.391				
Risk13	0.352***	3.913				
Risk14	0.527***	7.428				
<b>Consumer involvement</b>						
Involvement01	0.786***	12.585	0.856	0.840	0.883	0.488
Involvement02	0.704***	8.812				
Involvement03	0.750***	10.432				
Involvement04	0.527***	4.634				
Involvement05	0.700***	8.574				
Involvement06	0.657***	7.380				
Involvement07	0.687***	8.592				
Involvement08	0.749***	10.694				

Note: 1) \*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.1$

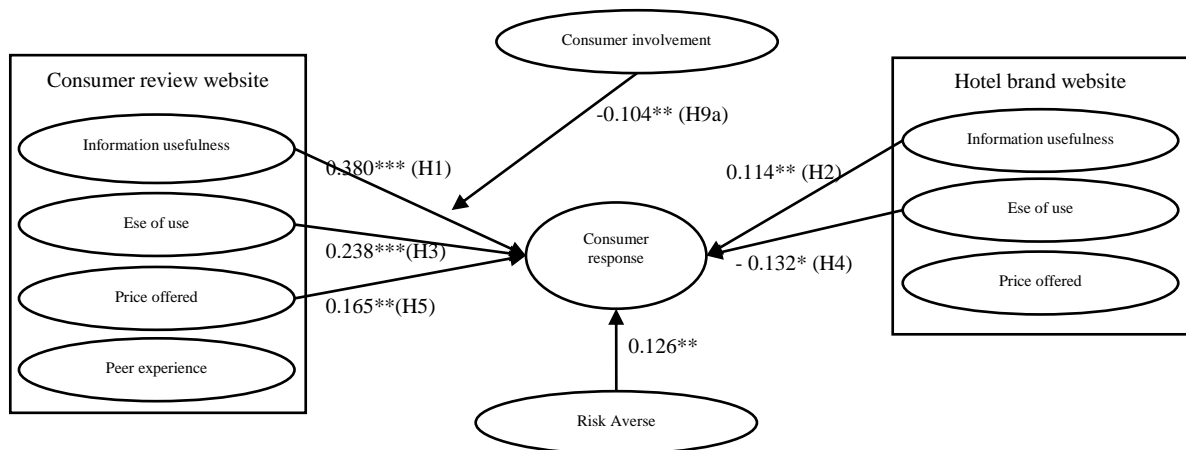


Figure 1. Results of model 3

(Note: 1) The insignificant paths were omitted. 2) \*\*\* =  $p < 0.01$ ; \*\* =  $p < 0.05$ ; \* =  $p < 0.1$ )

Considering the effects of hotel brand website, it was found that the information usefulness of hotel brand website had a positive effect on consumer response to consumer review websites ( $\beta = 0.114$ ,  $p < 0.05$ ). The results did not support H2, which hypothesized that the factor would negatively affect consumer response. The ease of use factor for hotel brand website negatively affected consumer response ( $\beta = -0.132$ ,  $p < 0.1$ ), which

supported H4. However, there was no significant effect of the price offered by hotel brand website; thus, H6 was not supported.

Regarding the effects of risk aversion, the results presented that there was a positive direct effect of risk aversion on consumer response ( $\beta = 0.126$ ,  $p < 0.05$ ). However, there was no significant moderating effect of risk aversion on consumer response. Therefore, H8a-H8g were not supported.

Last, the consumer involvement factor has a negative moderating effect solely on the effect of consumer review website information usefulness ( $\beta = -0.104$ ,  $p < 0.05$ ), while there were no significant effects of consumer involvement on other characteristics of websites. Thus, H9a was supported, and H9b-H9g were not supported.

## DISCUSSION AND IMPLICATIONS

This study found that majority of the respondents (90.07%) searched for hotel information on hotel brand website, and almost half of them began searching from hotel brand website before moving to consumer review websites (48.34%). This implies that consumers try to search and compare hotel information from various sources, especially in the case that they are travelling to an unfamiliar place. Although, there were evidences that customer review website became a popular hotel booking channel among tourists (Liu & Zhang, 2014; Martin-Fuentes & Mellinas, 2018), this study confirmed that hotel managers still had to pay attention to hotel own websites. It is not only because the hotel website can create brand image and trust among consumer (Wang et al., 2015), but it also can help support information search and decision making on consumer review website.

The results from analysis models confirmed that the information usefulness, ease of use, and price offered factors were the key elements of the consumer review website motivating consumers to make hotel reservations. This result coincided with a previous study (Kim & Kim, 2004). However, it was found that the review information was not the influential factor, as was found in past research (Zhao et al., 2015). This may be due to the level of analysis, that is, this research focused on the channel choice decision but not on the hotel choice. The peer experience information may not affect consumers' decision to make hotel reservations on consumer review websites, but it may affect how consumers evaluate the choice of hotel on websites that affect their trust in the hotel choice and thus their booking intentions (Kim et al., 2017).



In addition to the characteristics of the consumer review website, the key contribution of this study is finding that hotel brand websites affect consumers' decisions on consumer review websites. This is a new discovery that was not studied before. Although, we hypothesized that the information usefulness of hotel brand website would discourage consumer to make reservation on customer review website, the results contrarily showed that the impact of the factor on consumer review website was positive. This means that consumers may refer to information on hotel brand website when they try to make hotel reservations on the review website. This assumption was supported by the respondents' characteristics shown in Table 1, in which more than 50% of respondents search for hotel information on both consumer review websites and hotel brand website before they decide. This suggests that hotel managers should continue to supply complete information on their official websites as well as on other intermediary websites such as review websites, although most of the transactions and reservations may not occur within their websites.

The study also found that the hotel brand website's ease of use factor had a negative effect on consumer response to the consumer review website. This implied that if the hotel can make their hotel brand website easy to use, it may lead consumers to make decisions on their website instead of on consumer review website. This may reduce the cost of profit sharing with the consumer review website.

Another key contribution of this study is that consumer risk aversion and consumer involvement were considered in the analysis. It was found that consumer risk aversion has a positive direct effect on consumer response to consumer review websites. This result is consistent with past studies that high-risk averse travelers tend to made decision based on review information (Casaló et al., 2015b). This lead them to make their hotel reservations on consumer review websites.

However, the result reports that consumer involvement negatively moderated the effect of the review website's information usefulness on consumer response. The interpretation of this result may be that consumers who are relatively highly involved with the hotel tend to pay less attention to the information on the review website and have a high tendency to not make hotel reservations on the consumer review website. This result supports the work of Bandi et al. (2018) that high involvement consumers tend to make decision based on information from other sources rather than consumer review website. Such findings can guide hotel managers to manage their customers based on risk aversion and consumer involvement.

The consumer review website is the most likely channel for consumers who are highly risk averse and low involvement.

In conclusion, even though the study tried to compare the effects of the two types of websites, the results found that these two types of websites should cooperate to obtain consumers regardless of where the reservations are made. The hotel brand website still plays an important role in the hotel reservation process. It provides information about accommodations as well as the reservation channel for some consumers, i.e., high-involvement consumers. At the same time, the hotel must join the community or travel advisory sites that pull complete information from various sources. This type of travel community integrates various types of services such as destination, hotel, restaurant, events, and activity information. Moreover, it offers one-stop shopping where highly risk averse consumers can compare, share, and transact. Hotel groups and website developers can form a consortium or join forces with existing travel brokers or intermediaries to remain competitive in this fast-changing travel industry.

The limitation of this study is that the investigated hotel reservation behavior is under the condition that the respondents planning a vacation to an unfamiliar destination. Thus, factors impacting hotel reservation behavior under other travel objectives would be different. Further study with different travel objectives is recommended for future research. Also, this study focuses on how hotel brand website contributes to hotel bookings on consumer review website. Conversely, the study regarding the impact of information in consumer review website together with hotel brand website on hotel brand would be another research topic that can help managers utilize both websites in creating brand for hotel.

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## Appendix A. Constructs and measurements

Website characteristics (Kim et al., 2011)	
RW01, BW01	It's the fastest way to get information
RW02, BW02	I save time when hotel room shopping.
RW01, BW03	*** it's convenient to search from home or work
RW04, BW04	It's the easiest way to get information
RW05, BW05	I am able to compare different hotels easily
RW06, BW06	in order to find the lowest prices
RW07, BW07	**in order to get the information that free of bias
RW08, BW08	in order to get the best value for my money
RW09	because I can see if others feel the same way about a hotel as I do
RW10	because I like to compare my own evaluation with that of others
RW11	because I feel much better when I read that I am not the only one who has a certain problem
RW12, BW12	** , *** I visit this website regularly.
RW13, BW13	*** because I enjoy participating in the experiences of other community members
RW14, BW14	because I am interested in what is new
RW15, BW15	because I get to know which topics are available to find solutions to my problems
RW16, BW16	because customer reviews help me to make the right buying decisions
-	* to benefit from others' experiences before I book a hotel room
-	* because I like being part of a community
Risk aversion (Develop based on Kapferer & Laurent, 1993; Slevitch & Sharma, 2008)	
Risk01	I did not care much about making a mistake in choosing a hotel for tourism (reverse).
Risk02	I was very frustrated when I stayed at the hotel.
Risk03	I would be very annoyed if I chose the wrong hotel.
Risk04	I hesitate when deciding which hotel to stay at.
Risk05	We cannot guarantee that the hotel that we choose is the right choice.
Risk06	Selecting a hotel is quite difficult.
Risk07	In choosing a hotel, we cannot be confident in the hotel we choose.
Risk08	I always care that selected hotels require security measures.
Risk09	I always care that the selected hotel does not have a negative effect on my health.
Risk10	I always care that the chosen hotel must fit my tastes.
Risk11	I always care that the hotel I choose is trendy.
Risk12	I am always concerned that the selected hotel may not be worth the money paid.
Risk13	I am always concerned that the hotel I choose will cause me to lose face with my friends.
Risk14	I am always concerned that the selected hotel meets the specifications mentioned in the media.
Consumer involvement (Kapferer & Laurent, 1993)	
Involvement01	The hotel is extremely important to me in leisure travel.
Involvement02	I'm truly very interested in the hotel.
Involvement03	I couldn't care less about the hotel.
Involvement04	I truly enjoy choosing hotels.
Involvement05	At every hotel accommodation, I feel like I am giving myself a present.
Involvement06	To me, a hotel stay is quite a pleasure.
Involvement07	The hotel a person stays in says something about who they are.
Involvement08	The hotel I stayed in reflects the sort of person I am.
-	* You can tell a lot about a person from the hotel he or she stays in
Consumer response	
Satisfaction	I am satisfied with this site.
Intention to book	You decide to book this hotel through this site.
Intention to change	The information on this site led me to change hotels from the intended hotel.

Note: \* = these questions were dropped according to the result from the pretest.

\*\* = this question was added according to the result from the pretest.

\*\*\* = these questions were dropped according to the result of principal component analysis.

RW = Customer review website, BW = Hotel brand website.



## HOW SMARTNESS OF LEISURE-SPORTS APPLIANCES INFLUENCE TOURISTS' INTENTION TO USE

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### ABSTRACT

The tourism and hospitality industries emphasize on indoor leisure-sport activities for tourists because these activities are less impacted by weather and provide enjoyment and relaxation to travelers, thereby enhancing their satisfaction. This study used the self-promotion perspective to establish a theoretical model to illustrate how the perceived usefulness of a product (in these cases, leisure-sports appliances) mediates the relationship between a tourist's self-image and intention to use. Focusing on the users of treadmill, massage chair, Nintendo Wii, and hydrotherapy machine, a sample of 384 effective respondents was collected and analyzed with structural equation modelling by using AMOS 21.0. The study revealed several essential findings. First, product features like multifunctionality and reactivity significantly associate with a user's self-image and perceived usefulness of a leisure-sports appliance. Product complexity positively relates to self-image but negatively relates to perceived usefulness, whereas automation positively relates to perceived usefulness but negatively relates to perceived self-image. Moreover, individual subjective norms significantly influence perceived usefulness and intention to use. Entertainment is not significant to an individual's perceived usefulness but is significantly associated with a tourist's intention to use. This study affirms the mediating role of perceived usefulness that connects self-image and intention to use.

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 product intelligences  
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 self-image  
 perceived usefulness

### INTRODUCTION

Contemporary technology has enabled the usage of high-tech leisure-sports appliances, which facilitates more indoor activities. Engaging in indoor

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leisure sports is considered a major strategy for modern city-dwellers to promote their health and pleasure (Iwasaki et al., 2005), as such activities allow more flexibility in terms of venue, duration, and weather than outdoor activities. Therefore, for decades, hotel owners have invested in high-tech leisure-sports appliances at leisure sites to attract more travelers (Iryna & Yuriy, 2017; Van Bottenburg & Salome, 2010) who enjoy indoor leisure-sports activities during their travel (Szczechowicz, 2012). For example, hotels and resorts generally construct playgrounds, amusement spaces, or gymnasiums equipped with modern leisure-sports appliances (e.g., treadmills, weight training equipment, motion-sensing gaming consoles, or amusement equipment), which tourists can use for indoor exercises and entertainment. Prior studies have suggested that the tourism and hospitality industries should reliably provide customers with a favorable environment and popular equipment, which positively impact customer satisfaction (Gebremichael & Singh, 2019). Nevertheless, most relevant research has focused on consumers' direct perception of the spatial surroundings (Walls et al., 2011; Wu & Liang, 2009). Only a few studies have noted the association between service quality and the provision of leisure-sports appliances (e.g., Saló et al., 2014), and a limited number of prior studies have investigated how tourists feel about the product intelligence (smartness) of modern leisure-sports appliances.

The current study fills the research gaps in several aspects. First, we present the self-promotion perspective to establish a theoretical model for investigating how hotel customers perceive intelligent attributes of modern leisure-sports appliances that enhance their physical and mental pleasure. Referring to previous studies (Rijsdijk et al., 2007; Rijsdijk & Hultink, 2009), the intelligent attributes of modern appliances include multifunctionality, reactivity, complexity, and automation. Second, we propose that people with a self-promotion focus are inclined to demonstrate their positive characteristics to others. This natural tendency guides people to concentrate on attaining personal goals, seeking and fulfilling their ideals, and demonstrating their self-motivation (Higgins, 2000; Johnson & Romney, 2017; Lanaj et al., 2012). Hence, self-promoted people are likely to pursue a positive self-image. The smartness of leisure-sports appliances is regarded as a means for users to achieve the functional purposes of sports and recreation and to demonstrate their specific capabilities. Third, when people adopt certain leisure-sports appliances, they have perceptions concerning the instrumental functions, symbolism, and experiences associated with such appliances (Tjørndal & Nilssen, 2019). Instrumental symbolism can be defined as positive experiences and conceptions that are

likely to raise the perceived usefulness of appliances. In addition, the subjective norms of referential groups (e.g., friends, coworkers, and relatives) are major sources of advisory opinions (Pavlou & Fygenon, 2006) that are highly likely to influence individuals' perceived usefulness of and intention to use appliances. Finally, as people seek enjoyment and amusement from travel or other recreational activities (Figure 1), we investigate people's extent of perceived entertainment as an essential determinant of whether they perceive the usefulness of and intend to adopt leisure-sports appliances (Venkatesh, 2000).

### **THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES**

The perspective of self-promotion refers to people who engage with others by attempting to make a good impression on them as an accomplished, capable, and smart person (Higgins, 2000; Johnson & Romney, 2017; Lanaj et al., 2012). This concept is used to illustrate the theoretical structure of the current study in terms of the direct and indirect relationships among research variables. Accordingly, we propose that people's perception of the usefulness of the product intelligence of leisure-sports appliances can mediate the variable relationships between a tourist's self-image and, subsequently, the tourist's intention to use. A person's demonstration of their capability of using intelligent appliances is considered a self-promotion tendency. Self-promotion can be used to communicate people's accomplishments to others through public mannerisms such as: high technology expertise, skillfulness, operating ability, and machine proficiency regarding intelligent leisure-sports appliances. When people are motivated by the effect of the promotion of self-image, which strengthens the feeling of perceived usefulness of these intelligent appliances, their intention to use these appliances will increase (Ahn & Hosany, 2017). By drawing others' attention, people generally self-promote their strengths. This is a natural tendency to make others recognize their remarkable personal qualities (Leary, 2019).

#### **Mediating role of perceived usefulness between self-image and intention to use**

*Self-image* refers to the ideas, concepts, or mindsets that people possess about themselves, including physical and mental impressions of the self. People who perceive a more positive self-image are likely to experience greater self-satisfaction when they demonstrate their personal capabilities (Kwak & Kang, 2009; Schacter et al., 2015). Additionally, possessing a

positive self-image is beneficial for cultivating and building social networks and interpersonal relationships as well as for increasing opportunities for promotion at the workplace (Suki & Suki, 2011; Venkatesh & Davis, 2000). Operating leisure-sports appliances may promote relaxation among users, enable people to participate more easily in group socialization (Lynch, 2013), generate self-assurance in human-machine interactions (Webb et al., 1989), and consequently improve users' perceived self-image. Modern smart products that contribute to the greater enhancement of users' self-image are perceived to have a higher level of instrumental usefulness.

*Perceived usefulness* measures the extent to which individuals believe that adopting a new technology may benefit their performance (Venkatesh, 2000), which is considered a critical purport of making decisions on such adopting behaviors (Li et al., 2018; Sigar, 2016). Thus, positive user perceptions of the intelligent attributes of appliances are regarded as both an antecedent and a prerequisite for users to accept and adopt the appliances (Davis, 1989; Davis, 1993). Unlike traditional products, new intelligent appliances require potential users to be familiar with their functions and usefulness, making it imperative for the users to learn how to use the technology (Venkatesh, 2000). Therefore, intelligent appliances are perceived to be useful if the benefit of usage meets or exceeds the users' original expectations (Venkatesh & Davis, 2000). Perceived usefulness determines the extent to which people intend to take action to use intelligent appliances to obtain their expected benefits. From the perspective of self-promotion, self-image enhancement is evaluated by utilitarian motivation (Kang et al., 2011), and perceived usefulness directly influences people's intention to use (Li et al., 2018; Sigar, 2016) leisure-sports appliances. Thus, we propose that the perceived usefulness of these appliances can mediate the relationship between a user's self-image and the intention to use. Accordingly, we propose the hypothesis below:

H1: *Self-image can be improved by adopting intelligent leisure-sports appliances, and it can indirectly influence users' intention to use these appliances through perceived usefulness.*

### **Product intelligence enhances self-image and perceived usefulness**

Intelligent products offer modern information devices or systems (e.g., chips, artificial intelligence, and software) that deliver technology-oriented benefits according to users' needs (Di Palma et al., 2019; Lee, 2019). *Multifunctionality* refers to the ability of an appliance to perform numerous tasks to deliver various utilities expected by users (Park & Lee, 2014).

Multifunctional leisure-sports appliances can be integrated into several sports items and game styles; therefore, people can follow their individual inclinations when operating these appliances (Rijsdijk & Hultink, 2009). Based on the concept of self-interest, the greater the functionality of an object, the more beneficial it should be considered (Horberg et al., 2013). When users can play a wide selection of sports or games using leisure-sports appliances, they are pleased and experience self-promotion. This implies that when an individual has a higher ability for using a multifunctional appliance, it improves the perceived usefulness of the product and enhances the individual's self-image. Accordingly, we propose the following hypothesis:

H2: *Multifunctional leisure-sports appliances positively influence (a) self-image and (b) perceived usefulness when used.*

*Reactivity* represents the ability of a device to respond differently according to its environment. Reactive leisure-sports appliances can act based on their own sensations and judgments of variations in their physical surroundings (Miche et al., 2009; Rijsdijk & Hultink, 2009). A typical example of a reactive leisure-sports appliance is the Nintendo Wii console or Xbox series device. The signal receiver of this gaming device can collect environmental information about the player and respond with instructions in real time. Another example is an intelligent treadmill that can report users' heart rates on the screen as they use the device and, consequently, provide appropriate instructions. Thus, users engage with various functions of a treadmill and are aware of how to always operate it. If an individual benefits from the reactivity of a leisure-sports appliance, both their perceived usefulness of the appliance and their self-image are improved. Accordingly, we propose the below hypothesis:

H3: *When using leisure-sports appliances, reactivity positively influences (a) self-image and (b) perceived usefulness.*

*Complexity* is a general attribute of modern devices that are considered relatively difficult to comprehend and operate (Rijsdijk & Hultink, 2009; Trattner et al., 2019). To maximize the performance of complex leisure-sports appliances, users require time and patience to become familiar with and learn how to operate them (Thompson et al., 1991). Moreover, when users become familiar with the complexities and functions of leisure-sports appliances, they can improve their efficiency in operating them. Other people often admire users who can achieve a sophisticated use of complex devices. Such admiration may, therefore, motivate potential users to enhance their self-image by learning to control

complex intelligent leisure-sports appliances (Horberg et al., 2013). However, if operating the appliances is effortless, users can quickly discover and take advantage of their multifunctional values. Users with limited leisure time are more likely to appreciate time efficiency (Abd-Latif et al., 2012). However, when users require more time and knowledge to adapt to the complexity of leisure-sports appliances, they are more likely to experience inefficiency. The more time and effort are required to operate a complex appliance, the less perceived usefulness the device has (Davis, 1989; Moon & Kim, 2001). Therefore, we propose the hypothesis below:

H4: *A leisure-sports appliance's complexity influences (a) self-image positively and (b) perceived usefulness negatively.*

*Automation* represents the smart attribute of an appliance that can execute embedded functions by itself, without any user intervention (Lee, 2019; Rijdsdijk & Hultink, 2009). More automation often decreases the effort required by users to operate an appliance; thus, users do not need to exert a high degree of mental and physical effort to operate leisure-sports appliances with automatic functions. For example, it is ideal if a treadmill can turn off power automatically after several minutes if users forget to turn it off. Concerning perceived usefulness, the automation of leisure-sports appliances provides convenience to all users. However, equipping an appliance with automation means that people need to think less to operate and control it. When users adopt automatic appliances, they demonstrate less capability and expertise. Therefore, the higher the level of automation of a leisure-sports appliance, the less a user can demonstrate their competency while using it. In interpersonal settings, when using automated appliances, users' self-image may increase but may sometimes decrease as well. Therefore, we propose the hypothesis:

H5: *The automation of leisure-sports appliances influences (a) self-image negatively and (b) perceived usefulness positively.*

### **Subjective norms and entertainment sensation influence perceived usefulness**

*Subjective norms* are formed based on the influence of one's interpersonal connections, such as relatives and other significant people, who influence behaviors within their social network to a considerable degree (Brown & Venkatesh, 2005). People may perceive a certain degree of social pressure to adopt or refuse certain behaviors depending on specific group expectations; thus, they may follow specific motivations of significant people (Titah & Barki, 2009), who provide a suggestive behavioral pattern. Users, for the



most part, disseminate and adopt the use of intelligent appliances with reference to their social networks; the knowledge and perspectives of significant people in their lives strongly influence users' decisions on whether to adopt a new technology (Rogers, 2003). Therefore, the subjective norms of the significant referent group influence users' perceived usefulness of leisure-sports appliances. If potential users obtain positive information about leisure-sports appliances from significant people in their lives, their attitudes toward using these appliances are likely to improve, increasing their intention to use such devices. Therefore, we propose the hypothesis below:

H6: *The subjective norms around leisure-sports appliances have a positive influence on (a) their perceived usefulness and (b) people's intention to use them.*

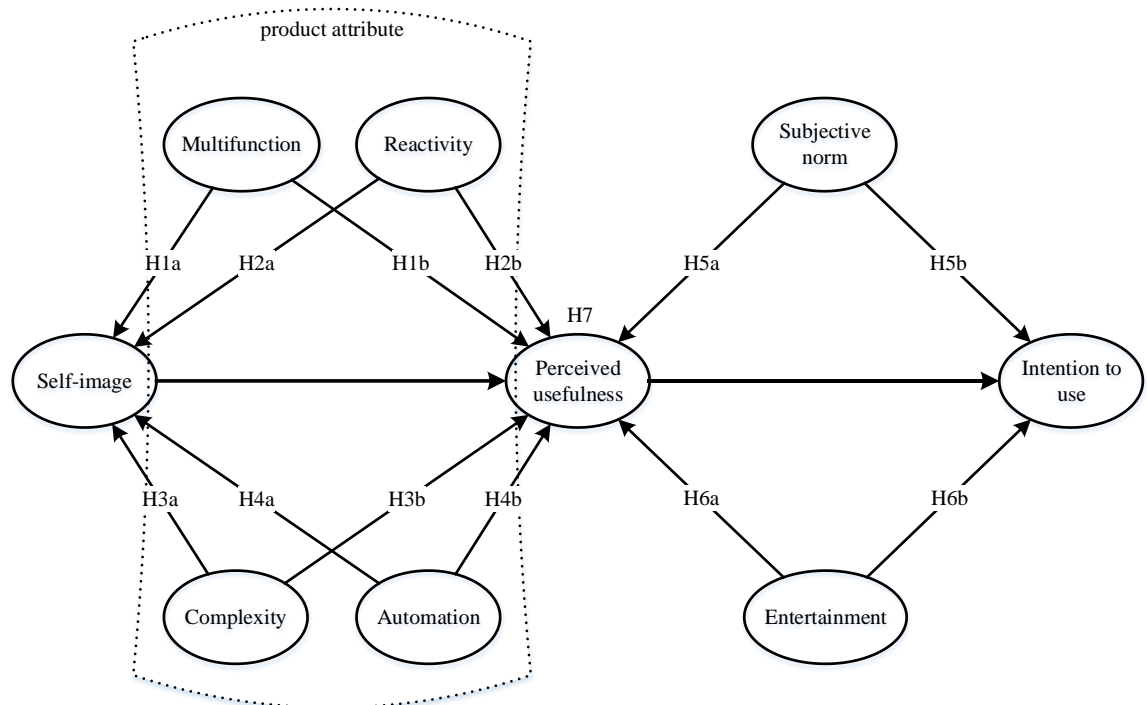


Figure 1. *Theoretical framework*

*Entertainment* refers to activities (e.g., games, performances, movies, and stories) intended to be fun for participants by seizing their attention and interest. Feeling entertained while using intelligent leisure-sports appliances is one manifestation of their positive effects (Lewis et al., 2003; Venkatesh, et al., 2003). A prior study has emphasized that the positive effects of an activity may stem from individual characteristics or the interaction between individuals and their surroundings (Moon & Kim, 2001). The concept of interacting with one's surroundings is inherent in users experiencing immersion when using intelligent leisure-sports



appliances. Such pleasurable and positive experiences are valued by users, whose intention to use intelligent appliances increases. Thus, the intention to use leisure-sports appliances is influenced by an individual's subjective experiences of being entertained (Kang et al., 2011). In addition, as leisure-sports appliances were originally designed to enrich the quality of indoor activities, users' enjoyable experiences when adopting such appliances are likely to increase their perceived usefulness. Therefore, we propose the hypothesis below:

*H7: Entertainment derived from leisure-sports appliances positively influences (a) their perceived usefulness and (b) the intention to use them.*

## METHODS

### Sample

We administered a cross-sectional survey by which research data were obtained through an onsite questionnaire survey. To purposively collect reliable data from the users of hotel leisure-sport appliances with smart features, we invited 32 hotel employees to be our research interviewers who worked at 32 medium-sized resorts in Taiwan. Furthermore, we collected the lists of the indoor leisure-sport appliances from these 32 hotels. Based on that, we concluded that four of the most installed types of intelligent appliances (with electronic chips) in hotels are: treadmills, massage chairs, Nintendo Wii console or Xbox series device, and hydrotherapy machines. We ensured that every invited hotel employee could successfully interpret the content of questionnaire items answered by the tourists who used leisure-sports appliances in their hotels. These invited hotel employees had helped tourists find intelligent appliances and later invited them to participate in the research survey by ensuring that the respondents understood the contents of the questionnaire survey. Of the 384 respondents who returned valid questionnaires, 74.7% were young people aged below 40 years, 55.7% were female tourists, 60.4% had a university degree or higher education, and 68.2% had exercise habits with a frequency of two to four times per month. Altogether, we obtained 75 effective samples from treadmill users, 63 from massage chair users, 149 from the users of Nintendo Wii console or Xbox series device, and 97 from the users of hydrotherapy machines.

### Measures

Measures for each research dimension were adopted by examining and choosing proper measure scales from domain literature (see Appendix 1).

The questionnaire items were modified and double-interpreted by two domain experts to formulate these items so that they match the context of leisure-sports appliances involving physical activity. All items were evaluated by using a 7-point Likert-type scale (i.e., strongly disagree = 1 and strongly agree = 7). The product intelligence attributes were multifunctionality, reactivity, complexity, and automation. These four dimensions were measured using a 10-item questionnaire modified from Rijdsdijk and Hultink (2009), comprising four items related to multifunctionality, four related to reactivity, three related to complexity, and three related to automation. The internal consistency scores of the weighted dimensions of multifunctionality, reactivity, complexity, and automation were satisfactory ( $\alpha = 0.89, 0.87, 0.89, \text{ and } 0.78$ , respectively). Self-image was assessed using a 3-item questionnaire proposed by Karahanna et al. (1999), and the internal consistency score of weighted self-image was also satisfactory ( $\alpha = 0.88$ ). The perceived usefulness scale used in this study was adapted from the scales proposed by Davis et al. (1989). It comprised four items, and the weighted internal consistency score of perceived usefulness was acceptable ( $\alpha = 0.87$ ). The subjective norm scale used in this study was adapted from scales proposed by Taylor and Todd (1995) and Brown and Venkatesh (2005). It comprised three items; the internal consistency score of weighted subjective norm was acceptable ( $\alpha = 0.80$ ). The entertainment scale was adapted from that proposed by Moon and Kim (2001); the internal consistency score of weighted entertainment was satisfactory ( $\alpha = 0.94$ ). Furthermore, we adapted the intention to use scale from the scales proposed by Davis et al. (1989). The internal consistency score of weighted intention to use was satisfactory ( $\alpha = 0.91$ ).

## RESULTS AND DISCUSSION

### Baseline analysis

First, ANOVA tests by using SPSS 18.0 were applied to test the significant differences among the grouped sample sets of each user characteristic items. We found several important results with regard to users' perceived smartness of intelligent leisure-sports appliances. Regarding usefulness, the results (Table 1 of Appendix 2) show that the tourists who exercise more than five times per month perceived usefulness of an appliance significantly higher than those who exercise less than once per month on average. Tourists who have more than 30,000 New Taiwan dollars (NTD) per month perceived usefulness significantly lower than the two less-income groups. About reactivity, the results (Table 2 of Appendix 2) show that the respondents who exercised the least perceived reactivity significantly lower

than the other two groups of the respondents who exercised the most. Groups with an average age between 20 and 30 years perceived reactivity significantly higher than groups with an average age between 30 and 40 years. Furthermore, tourists who have more than 30,000 NTD per month perceived reactivity significantly lower than the two less-income groups. Concerning complexity, the results (Table 3 of Appendix 2) show that the highest-exercise group perceive complexity significantly higher than the least-exercise group. Tourists with a university degree or higher education perceived complexity significantly higher than those who had a high school degree or lower education. High-income users perceived complexity significantly lower than the other, the second, low-income groups. Regarding automation, the results (Table 4 of Appendix 2) show that the group with an average age between 31 and 40 years perceived automation significantly lower than the other groups. Moreover, the highest income users perceived automation significantly lower than the low-income groups.

Second, Amos 21.0 was applied to test the factor validity of each research construct. Table 1 displays the correlation coefficients for the variables and the average variance extracted (AVE) of the measures. The AVE of automation was 0.55, which is higher than the threshold value of 0.5 (Bagozzi & Yi, 1988). Another calibration for ensuring discriminant validity is to examine if each construct's square root of the AVE is higher than the correlation values of the construct with the others (Bhattacharjee, 2002; Fornell & Larcker, 1981; Segars, 1997). Table 1 also presents the correlations between constructs and each construct's AVE, indicating that the square root of each construct's AVE (on-diagonal values) is higher than its correlation with the others (off-diagonal values). This provided our research model with supportive evidence for ensuring the discriminant validity of each selected construct.

All values of factor loadings tested for each construct were significant in the model ( $p < 0.05$ ; the loadings ranged from 0.68 to 0.91). Moreover, the convergent validity was evaluated by using composite reliability, which represents the aggregation of the items that contain the composite (i.e., latent variables measurement; Bagozzi & Yi, 1988). We obtained a satisfactory result that the values of composite reliability of the nine latent variables reached the threshold of .6 (Bagozzi & Yi, 1988). The analytical results showed that our theoretical model illustrated a good fit to the data with the relevant values:  $\chi^2 = 1136.01$ ,  $df = 491$ ,  $\chi^2/df = 2.31$ , SRMR = 0.05, goodness of fit index (GFI) = 0.84, adjusted goodness of fit index (AGFI) = 0.80, normed fit index (NFI) = 0.87, incremental fit index (IFI) =

0.92, comparative fit index (CFI) = 0.92, and root mean square error of approximation (RMSEA) = 0.06.

Table 1. Descriptive statistics and correlation coefficients among variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Multifunction	4.71	1.14	<b>.82</b>								
2. Reactivity	4.74	1.28	.46***	<b>.80</b>							
3. Complexity	3.69	1.07	.10	.24***	<b>.85</b>						
4. Automation	4.83	1.13	.40***	.55***	.07	<b>.74</b>					
5. Self-image	3.75	1.17	.29***	.32***	.31***	.19***	<b>.85</b>				
6. Perceived usefulness	4.75	1.17	.49***	.59***	.12*	.50***	.35***	<b>.80</b>			
7. Subjective norm	4.66	1.16	.20***	.27***	.15**	.31***	.29***	.30***	<b>.78</b>		
8. Entertainment	5.30	1.21	.58***	.38***	-.06	.37***	.14**	.41***	.22***	<b>.87</b>	
9. Intention to use	4.89	1.19	.63***	.44***	.08	.36***	.26***	.52***	.19***	.59***	<b>.81</b>

Note: 1. N = 348; \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

2. The square root of each construct's AVE are shown as bold print font in diagonal values

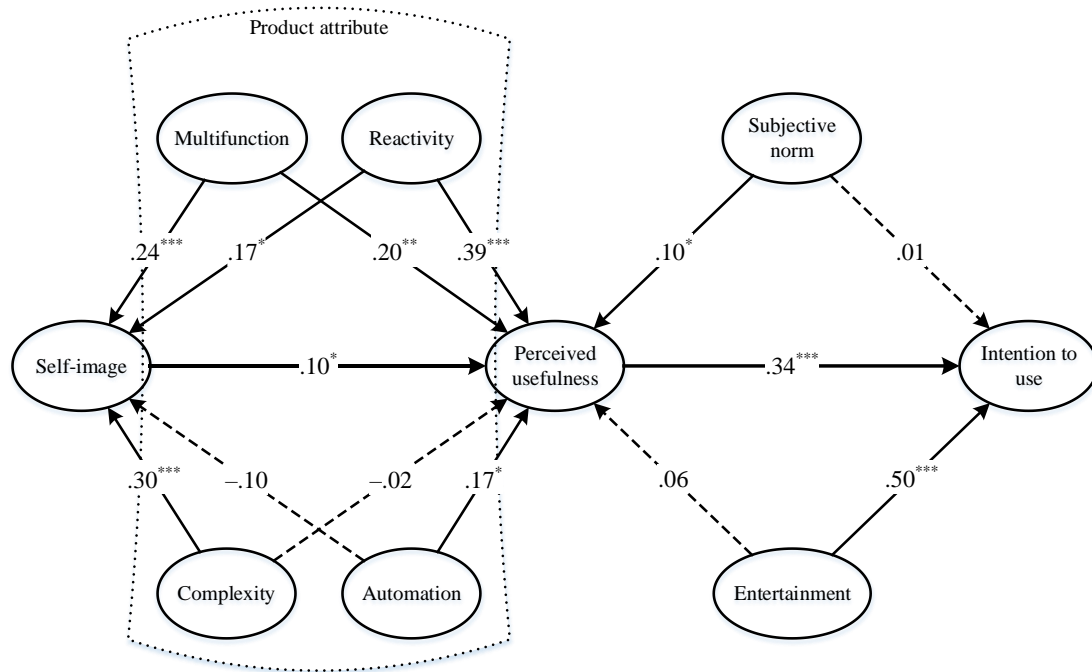


Figure 2. The Structural Model

Notes: 1.  $\chi^2 = 1171.58$ ,  $df = 498$ ,  $\chi^2/df = 2.35$ , SRMR = 0.06, GFI = 0.83, AGFI = 0.80, NFI = 0.86, IFI = 0.92, CFI = 0.92, RMSEA = 0.06

2. The straight line represents significant variable relationship, and dotted line represents insignificant ones.

### Structural model

The paths of the proposed model are shown in Figure 2. The analytical results presented a good fit with the observed data that fits the established model well ( $\chi^2 = 1171.58$ ,  $df = 498$ ,  $\chi^2/df = 2.35$ , SRMR = 0.06, GFI = 0.83, AGFI

= 0.80, NFI = 0.86, IFI = 0.92, CFI = 0.92, and RMSEA = 0.06). As shown in Figure 2, the results revealed that the indirect path from self-image to intention to use through perceived usefulness was positive and significant ( $\gamma = 0.10$ ,  $p < 0.05$ ;  $\beta = 0.34$ ,  $p < 0.01$ ); concerning product intelligence, the path from multifunctionality to self-image and perceived usefulness was positive and significant ( $\gamma = 0.24$ ,  $p < 0.01$ ;  $\gamma = 0.20$ ,  $p < 0.01$ ); the path from reactivity to self-image and perceived usefulness was significantly positive ( $\gamma = 0.17$ ,  $p < 0.05$ ;  $\gamma = 0.39$ ,  $p < 0.01$ ); the direct path from complexity to self-image was significantly positive ( $\gamma = 0.30$ ,  $p < 0.01$ ), but the path from complexity to perceived usefulness was insignificant ( $\gamma = -0.02$ , n.s.); similarly, the direct path from automation to perceived usefulness was significantly positive ( $\gamma = 0.17$ ,  $p < 0.01$ ), but the path from automation to self-image was insignificant ( $\gamma = 0.01$ , n.s.). The results presented that subjective norm significantly predicted perceived usefulness ( $\gamma = 0.10$ ,  $p < 0.05$ ) and that entertainment significantly predicted intention to use ( $\gamma = 0.50$ ,  $p < 0.01$ ). Nevertheless, the predictive effect of subjective norms on intention to use was insignificant ( $\gamma = 0.01$ ,  $p > 0.05$ ) and entertainment did not directly predict perceived usefulness ( $\gamma = 0.06$ ,  $p > 0.05$ ).

## DISCUSSION

This study explored how some characteristics of leisure-sports appliances influence the appliances' perceived usefulness and their users' self-image and intention to use. After collecting empirical data and conducting a structural equation modeling analysis, we found that the intelligent attributes of leisure-sports appliances can be used to promote users' self-image. Self-image influences the public perspectives of the perceived usefulness of modern novel technologies and, thus, increases the intention to use leisure-sports appliances. In this study, a product's smart features were not only perceived to enhance self-image but also caused tourists to perceive the usefulness of leisure-sports appliances. Users perceived that their self-image could be improved through intelligent attributes of multifunctionality, reactivity, and complexity of leisure-sports appliances because publicly demonstrating the capability to operate such appliances enhances a person's self-image. Although not all of these attributes were found to influence both self-image and perceived usefulness, both multifunctionality and reactivity significantly increased and reinforced them (Horberg et al., 2013). However, complexity only strengthened self-image, and automation only strengthened perceived usefulness. Given that when the hotel and recreational industries seek to acquire leisure-sports appliances, they anticipate enhancing both tourists' self-image and the

appliances' perceived usefulness, focusing on multifunctionality and reactivity of such appliances can result in the most positive outcome possible. Concerning complexity and automation, some adjustments must be made depending on the core target market and each distributor, dealer, retailer, agent, and so forth (Davis, 1989; Moon & Kim, 2001). For example, for a hotel whose target market mostly comprises people with a higher social status, more complex appliances should be acquired; by engaging with that complexity, tourists can enhance their sense of self-worth and, consequently, their self-image (Cheung & Lee, 2010). However, a hotel serving a more pragmatic clientele should acquire more automated appliances to facilitate the immediate perception of usefulness. This should enhance users' intention to use these appliances because perceived usefulness is more likely to affect people whose subjective norms encourage a rational perspective. However, whether usefulness is perceived may be influenced by an individual's sentiments toward entertainment. In summary, if hotels and recreational industries advertise through word-of-mouth marketing with the aim of maintaining a positive reputation, this can enhance tourists' perceived usefulness of leisure-sports appliances, which, in turn, can increase tourists' intention to use them. Moreover, if the overall surroundings and physical facilities contribute to a positive ambiance in which the appliances are used, this can enhance the entertainment value of these appliances.

## CONCLUSION

Given the importance of equipping hotels with intelligent leisure-sport appliances to increase travelers' satisfaction, the current study used self-promotion to illustrate the effect of travelers' perception on their intention to adopt modern technologies (Higgins, 2000; Johnson et al., 2017; Lanaj et al., 2012). Modern leisure-sports appliances at tourism and recreational sites provide not only health-promotion functions but also entertainment and stress relief (Godbey, 2003; Kuo, 2013). When tourists engage in indoor activities using modern intelligent appliances, product smartness becomes a cue by which they recognize the product's advantageous functionality (Szymanski et al., 2007). General examples of intelligent appliances at tourism sites are gaming consoles (e.g., Nintendo Wii or Microsoft Xbox) and health and wellness equipment (e.g., treadmills, massage chairs, and hydrotherapy devices). These appliances enable tourists to engage in indoor activities during their leisure time. Nevertheless, the intelligent attributes (e.g., multifunctionality, reactivity, complexity, and automation) of such appliances (Rijsdijk & Hultink, 2009) are noteworthy because they may



influence the quality of indoor activity services at hotels and recreational sites.

### **Managerial implications**

The effect of product intelligence (smartness) on user recognition, perception, or attitude has received increasingly attention. How satisfied users are with these intelligent/smart characteristics of modern appliances needs to be empirically examined (Lee & Shin, 2018; Lin et al., 2017; Rijdsdijk & Hultink, 2009). This study established a theoretical model to explain how users perceive the usefulness of leisure-sports appliances mediating the effect of tourists' self-image on intention to use. The three contributive implications of this study are illustrated as follows: First, this study validated the correlation between subjective norms and perceived usefulness of appliances for promoting self-image, supporting multiple other studies on technological products. All these studies reinforce the notion that leisure-sports appliances exert gradational influences on both self-image and perceived usefulness. Second, this study hypothesized the influence of the entertainment experience on intention to use that was validated by the findings. Thus, this study filled the relevant research gap. Third, this study comprehensively evaluated the attributes of leisure-sports appliances and their influence on self-image. It made a significant contribution by probing into the existing issues and clarifying the advantages (e.g., automation, reflectivity, and multi-function) as well as disadvantages (e.g., complexity) of the product intelligence of modern leisure-sport appliances.

### **Practical implications**

Based on our research findings, we provide the following suggestions for the hotel and recreational industries: First, if hotels or recreational sites are planning to invest in leisure-sports equipment, they should determine whether priority should be given to products that enhance self-image (Ahn & Hosany, 2017) or to those that increase perceived usefulness. Especially, hotel instructors can recommend to tourists who exercise regularly to use intelligent appliances because they perceive usefulness better than other tourists. However, tourists who exercise regularly may feel that intelligent leisure-sports appliances are highly complex; thus, the onsite instructors should help them to operate the appliances successfully. Second, after hotels or recreational sites procure leisure-sports appliances, they should consider improving subjective norms through word-of-mouth marketing and maintaining a positive general reputation if tourists lack a sense of the

devices' perceived usefulness. Alternatively, perceived usefulness can be enhanced through other brick-and-mortar businesses or by organizing events to stimulate tourist entertainment. This should enhance tourists' intention to use leisure-sports appliances.

This study concluded that tourists' intention to use leisure-sports appliances is influenced by three major factors. The first factor is perceived usefulness; the utilitarian perspective is considered beneficial by a user because exercising by using leisure-sports appliances can enhance physical fitness or health and can provide therapeutic effects, relaxation, or leisure activities (Horberg et al., 2013; Kang, 2002). The second factor is the influence of subjective norms, particularly through social pressure from close relatives, friends, colleagues, managers, and other authoritative figures in a person's social group. The opinions and perceptions of significant people serve as a motivation and can affect how users socially identify with leisure-sports appliances (Cheung & Lee, 2010). The third factor is the users' entertainment experience of leisure-sports equipment. Positive emotions frequently play a critical role in establishing behavioral patterns, as validated by numerous studies; therefore, the entertainment experience is a crucial element influencing users' intention to use leisure-sports appliances (Moon & Kim, 2001; Morosan & Jeong, 2008).

### **Suggestions for future research**

Market competition between competitors in the hotel and recreational industries is more likely to be aggressive; therefore, market segmentation should be more clearly defined and subdivided. To enhance service quality within brick-and-mortar businesses, the market should be subdivided so that one can proceed to investigate specific facilities. This study focused on leisure-sports appliances, but future studies could apply our research outcomes to interior design and decoration, the coordination of lighting and colors, landscaping design and visual angles, or ambient music (as mentioned in Brunner-Sperdin & Peters, 2009). The comprehensive design of an environment, including the traffic flow in interior design and network connection services, should also be considered. Future studies should be extended to investigating group behavior, conformity influences, and the bandwagon effect, the three levels of cultural influence, and so forth. Moreover, the influence of intention to use can be extended to entertainment more generally. Future studies should also consider whether the intention to use leisure-sports appliances is determined more by tourists' long-standing personalities or by momentary emotional influences.

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## APPENDICES

Appendix 1. *Measures and Sources*

Research Construct/Items	Standardized estimates	Cronbach's $\alpha$	Composite reliability (CR)	References
<b>Multi-functionality</b>		.89	.89	Rijsdijk & Hultink (2009)
1. Can function to achieve plentiful activities.	.74			
2. Can do a lot	.86			
3. Performs multiple tasks.	.86			
4. Fulfills multiple functional needs.	.80			
<b>Reactivity</b>		.87	.88	Rijsdijk & Hultink (2009); Jennings & Wooldridge (1998)
1. Keeps an eye on its environment.	.81			
2. Reacts to changes.	.86			
3. Directly adapts its behavior to the environment	.82			
4. Observes it's environment actively	.70			
<b>Complexity</b>		.89	.89	Rijsdijk & Hultink (2009);
1. Much help is needed in taking this appliance into use.	.80			
2. Much effort is need to learn how to use this appliance.	.89			
3. Much knowledge is needed to use this appliance.	.87			
<b>Automation</b>		.78	.78	Rijsdijk & Hultink (2009); Jennings & Wooldridge (1998)
1. Works independently.	.68			
2. Takes the initiative.	.76			
3. Takes decisions by itself.	.76			
<b>Self- image</b>		.88	.88	Karahanna et al. (1999)
1. Make me feel more popular	.81			
2. Promote my social status	.87			
3. Increase my own positive image	.85			
<b>Perceived Usefulness</b>		.87	.88	Davis et al. (1989); Venkatesh & Davis (2000)
1. Enable me to accomplish purposes more quickly.	.82			
2. Make it easier to complete my health plan	.88			
3. Increase my effectiveness of sports and leisure.	.73			
4. Beneficiary for my health	.77			
<b>Subjective Norms</b>		.80	.82	Taylor & Todd (1995); Brown & Venkatesh (2005)
1. My family think I should use the appliance.	.73			
2. My close friends think I should use the appliance.	.91			
3. My immediate supervisor thinks I should use the appliance.	.67			
<b>Entertainment</b>		.94	.94	Moon & Kim (2001)
1. Make me feel pleased	.82			
2. Make me feel enjoyable	.89			
3. Make my life have more fun	.90			
4. Make me feel relaxed	.88			
5. Make me feel comfortable	.85			
<b>Intention to use</b>		.91	.91	Davis et al. (1989)
1. I like using this appliance.	.83			
2. I will keep on using it.	.85			
3. I feel pleased when use it.	.83			
4. I persuade others to use it.	.79			
5. I actively use the appliance in my leisure time.	.77			



## Appendix 2. Results

Table 1. ANOVA analysis of Usefulness (PU)

User characteristics	Types	Frequency	Test Statistic		Scheffe/ Bonferroni
			T	F	
Exercise habits and frequency	Average frequency/per month				
	A.	0-1 time	122		
	B.	2-4 times	126		
	C.	More than 5 times	136		5.73**
					C>A**
	Average duration every time				
A.	Less than 0.5 hour	139			
B.	1 hour	139		0.71	
C.	More than 1.5 hours	106			
Education	A.	High school or below	152		
	B.	University or above	232	-0.78	
Age	A.	20 years old or below	83		
	B.	21-30 years old	119		
	C.	31-40 years old	85		1.84
	D.	41 and above	97		
Gender	A.	Male	170		
	B.	Female	214	-0.48	
Monthly disposable income (NT dollars)	A.	Below 10,000	169		
	B.	10,000 -30,000	107		10.17***
	C.	Above 30,000	108		A>C**, B>C**

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table 2. ANOVA analysis of Reactivity (RE)

User characteristics	Types	Frequency	Test Statistic		Scheffe/ Bonferroni
			T	F	
Exercise habits and frequency	Average frequency/per month				
	A.	0-1 time	122		
	B.	2-4 times	126		
	C.	More than 5 times	136		5.81**
					B>A*, C>A**
	Average duration every time				
A.	Less than 0.5 hour	139			
B.	1 hour	139		1.90	
C.	More than 1.5 hours	106			
Education	A.	High school or below	152		
	B.	University or above	232	-1.02	
Age	A.	20 years old or below	83		
	B.	21-30 years old	119		
	C.	31-40 years old	85		3.85**
	D.	41 and above	97		B>C*
Gender	A.	Male	170		
	B.	Female	214	-0.21	
Monthly disposable income (NT dollars)	A.	Below 10,000	169		
	B.	10,000 -30,000	107		7.25**
	C.	Above 30,000	108		A>C*, B>C**

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$

Table 3. ANOVA analysis of Complexity (CX)

User characteristics	Types	Frequency	Test Statistic		Scheffe/ Bonferroni
			T	F	
Exercise habits and frequency	Average frequency/per month				
	A.	0-1 time	122		
	B.	2-4 times	126	4.15*	C>A*
	C.	More than 5 times	136		
	Average duration every time				
	A.	Less than 0.5 hour	139		
B.	hour	139	1.92		
C.	More than 1.5 hours	106			
Education	A.	High school or below	152		
	B.	University or above	232	-2.13*	B>A*
Age	A.	20 years old or below	83		
	B.	21-30 years old	119		
	C.	31-40 years old	85	2.48	
	D.	41 and above	97		
Gender	A.	Male	170		
	B.	Female	214	1.35	
Monthly disposable income (NT dollars)	A.	Below 10,000	169		
	B.	10,000 -30,000	107	3.32*	B>C*
	C.	Above 30,000	108		

Note: \*  $p < 0.05$ 

Table 4. ANOVA analysis of Automation (AU)

User characteristics	Types	Frequency	Test Statistic		Scheffe/ Bonferroni
			T	F	
Exercise habits and frequency	Average frequency/per month				
	A.	0-1 time	122		
	B.	2-4 times	126	1.15	
	C.	More than 5 times	136		
	Average duration every time				
	A.	Less than 0.5 hour	139		
B.	1 hour	139	0.04		
C.	More than 1.5 hours	106			
Education	A.	High school or below	152		
	B.	University or above	232	-0.59	
Age	A.	20 years old or below	83		D>C*/
	B.	21-30 years old	119		
	C.	31-40 years old	85	3.45*	A>C*, B>C*,
	D.	41 and above	97		D>C*
Gender	A.	Male	170		
	B.	Female	214	0.96	
Monthly disposable income (NT dollars)	A.	Below 10,000	169		
	B.	10,000 -30,000	107	5.97**	B>C**
	C.	Above 30,000	108		

Note: \*  $p < 0.05$ , \*\*  $p < 0.01$

## WHAT DO CUSTOMERS SHARE ABOUT EATING-OUT ON FACEBOOK?

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### ABSTRACT

Discussing the eating-out experience is long-lasting among people around the world, and with the advent of the internet, customers change the way of sharing dining experience online. This study aims to identify the dominant topics and emotional dimensions on Facebook status updates of large-scale individual accounts, as well as the topic variance by users' age and gender. With an adaption of the myPersonality dataset on Facebook, topic modeling and emotion analysis are conducted. Findings indicate that five primary topics are composed of food, happy time, dining experience, coffee time, and people. Males and females demonstrate a significant difference in the theme of people. Positive emotional dimensions generally show stronger extents than the negative ones. This study is a pioneer of exploring Facebook individual accounts in the hospitality and tourism field and expands industry practitioners' comprehension of dominant dining-out themes and emotional responses among distinct consumer groups.

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### INTRODUCTION

Dining-out has increasingly gained importance in the U.S., accounting for over 50% of total food expenditures. Food sales at restaurants accounted for 71.9 percent of food-away-from-home expenditures in 2017 (US

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Department of Agriculture Economic Research Service, 2018). Greater educational attainment and rising double-income households have both contributed to the increase of restaurant demands; Americans ate out five times averagely per week in 2018 (US Department of Agriculture Economic Research Service, 2018). Therefore, the restaurant industry has shown greater attention to consumers' eating-out patterns. Industry practitioners have widely agreed that e-WOM is an effective venue for understanding consumers' eating-out patterns (Yamaguchi et al., 2018).

The advent of the internet has fundamentally changed the ways individuals share dining experiences in today's world. Social media support communications in which individuals interact with others; people update, respond, and pass messages to others in a social circle about personal lives, trending topics, and perceptions toward products/services (Chatterjee, 2011). The unique characteristic of social media has made itself as an exceptional channel for people to share their restaurant experience, including topics and emotions, socially instead of keeping it as a personal experience. Since social influence is an important factor in making food choices (Furst et al., 1996), an understanding of what restaurant attributes addressed and what emotions conveyed on social media can provide researchers and practitioners with insights into the dynamic nature of individual's dining experience.

Previous studies (e.g., Kang et al., 2014) have dominantly relied on surveys to explain consumers' dining experience on social media which lack external validity. The massive data warehouse from social media platforms can create opportunities to revisit survey validation and improve external validation (Baesens et al., 2016). However, the existing studies adopting big data analytics (e.g., Wang et al., 2019) have primarily focused on business-oriented platforms (e.g., Yelp, TripAdvisor). People's posts on these websites are goal-oriented (e.g., help others to make restaurant choices), which lack an instinctive self-observation of daily life phenomena. Instead, such "indeliberate" in-the-moment communications about eating out (i.e., eat at a restaurant as an aspect of personal life) are expected to happen in the wide-ranging network of individual accounts on Facebook. Examining a large and random pool of messages from Facebook individual accounts has been proven effective to detect and predict social patterns or trends, ranging from political polling (e.g., MacWilliams, 2015) to monitoring of health issues (e.g., Hawn, 2009), from earthquake tracking (e.g., Muralidharan et al., 2011) to stock market prediction (e.g., Karabulut, 2013), and from identifying user personality (e.g., Garcia & Sikstrom, 2014) to detect emotional changes (e.g., depression symptom) (e.g., Moreno et al.,

2011). All of these applications show Facebook's capability of serving as an efficient, low-priced, and reliable technique for monitoring the general public's experience, attitudes, and preferences on a specific perspective of life (e.g., eating out). Considering that eating out is among the most common human behaviors, Facebook status updates (i.e., short messages users post to depict daily routes) randomly selected from a massive pool of individual accounts is a potential data source for gaining the big picture of user-generated content (UGC) on this topic.

To understand the public's patterns and trends of a specific perspective of life (e.g., eating out) through Facebook status updates, two critical questions need to be answered: what are consumers mostly concerned? How do they perceive or express about a given hospitality issue? To answer the first research question of "what", dominant themes are extracted from high-volume messages of Facebook status updates through mapping out the recurrent patterns of terms, which is denoted as topic modeling (Rossetti et al., 2016). Topic modeling has been widely applied to collect relevant features in the hospitality and tourism field, such as destination image themes (Sun et al., 2014), hotel attributes (Xu, 2018), and restaurant-quality features (Huang, 2017). Furthermore, individuals in distinct demographic groups (i.e., age, gender) demonstrate different interests in a given hospitality issue on social media (Bhattacharya, 2015). Therefore, it is necessary to identify the patterns of topics/themes interested in distinct demographic segments through Facebook update status. To the knowledge of the authors, no attempt has been made to identify whether individuals' patterns of sharing dining-out experiences on Facebook vary by gender and age. The present study aimed to fill the research gap.

To answer the second research question of "how", consumers' emotions toward distinct themes (i.e., themes are identified by answering the first research question) are assessed. The one-dimensional scalability of sentiment (e.g., positive vs. negative) in hospitality research that has dominantly adopted is indefensible (Solomon & Stone, 2002). However, the manifold perspectives (e.g., joy, fear) underneath either positive or negative emotions constitute distinct origins, connotations, and consequences (Pfister & Bohm, 2008). As a cornerstone work in psychology discipline, Plutchik's (1994) emotional wheel provides a relative comprehensive (i.e., eight emotional dimensions) and balanced (i.e., four positive and negative ones, respectively) framework, which thus is used in the current study.

The current study aims to excavate message content and demographic variables regarding eating out on Facebook status updates.

The specific goals include: 1) to identify the topics relevant to eating out; 2) to examine pattern variance of the eating-out topics by age and gender; and 3) to investigate emotional variance by eating-out topics. The present study is the first of exploring the eating-out phenomena among the general public through large-scale Facebook individual accounts in the hospitality and tourism field. It is a significant addition to the findings of previous studies collected with traditional approaches (e.g., surveys, interviews, review websites). The findings help practitioners and government officers better understand eating-out patterns or trends from the view of a social phenomenon, and accordingly design effective communication programs with the general public.

## LITERATURE REVIEW

### Facebook Studies in Hospitality and Tourism Field

Facebook is one of the world's most trafficked sites which had 2.2 billion monthly active users as of 2018 (Stout, 2018). It has become one of the most popular platforms where consumers present their opinions, attitudes, and judgments about products, services, and experiences (Richard & Guppy, 2014). Despite the importance of Facebook, limited studies in the hospitality and tourism area have explored valuable data warehouse on this site. Previous research most relevant to Facebook in hospitality and tourism field is summarized in Table 1.

These studies investigated the utilization of Facebook from either receiver or sender perspectives. Receivers refer to consumers who view content on Facebook. Senders mean message providers, including businesses which create Facebook brand pages and individual owners of Facebook accounts. The 22 studies in Table 1 examined the sender perspective and three out of these focused on the restaurant setting (Gruss et al., 2020) and analyzed the effects of senders' messages on consumers' behaviors in Facebook brand pages. The 22 studies from the receiver aspect examined the relationships of motivations (e.g., benefit, value) (e.g., Kang et al., 2014), webpage features (e.g., cues, participation, experiential flow) (e.g., Perez-Vega et al., 2018), attitudes (e.g., trust) (e.g., Ben-Shaul & Reichel, 2018), and behavioral intentions (e.g., commitment) (e.g., Enter & Michopoulou, 2013) on Facebook brand pages. Among the 22 studies from the standpoint of receivers, only one examined the restaurant setting (Kang et al., 2014). Therefore, the restaurant setting should gain more attention from scholars.



Table 1. *Summary of Literature Most Relevant to Facebook in Hospitality and Tourism*

Perspective	Context	Methodology	Research Ideas	Content Types	Citations
Receiver	Restaurant (1)	Survey	Examine correlations between benefit, community participation, brand trust, and commitment on Facebook brand pages	General	Kang et al. (2014)
		Hotel (13)		Survey	General
		Survey		General	Touni et al. (2020)
		Survey		Message purpose	Kwok et al. (2017) <sup>1</sup>
		Facebook feature analysis		Message delivery media & Engagement formats	Lo and Fang (2018)
		Big-data analysis		message purpose & Message delivery media	Leung et al. (2017)
		Facebook feature analysis	Investigate the impacts of message format and content on Facebook brand pages on consumers' attitudes and behavioral intentions	Usage status	Phelan et al. (2013)
	Survey	General		Wang (2016) <sup>2</sup>	
	Survey		General	Choi et al. (2016)	
		Experiment		Message purpose & message delivery media	Leung et al. (2017)
		Experiment		Message purpose	Cervellon and Galipienzo (2015)
		Survey		Message purpose & message delivery media	Leung (2012)
		Survey		General	Leung et al. (2015)
	Survey		General	Leung and Tanford (2016)	
	Tourism (8)	Survey		General	Ben-Shaul and Reichel (2018)
		Facebook feature analysis		Engagement format	Gunter et al. (2019)
		Survey	Assess webpage cues, motivation, experiential flow, engagement, value, attitude, behavioral intention, and others on Facebook brand pages	General	Escobar-Rodríguez et al. (2017)
		Survey		General	Leung and Jiang (2018)
		Facebook feature analysis		Message delivery media	Mizrachi and Sellitto (2015)
		Survey		General	Senders et al. (2013)
		Survey		General	Perez-Vega et al. (2018)
		Survey		General	Enter and Michopoulou (2013)

Sender	Restaurant (3)	Facebook feature analysis	Examine consumers' messages on Facebook fan pages of restaurants	Engagement format	Gruss et al. (2020)
		Survey		General	Khan and Boehmer (2013)
		Big-data analysis		Message delivery media	Kwok and Yu (2013)
Hotel (7)	Facebook feature analysis	Examine the features and messages of Facebook fan pages	Message delivery media	Connor (2011)	
	Facebook feature analysis		Usage status	Capatina et al. (2018)	
	Facebook feature analysis		Engagement format	Su et al. (2015)	
	Facebook feature analysis		Message delivery media	Minazzi and Lagrosen (2014)	
	Big-data analysis		Message purpose	Kowk and Yu (2013)	
	Facebook feature analysis		Usage status	Wang and Kubickova (2017)	
	Facebook feature analysis		Usage status	Phelan et al. (2013)	
Tourism (10)	Facebook feature analysis	Examine the features of Facebook brand pages; investigate the impacts of travel photos in Facebook individual accounts on generating travel ideas	Usage status	Hsu (2012)	
	Facebook feature analysis		General	Ketter (2016)	
	Big-data analysis		Message purpose	Aydin (2020)	
	Survey		General	Möller et al. (2018)	
	Survey		General	Mariani et al. (2019)	
	Facebook feature analysis		Message delivery media	Lalicic et al. (2020)	
	Big-data analysis		Engagement format	Mariani et al. (2016)	
	Facebook feature analysis		Message delivery media	Moya and Jain (2013)	
	Facebook feature analysis		General	Park et al. (2016)	
	Facebook feature analysis		Message delivery media	White (2010)	
Event (1)	Survey	Test the relationship between variables about users' experience on Facebook brand pages	General	Lee et al. (2012)	
Airport (1)	Facebook feature analysis	Feature summary	Message delivery media	Wattanacharoensil and Schuckert (2015)	

<sup>1,2</sup>. It covers all the hospitality sectors (e.g., hotels, restaurants, tourism attractions, etc.)

We also categorized the papers relevant to Facebook in the hospitality and tourism field based on types of content, message delivery media, engagement formats, message purpose, and usage status. 19 papers which investigated senders or receivers' perceptions of Facebook messages as a general (e.g., Atadil et al., 2010), which were excluded from the categorization based on types of content. Surveys and experimental designs with Facebook users were dominantly used in these studies (e.g., Lee et al., 2012). These traditional methods emphasize isolated and randomly identified respondents, which are inefficient to handle the network structure of Facebook.

The other 25 studies examined either one or more types of content. For example, Facebook messages were classified by distinct purposes, including marketing (Kwok et al., 2017), conversational (Cervellon & Galipienzo, 2015), emotional (Kwok & Yu, 2013), promotion/event, congratulations/condolences, informative (Aydin, 2020), reward (Leung et al., 2017), brand, product, and involvement (Leung, 2012), booking, and discussions (Connor, 2011). Facebook messages were also grouped with engagement formats, including likes, shares, and comments (e.g., Gruss et al., 2020). Some research focused on the usage status (e.g., frequency of posts, language use, number of likes) (e.g., Hsu, 2012). Message delivery media (i.e., text, photo, video, links) were discussed in Moya and Jain (2013), White (2010), Wattanacharoensil and Schuckert (2015), and others. These 25 papers mostly aimed at categorizing and comparing the messages and/or user profiles. Sporadic ones put a specific type of content under microscope to examine the details (e.g., White, 2010). Furthermore, very few of them took advantage of big data technique to analyze Facebook messages (e.g., Escobar-Rodriguez et al., 2017). The present study was the pioneer to identify social trends and patterns of eating out among the general public through examining status updates from a large volume of Facebook individual accounts.

### **Topics of Eating Out on Facebook and Demographic Information**

Multi-attribute attitude model suggests that a consumer's perception of a business (e.g., a restaurant) is influenced by a mixture of business attributes at different extents (Wilkie & Pessemier, 1973). The level of influence is explained by both business attributes (Xiang et al., 2015) and individual consumers' idiosyncratic preference (Heo & Hyun, 2015). Thus, user-generated content which shows consumers' preference is expected to demonstrate distinctions (Brody & Elhadad, 2010) relevant to each attribute of a restaurant. As text data are composed of words, a topic people share on

social media can be expressed by a combination of strongly related words (Jeong et al., 2019). Topic modeling allows researchers to capture latent topic identification. In the present study, topics related to restaurant experience from Facebook status updates were identified by topic modeling.

The demographic factors such as gender and age play an important role in individuals' behavior on eating out (Kardes et al., 2014). Age and gender have been proved in previous studies to be two dominant demographic variables that influence consumers' eating-out behaviors (e.g., Poria, 2008). Males more frequently eat out than females (Dave et al., 2009). Furthermore, consumers' perceptions of restaurant attributes (e.g., food variety, food portion size, food quality, and others) are significantly different based on gender at American-themed restaurants (Heung, 2002).

Food consumption behaviors can vary across the age groups (Kuhns & Saksena, 2017). Americans who are 35–44 years old eat out more often than others, whereas elderly individuals (i.e., over 64 years old) spend eight percent less than others (US Department of Agriculture Economic Research Service, 2018). The demand for full-service restaurants is likely to increase among baby boomers (Kim & Geistfeld, 2003). Harrington et al. (2013) also confirmed the impact of consumers' gender and age on their assessment of restaurant attributes at quick-service restaurants. Females view quality, setting, and dietary attributes as more important than their male counterparts. And older groups place greater importance on quality, setting marketing, dietary, access, and special promotions than their younger counterparts at quick-service restaurants. Considering knowledge, experience, and perceptions of individuals, the significant difference of user-generated content on social media may exist across different demographic segments of individuals, especially those in the distinct age and gender cohorts (Guo et al., 2017). Therefore, gender and age should be considered as significant variables that influence individuals' expressions of dining experience on Facebook status updates.

### **Emotion**

Textual data on social media address individuals' expressions which describe their sentiments and emotion. Emotion was defined as an all-around mental state across physiological, intellectual, and social systems (Mulligan & Scherer, 2012). The investigation of emotions on social media is important based on emotion-as-feedback system theory (DeWall et al., 2016) and emotional contagion theory (Hatfield et al., 1993). Upon the

emotion-as-feedback system theory, conscious emotion of an individual serves as a feedback system which results in actions through the retrospective cognitive process (Baumeister et al., 2007). It explains how emotions expressed in a consumer's review predict his/her patronage behavior (Herzig et al., 2016). Emotional contagion theory indicates that an individual's emotions could directly/indirectly trigger similar emotions in other individuals (Hatfield et al., 1993). Social media offers a venue of emotional synchrony and sharing between individuals. As a result, a reviewer's comment leads to the attitudinal and behavioral changes of readers (Wang et al., 2019). Therefore, emotion conveyed in reviews is an important topic of social media studies.

Considering its multidimensional nature, emotion on social media has gained many scholars' attention in hospitality and tourism field (e.g., Zhang et al., 2011). However, previous studies assumed that all emotions are instinctively classified as either positive or negative (e.g., Kim & Tang, 2016). This postulation is unconvincing because ample proofs support that people's selections do not comply with simple scalability (Tversky & Thaler, 1990). Therefore, Wang et al. (2019) argued that the multi-dimensional framework provides a more powerful diagnostic tool of social media content than the emotion dichotomy.

Several psychological theories proposed multi-dimensional frameworks of human emotions (e.g., Ekman, 1992). For instance, Perse (1990) proposed three emotional dimensions (happy, sad, and angry) consumers generate when watching television news. Ekman (1992) indicated that humans have six fundamental emotional perspectives; anger, disgust, joy, surprise, sadness, and fear. Compared to Ekman (1992), Plutchik's (1994) framework had two supplementary dimensions, including trust and anticipation. Plutchik (1994) presented the emotion wheel with four opposite pairs; sadness-joy, surprise-anticipation, disgust-trust, and fear-anger. Plutchik's wheel of emotion has been broadly applied in varied online textual content mining practices, including consumer review websites (e.g., Atabay & Cizel, 2020; Chafale & Pimpalkar, 2014), social communities (e.g., Bertola & Patti, 2013), blogs (e.g., Abbasi & Beltiukov, 2019), and others. The present research adopted Plutchik's emotion wheel due to four considerations. First, this framework has been widely accepted in psychological investigations. Second, compared with some distinctive alternatives, like Ekman (1992), that negative emotions are prevailing, Plutchik's wheel of emotion offered a symmetric emotional structure with both emotional extremes. Third, this framework is a superset of the emotional facets which previous scholars (e.g., Ekman, 1992) had laid the

foundation. Last but not least, the effectiveness of Plutchik's framework in the social media context in hospitality and tourism field has been proved by Rahmani et al. (2019) and Wang et al. (2019). Specifically, Rahmani et al. (2019) identified affective responses from destination experience with the eight dimensions and examined their influences on tourists' interpretation expressed on travel blogs. Wang et al. (2019) investigated how the eight emotional components embedded in user-generated content influence review helpfulness on Yelp. Therefore, Plutchik's framework is proper to examine multi-dimensional emotions of Facebook status updates in our research.

## METHODOLOGY

### Data Collection

The present study adopted the secondary data from the myPersonality application on Facebook (Stillwell & Kosinski, 2018). The application was created by Dr. David Stillwell at the University of Cambridge and Dr. Michal Kosinski at Stanford University, which complied with Facebook's policies and was supportive by Facebook. At this application, users voluntarily took psychometric tests and reported demographic information, and opted to (i.e., did not have to) donate their Facebook data for academic research purposes. The myPersonality application is one of the largest social science research databases in history (The Psychometric Centre, 2018), which have been used to generate over one hundred academic papers in social sciences. Over six million volunteers participated in the psychometric tests, and around 40% of them shared their Facebook profiles. The sub-dataset could be available upon request from the administrators of myPersonality project upon the sound proposal. We got approval from the administrators in Feb 2018 to access the sub-datasets of participants' self-reported age and gender, as well as Facebook status updates in the myPersonality database.

### Data Cleaning

By referring to diverse sources relevant to restaurants in both academia and industry practices (Meeroona, 2018; Wikipedia, 2018; Winsight, 2018), an initial list of 2,322 keywords was identified which specified the food service context. The word categories included foodservice business types (e.g., fast food, cafeteria, coffeehouse, café, pub, and others), dining-related terms (e.g., waitress, menu), and major chain restaurant names (e.g., MacDonald's, KFC) in the U.S. Four researchers with the specialization of



restaurant management at two primary research universities in the U.S. screened the keyword pool and kept 2,002 ones for screening the Facebook status updates. After screening all the Facebook messages in the MyPersonality database, 100,168 ones written in English were kept.

Although these Facebook status updates were composed of at least one keyword we identified, some outliers may exist which did not refer to the restaurant context. Two researchers reviewed all Facebook status updates separately and crossed-checked the findings to confirm results were consistent. Accordingly, 198 Facebook status updates were further deleted. The textual cleaning procedure was processed in statistics software R 4.0.5. The next step followed Miner et al. (2012), including escaping HTML characters, removal of stop-words and punctuations, apostrophe and slangs lookup, and many others. Since the primary purpose of the present study was to analyze text content (i.e., topics and emotions extracted from texts), we used the textual cleaning technique proposed by Miner et al. (2012). All punctuations, special characters, and numbers were not considered and thus removed in the data cleaning process. And Table 2 displays removed information categories with sample words.

Table 2. *Removed information and stop words in data cleaning*

Removed information	Sample
Punctuation	“,”, “.”, “?”, “:”
Special character	“/”, “@”, “\”, “ ”
Number	“1”, “2”, “3”, “4”
Stop word	“seem”, “what”, “via”, “lots”

The cleaned data groups described above (age, gender, Facebook status updates) were merged into one database. The users with missing data in any of the three categories were removed. Accordingly, the dataset of 47,935 users with 99,970 Facebook status updates was kept for further analysis. Among 47,935 users, 41.05% were male and 58.95% were female. The average age of users was 33. The respondents were classified into seven groups, including 20 or less (0.28%), 21-30 (54.71%), 31-40 (23.89%), 41-50 (13.05%), 51-60 (5.41%), 61-70 (1.69%), and 71 and above (0.97%). The dominant age group of 21-30 wrote 39,460 Facebook status updates.

## Data Analysis

Topic modeling was used to detect the latent restaurant themes in Facebook status updates. Among several topic modeling approaches (e.g., Non-negative Matrix Factorization, Latent Semantic Analysis), Latent Dirichlet

Allocation (LDA) is particularly effective on social media (Hong & Davison, 2010), since LDA aggregates unrelated language information (e.g., Facebook messages) into meaningful topics with an iterative machine learning method. By analyzing status updates at a single word level, LDA was adopted to do the topic modeling. Cross-tabulation, T-test, and ANOVA were used for the relationship between topics and demographic variables (i.e., age and gender). With a series of iterative algorithm processes suggested by Nidhi (2017), LDA was performed by using statistic software R 3.6.2 with a package called “topicmodels”.

Emotional analysis was used to assess consumers’ emotions expressed on Facebook. The eight emotional dimensions of Plutchik (1994)’s framework embedded in Facebook status updates were detected with the Word-Emotion Association Lexicon (EmoLex). EmoLex was created by National Research Council (NRC) to compare the weight of words in a specific dimension by its own developed lexicon (Pennebaker et al., 2015). The EmoLex dictionary was input the Linguistic Inquiry and Word Count 2015 (LIWC) which is a software that counts the percentage of emotion words in textual status updates. Eight kinds of consumer emotions were detected by comparing the percentage of words in a specific dimension with the EmoLex dictionary in the LIWC software. The steps of data processing are demonstrated in Figure 1.

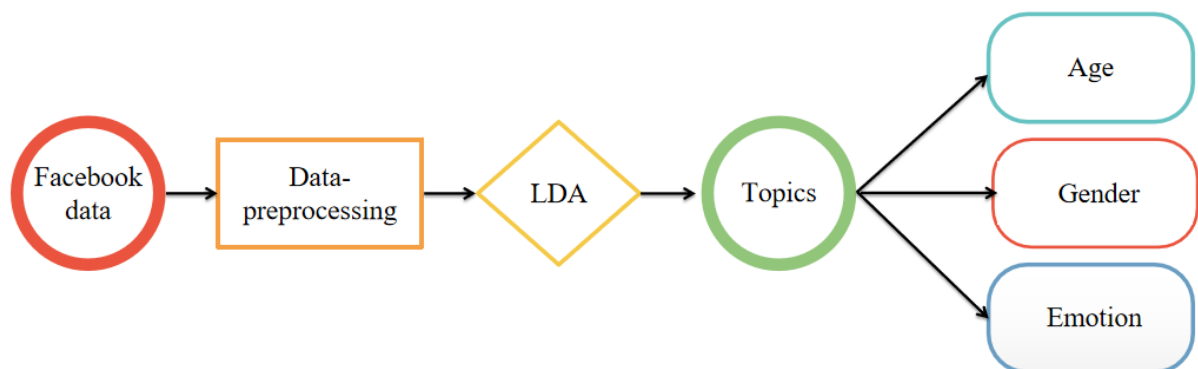


Figure 1. Facebook data processing procedure

## RESULTS AND DISCUSSIONS

### Themes of Facebook Status Updates

In LDA a series of iterative algorithm computing and data cleaning (e.g., remove stop words like “via”, “what”.) were taken, which identified five dominant themes of Facebook status updates; *food, happy time, dining*

*experience, coffee time, and people.* The description of each theme and corresponding 15 sample words are demonstrated in Table 3. Furthermore, the 15 sample words for each theme by the sequence of word frequencies are shown in the word clouds of Figure 2.

Table 3. *Sample words in eating-out topics*

No.	Topic	Definition	Sample word
1	Food	Directly relate to food name or eating-out behavior	Food(5.64%), McDonald's(4.04%), menu(8.87%), eat(16.69%), buffet(3.16%), taco(3.06%), KFC(3.08%), eating(2.90%), pizza(2.27%), burger(2.78%), chicken(1.77%), breakfast(1.60%), ate(22.11%), dinner(4.00%), Wendy(1.17%)
2	Happy time	A pleasant period of time at pubs or bars with family and friends	Pub(49.91%), night(11.25%), tonight(4.57%), great(4.87%), bar(4.11%), happy(3.22%), best(3.11%), fun(4.37%), awesome(2.10%), nice(2.28%), weekend(1.64%), amazing(1.63%), Sunday(1.08%), wonderful(0.95%), Saturday(0.90%)
3	Dining experience	Dining-out experience about restaurant, food, or service	Service(8.42%), bill(8.18%), private(4.90%), group(4.44%), spending(2.81%), experience(3.42%), social(4.59%), final(14.06%), video(3.48%), event(6.01%), special(8.63%), stall(2.77%), miles(2.25%), west(4.01%), standing(2.24%)
4	Coffee time	All things related to coffee and/or coffee house	Starbucks(17.26%), cafe(24.68%), morning(6.08%), coffee(5.29%), week(10.02%), days(6.26%), drink(6.27%), internet(2.23%), holiday(2.21%), cold(1.78%), drinking(1.65%), beer(1.95%), Monday(1.61%), cup(2.36%), wine(1.48%)
5	People	Related to people or interpersonal relationship	Love(19.15%), man(28.57%), waitress(4.50%), guy(6.66%), girl(6.19%), girls(2.63%), waiter(2.60%), guys(3.12%), dear(2.16%), date(4.61%), lady(1.63%), boy(4.54%), together(1.61%), couple(1.65%), woman(1.43%)



Figure 2. *Word clouds of five topics*

The topic of *food* described cuisine (e.g., “pizza”, “taco”), dining types (e.g., “buffet”, “breakfast”) and restaurant names (e.g., “McDonald’s”, “KFC”). The top words included “eat”, “ate”, “menu”, “food”, “McDonald’s”, and “buffet”. Particularly, “McDonald’s” was the most discussed restaurant brand and “buffet” was the most widely mentioned dining type on Facebook messages. The theme of *happy time* described enjoyable nightlife (e.g., “pub”, “bar”). The top words were

composed of “night”, “pub”, “great”, “fun”, “happy”, “bar”, and “tonight”. Consumers were likely to share with others about their positive experiences in pubs and bars at night on Facebook. *Dining experience* covered the happenings at restaurants (e.g., “bill”, “spending”). The top words were “final”, “special”, “service”, “event”, and “private”. Besides service as one of the cores in the restaurant industry, the special and engaging dining context was addressed on Facebook messages. *Coffee time* referred to consumers’ experience at coffee stores (e.g., “Starbucks”, “coffee”). The top words were “Starbucks”, “café”, “week”, “drink”, and “coffee”. Particularly, Starbucks was a star brand in coffee stores, which was mostly mentioned on Facebook. *People* depicted the types of both service employees and consumers at the restaurant context (e.g., “waitress”, “waiter”). The top words were composed of “guy”, “man”, “love”, “date”, “girl”, “boy”, and “waitress”. Specifically, by checking individual consumer reviews, it was found that “guy”, “man”, “girl”, and “boy” referred to both companions and strangers met at the business. Some examples of reviews included “just watched a drunk guy get arrested in the Waffle House” and “the boys I met at the restaurant were pretty cool”. The result was consistent with Pollack (2009), Brady and Cronin (2011), and Tang et al. (2020) which included both service people and other consumers as a social environment factor of restaurants. “Love” and “date” described the settings for the dining-out experience. Some examples of reviews were composed of “well, I must say what a fabulous night out for 16th Marry Ceremony at Cy restaurant! Love you Adam you are just my fabulous guy”, and “have a romantic dating at Kokk Estia restaurant. Wonderful memories!”.

### Relationship between Facebook Status Update Themes and Gender

Gender showed a significant difference on the topic of *people* (Table 4). Females discussed more about *people* at the restaurant setting than males. The finding is consistent with Alzahrani (2016) that females share more about social relationships than males on social media.

Table 4. *t*-test on gender difference in eating-out topics

	Food	Happy time	Dining experience	Coffee time	People
t Stat	1.07	0.28	-0.99	1.3	2.37
p(T<=t) two ways	0.3	0.78	0.35	0.22	0.04*

Note: n=7, df=12, \*p<0.05

### Relationship between Facebook Status Update Themes and Age

Figure 3 demonstrates the relationship between the topics of Facebook status updates and age groups. First, people at 20 or younger showed the

least coffee consumption among all the age groups. Coffee consumption smoothly increases in the age groups of 21-60. The coffee consumption of the older people at the age of 61 or later decreases compared to those at 21-60, which may be explained by their more concerns about health (Butt & Sultan, 2011). Second, Facebook users mentioned the topic of people most at the age of 20 and younger. Social contacts with other people play a crucial role in brain development for adolescence's transformation to the mature (Cauce et al., 1994). It explained why social gatherings at restaurants were highly frequently shown on the teenagers' Facebook status updates.

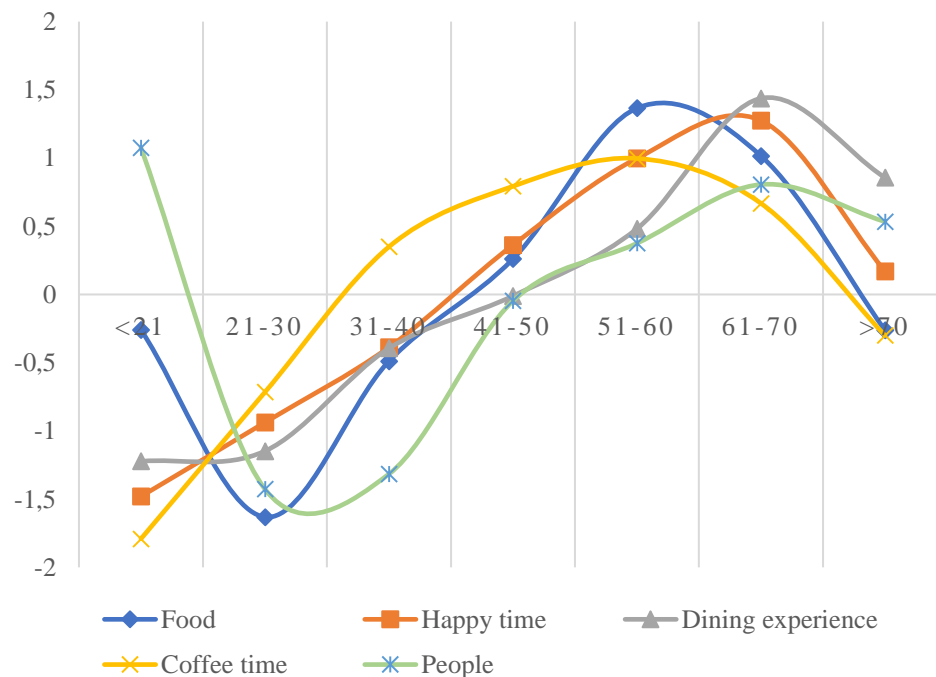


Figure 3. Relationship between Facebook status update themes and age\*

(\*The numbers of Facebook status updates in the five themes were standardized, which is shown on Y-axis.)

Third, *dining experience* was discussed most during 61-70. The age of 61-70 is the full retirement age for most countries. Senior people at this age range start to have freely disposable time and money after retirement, and they have fewer obstacles to eating well compared to even older people (Hellmich, 2014). Therefore, eating out makes seniors at 61-70 feel like an enjoyable mini-vacation (Menchin, 2000), which is worthy to share on Facebook. Fourth, *happy time* was portrayed on Facebook status updates most among senior people at 61-70. People at 61-70 mentally and psychologically cannot accept the lifestyle of aging people and are inclined to show off their energy and vigor on Facebook through engagement in

happy hours (Holladay, 2002). Last but not least, *food* was shown on Facebook status updates most in the age group of 51-60.

### Facebook Status Updates Themes by both Gender and Age

Figure 4 illustrates the gender difference in each topic of Facebook status updates among seven age groups. As indicated in Table 4 aforementioned, except for *people*, no significant difference was found between the male and female groups among *food*, *happy time*, *dining experience*, and *coffee time*. For the theme of *people*, the two gender groups showed distinctions at four age stages. Examples of messages for males and females are “took the girls to the park and had lunch at Applebee’s. It’s such a beautiful day!” and “It’s my daddy’s birthday!!! Olive Garden with my family and my handsome boyfriend soon!:) yay”. For the age groups of 41-50, 61-70, and 71 and above, females communicated more about *people* than males. However, males of 20 and below mentioned *people* more at the restaurant setting than females. A potential reason is that adolescent girls generally use Facebook to communicate preexisting social relationships, while boys more often address new social relationships (e.g., people date at restaurants) (Barker 2009).

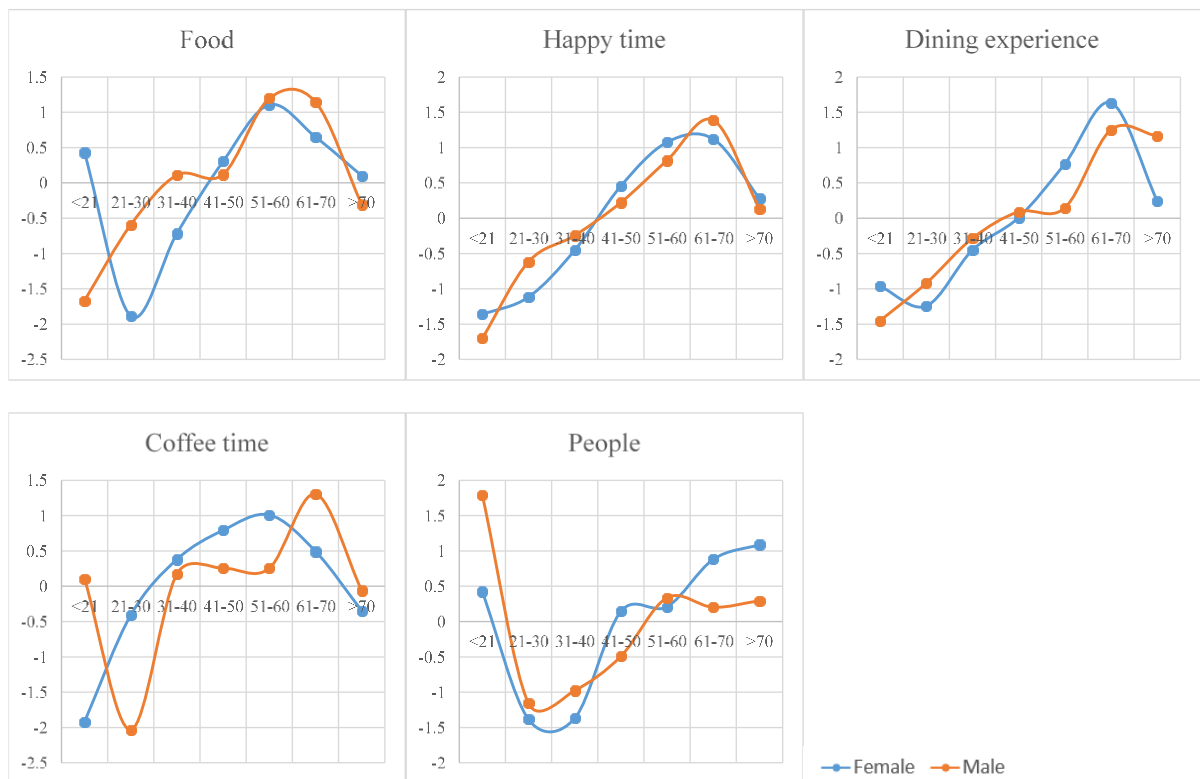


Figure 4. Facebook status update themes by both gender and age\*

(\*The numbers of Facebook status updates in the five themes were standardized, which is shown on Y-axis.)



## Emotional Dimensions among the Five Themes of Facebook Status Updates

Plutchik's (1994) framework is composed of four opposite emotional dimensions. The examples of messages for the pair of anger and fear are "ridiculous service and no feedback not even a call from the store manager after so many phone calls. Domino's Pizza." and "There's a McDonald's two blocks away from ground zero that has killed more than two terrorists", respectively. The instances of messages for the pair of joy and sadness are "Had a fun time at Starbucks! And today was the last Ask-Out-Friday" and "It's pretty sad when I feel too ill to go to the pub - and this is the third week in a row that I've missed out", respectively. The examples of Facebook status updates that conveying trust and distrust are "Two weeks in a row... we have found simply AMAZING restaurants!!! Both places we clean, elegant, uniquely Choice! They even agreed to let us see the kitchens! wow! all hail the small business ppl!" and "I crave Taco Bell but after I eat it I realize it's so disgusting!", respectively. The instances of the messages for anticipation and surprise are composed of "Having dinner at a well-reviewed Italian restaurant tonight. Hope it's as good as we anticipate! Panna cotta for dessert" and "What a surprise! The Caf e has such a rude waitress".

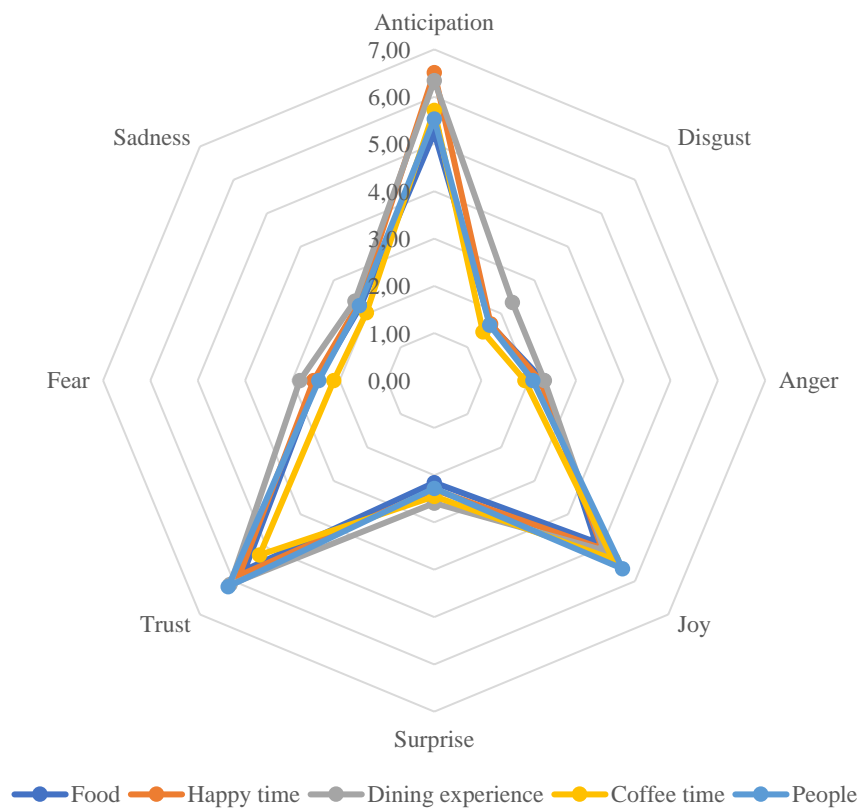


Figure 5. Comparison of eight emotions in Facebook status updates themes

Figure 5 demonstrates the strengths of the emotional dimensions among five themes of Facebook status updates. On each axle, the point close to the inner with a smaller number shows a weaker extent of emotion; in contrast, the point far away from the inner with a larger number means a stronger extent of emotion. Except the pair of anger (range of 1.92-2.33 for the five themes of Facebook status updates) – fear (range of 2.12-2.84), the positive emotional dimension showed a much stronger extent than its negative counterpart, including joy (range of 4.83-5.63) – sadness (range of 2.03-2.37), trust (range of 5.22-6.16) – disgust (range of 1.46-2.34), and anticipation (range of 5.24-6.51) – surprise (range of 2.16-2.59). It is consistent with the findings in previous studies focusing on consumer review websites (e.g., Felbermayr & Nanopoulos, 2016; Wang et al., 2019).

Among the four negative emotional dimensions, the words relevant to the disgust dimension showed a bit stronger tone compared to those in the dimensions of sadness, fear, and surprise. The Facebook status updates on the disgust aspect are most relevant to food health (e.g., bugs in noodles), which is the “bottom line” of eating out experience (Yiannas, 2008). Thus, breaking through the “bottom line” makes consumers intolerable and triggers strong offensive feelings. Among the four positive dimensions, Facebook users were inclined to express their trustworthy and anticipative feelings at greater levels and communicated joyful sentiments at a gentle level but demonstrated anger at a weaker extent. Although “angry” is categorized as a positive dimension of Plutchik (1994)’s framework, it conveys the depressed and dissatisfied mood (Bougie et al., 2003) which is close to the negative dimension. Therefore, similar to the four negative dimensions, the “angry” tone was at a weak extent.

As a summary, a comparison of the findings generated from the current big data analysis with previous research has been demonstrated in Table 5. It can be discovered that the majority of past research was inclined to utilize business comment websites (like Yelp.com) to obtain information instead of individualized social media such as Facebook. Almost all previous studies did not focus on age diversity in the dining-out settings in the hospitality and tourism industry, particularly among those studies with big data techniques. Only sporadic research efforts existed in other disciplines like nutrition (Butt & Sultan, 2011), communication (Holladay, 2002), and others. Although gender diversities were discovered in previous studies on restaurant consumer behavior, the majority of them employed regression for data analyses and research methods (e.g., Ma et al., 2011, 2014; Yildirim & Akalin-Baskaya, 2007). Consumer sentiment has been broadly explored via diverse text excavation approaches. Nevertheless, the

majority of past studies either utilized one-dimension sentiment scale or failed to deconstruct text information into topics (e.g., Luo et al., 2020; Wang et al., 2019).

Table 5. *The comparison of findings between current research and previous studies*

Research themes	The current research's findings	Previous studies' findings
Eating-out topics	coffee time	Kwon et al. (2022) excavated consumer-produced comments from Yelp.com. and obtained 14 topics (e.g., excellence in every way, love with food, mediocre taste, rude attitude, etc.).
	dining experience	Wen et al. (2020) explored consumer remarks on AllergyEats.com and acquired 40 topics (e.g., knowledgeable staff, customized orders, efforts of staff, menu options, fried foods, oil, communication, etc.).
	food	Huang (2017) discovered three primary topics, such as taste, restaurant (brand and aura) and opportunity of out-eating, and employee service via the excavation of hospitality review websites in Chinese and English.
	people	Luo et al. (2020) obtained five topics (atmosphere, foods & drinks, location, service, and value) via the analyzing comments from Yelp.
Eating-out topics & Age	coffee time	Butt and Sultan (2011) argued that the purchase of coffee among the senior citizens decreases in contrast to that among younger people.
	dining experience	Hellmich (2014) discovered that the elder generation has spare time and wealth. And it's more probable for these people to eat well in contrast to individuals of higher ages.
	happy time	Holladay (2002) argued that individuals at 61-70 are reluctant to embrace senior citizen lifestyle, but wishing to exhibit vitality via social media by enjoying lives.
Eating-out topics & Gender	dining experience	Yildirim and Akalin-Baskaya (2007) discovered that female consumers highlighted numerous aspects of restaurants' reputation, such as exquisite planning, roomy space, tidiness, tranquility, and peacefulness via MANOVA.
	food	Ma et al. (2011) argued that female consumers, in general, exhibited greater demands for flavor, appearance, and menu diversity, whereas male consumers highlighted the actual quantity of the food via SEM.
	people	Alzahrani (2016) stated that women communicate more on their social interaction in contrast to men on social media. Ma et al. (2014) revealed that when assessing service experiences, men are more target-driven whereas women are more social interaction-driven via SEM.
Eating-out topics & Emotion	dining experience	Luo and Tang (2019) utilized Plutchik's emotional wheel and revealed that consumers display emotions via the mining of Airbnb consumer comments. Wang et al. (2019) employed eight sentiments from Plutchik's emotional wheel via excavating Yelp comments, nevertheless, they failed to offer topics of comments. Luo et al. (2020) indicated that consumers expressed positive sentiment on food and drink by mining consumer reviews on Yelp.
	food	Calheiros et al. (2017) revealed that consumers exhibited favorable sentiment in the accommodation services.
	people	Luo et al. (2020) revealed that consumers generally displayed favorable sentiment towards staff service via the excavation of Yelp data.

## CONCLUSION AND IMPLICATIONS

### Conclusion

By taking advantage of big data analytics on Facebook status updates, the present study demonstrated the eating-out patterns and trends in the general population. We identified five primary themes relevant to eating out: *food*, *happy time*, *dining experience*, *coffee time*, and *people*. Males and females show a significant difference in the theme of *people*, specifically among four age groups (20 and below, 41-50, 61-70, 71 and above). The two most discussed topics of Facebook users, between the ages of 61-70, are *happy time* and *dining experience*. The two most discussed topics for the Facebook users at 51-60 are *coffee time* and *food*. However, *people* is the most discussed among the consumers at 20 and below. Except for the pair of anger – fear, the positive emotional dimension (joy, trust, and anticipation) showed a much stronger extent than its negative counterpart (sadness, disgust, and surprise).

### Theoretical Implications

The present research has three primary theoretical contributions. First, as discussed in the Section 2.1., among the previous studies relevant to Facebook in the hospitality and tourism field, very limited ones from the perspective of receivers (i.e., only one in Table 1) focused on the restaurant setting. Facebook may cover even more wide-ranging and distinct topics than those included in traditional restaurant data sources such as interviews and surveys at service encounters. For example, Facebook messages cover many details, such as motivations for eating out, subtle emotional changes, and post-event memory. Thus, the literature stream about consumers' communications at the restaurant setting on Facebook needs more attention from scholars. The present study which investigates the large-scale Facebook messages significantly contributes to this literature stream. Furthermore, due to the nature of rich content on Facebook, the specific type of content (i.e., as discussed in section 3.1. about the literature streams on distinct purposes, engagement formats, usage status, message delivery media) should be put under microscope to examine the details (Moya & Jain, 2013; White, 2010). The present study particularly focused on textual (as a type of message delivery media) conversational (as a type of distinct purposes) comments (as a type of engagement formats).

The current study also contributes to the studies of emotions in the hospitality and tourism field. Previous studies have primarily focused on

intrapyschic emotion (such as a person's inner emotional feelings) within an individual consumer, which could be viewed as the application of emotion-as-feedback system theory discussed in Section 2.3. For instance, numerous attempts have assessed how a consumer's affection during the service affects the mentality on certain commodity and re-patronage motivation (e.g., Kim & Tang, 2016; Lam & Chen, 2012). Nevertheless, limited attention from previous research has been given to interpersonal role of a consumer's emotion (i.e., affective interactions between peoples) as explained in the emotional contagion theory (see Section 2.3.). With the emergence of social media, the emotional function in people's interactions has been enhanced. The emotional hints within a group on the Internet are able to arouse sentiment-related responses, which eventually affects people's mentality towards the information supplier. In this research stream, previous studies have primarily given attention to review websites rather than Facebook. The present study fills the gap.

Last but more importantly, the present study is the first adoption of a multi-dimensional scale of emotions instead of dichotomy (i.e., positive vs. negative) on Facebook in hospitality and tourism field. In Plutchik's (1994) emotional framework, positive sentiment is composed of joy, anticipation, trust, and anger, while negative sentiment covers fear, surprise, disgust, and sadness. The results of the present research indicate that the four perspectives belonging to either positive or negative sentiment are present at different extents on Facebook status updates. It supports that the single-dimensional scale of emotion widely adopted in previous hospitality and tourism research overlooked emotion complication, and thus provided an ambiguous argument about consumers' perceptions and attitudes.

Furthermore, although the current research only evaluated eight affective aspects, the fundamental mechanism can be used to comprehend the influence of an even broader assembly of emotional features (e.g., Arnold (1960)'s 11-aspect emotion framework and Cowen and Keltner (2017)'s emotion framework with 27 dimensions) conveyed on Facebook regarding eating out. Moreover, although the present research evaluated Facebook status updates, the fundamental logic is applicable to other social media venues (e.g., twitter, google+), which could be a promising direction for future studies. From an even more far-reaching viewpoint, our efforts are expected to supplement the hospitality and tourism literature on consumer emotions.

## Practical Implications

The present study suggests an alternative tool for government offices to conduct a statewide or even countrywide investigation of consumers' eating-out behaviors. To the knowledge of the present authors, even the leading government offices and foodservice organizations (e.g., United States Department of Agriculture (USDA)) have not tracked the general public's experience and attitude in millions of restaurants. A good example of a countrywide project related to dining is food swamps map (US Department of Agriculture, 2019) conducted by USDA, which marked the areas with high or low density of establishments selling high-calorie fast food or healthier food options. The adoption of large-scale Facebook messages could further enrich the data of food swamps map alike. For example, with the same approach used in the present study, USDA could partner with Facebook to timely collect large-scale messages which convey the general public's perceptions of restaurants and demonstrate the summarized results (i.e., topics and emotions) by geographic locations and even by restaurant brands. It could provide richer information for the government offices to understand the general public's perceptions and experiences of eating-out, and accordingly provide guidance for healthy eating and formulate policies and regulations for the restaurant industry. Facebook effectively decreases costs and generates real-time statistics about the general public's eating-out experience, suggesting a completely innovative area of large-scale restaurant research.

The findings provide industry practitioners opportunities for "taking the pulse" of specific dining out topics of interest among the general public. For example, in the theme of *food*, the top words are composed of "McDonald's", "KFC", "Wendy", "buffet", "taco", "pizza", "burger", and "chicken." It shows that fast-food restaurants are popular. And high-calorie food items, more detailly, popular food categories (e.g., burger, pizza) and main ingredients (e.g., chicken) on menus, are still widely consumed among the general public. Although the government offices (e.g., USDA) and restaurateurs have been committed to promote healthy dining-out, it seems a long way to go before significantly changing the general public's eating-out habits and trends.

The keywords identified on Facebook status updates in the present study expand industry practitioners' understanding of the dining-out themes. For example, although the human factor was included into restaurant attributes identified on review websites or consumer surveys in previous studies (e.g., Huang, 2017), staff interaction was the focus.



However, according to our results, the presence of others as a social environment factor has a significant impact on a consumer's perception of dining-out experience, including both his/her companions and strangers at a restaurant. The *people* factor plays a different role for the two genders in distinct age ranges. Thus, in the promotional materials (e.g., commercials) targeting a specific consumer group, the human variable, including both interactions with employees and presence of other consumers in the social environment, should be weighted at different extents. For instance, males care people more than females in the age group of 20 and below. Thus, for promoting an event targeting male teenagers (e.g., high school boys' dinner party) at a restaurant, the energetic and joyful crowd of the youth could be included in the advertisements. Females at 61 and above discussed people more than male peers. Thus, for promoting an occasion targeting the females at 61 and above (e.g., dinner at a senior women conference) at a restaurant, the sociable environment should be addressed in advertising and other marketing venues, including meeting new friends, getting social support, interacting with employees, and others.

Furthermore, the assessment of individual emotional aspects on Facebook status updates indicate that people are more likely to convey positive opinions, ideas, and experience relevant to eating out rather than negative ones. Just because many former consumers are reluctant to express negative emotions toward a business no matter within a friend network or not, a restaurant with inferior quality could keep attracting other first-time consumers. Foodservice relevant organizations (e.g., National Restaurant Association) and social media should encourage the general public to express any of their emotions toward restaurant experience, no matter positive or negative, which contributes to the monitor of industry performance. To take the idea further, future studies could do the emotion assessment on Facebook status updates for individual restaurants (i.e., use the restaurant name as keyword for data collection), which enables industry practitioners to instantly recognize "whether the consumers are happy with, dissatisfied with, losing trust in, or angry with their product or a particular feature of the product" (Mohammad & Turney, 2013, p. 4). The evaluation of emotion-related data from Facebook communications could provide restaurants with a kind of "sentiment-awareness" to distinguish emotional aspects, explore the causes, and develop service remedy plans.

### **LIMITATIONS AND FUTURE RESEARCH**

This study has several limitations. First, the current study only considers Facebook as the investigation site and implications of the study may be

limited due to the validity of the data. Although Facebook is one of the world's most trafficked sites, users on other social media such as Twitter or Instagram may post different content on the sites. Therefore, future studies could modify and validate the model for other social media sites and provide more applicable strategies. Second, data bias may exist considering that users who post Facebook status updates may not be representative of the entire population. Specifically, a subgroup of users (e.g., outgoing people) may be more or less inclined to post information relevant to eating out. Controlling bias is a hallmark of traditional methods like surveys and experiments, yet biases on social media are little comprehended, which should be considered in future hospitality and tourism studies. Third, the data collected from Facebook status updates are composed of either description of an actual dining-out experience or just a mention of the perception toward a restaurant. Such a crowd-sourced effort makes us only detect attitudes and behaviors of the public regarding eating out. For more precise research tasks (e.g., consumption experience toward fast-food restaurants), the exact nature of the restaurant-relevant words should be determined in future work.

Fourth, the keywords used to screen Facebook status updates covered diverse restaurant settings (e.g., fast food restaurants, coffee shops). The scope of restaurants may be disputed. A more specific context is preferred in future research upon particular study purposes. Fifth, we used the textual data cleaning procedure suggested by Miner et al. (2012), which excluded punctuations, apostrophes, slangs lookup, intentional misspellings (e.g., goooood day). However, considering the multimodality feature of social media communication, it would be an interesting venue to further and deeper investigate consumers' emotions through "decoding" the emoji and emoticons on Facebook. While, on the other hand, if there would be any chance of analyzing emoji's motions taking advantage of technology development in future, it also could be a promising research subject for social media and netnographic studies. Sixth, a challenge that remains in large-scale textual analysis is semantic ambiguity. For example, a message of "McDonald" is ambiguous, but more information in the message like "*I enjoyed the hamburger at McDonald's near my house*" shows a common cause. Furthermore, the multilingual and informal nature of text make such a task even tricky, we removed the non-English messages and cross-checked individual Facebook status updates to eliminate vagueness. However, for an even larger-scale dataset and multilingual text analysis in future research, it is imperative to develop more precise information

extracting techniques with computational algorithms or robustness check procedures.

Seventh, we did not differentiate Facebook status updates by geographic information of participants. Future studies could further precisely examine the eating-out patterns in a specific nation or region. Eighth, we did not disaggregate the Facebook status updates by years. Future studies are advised to compare the changes of topics and emotions across multiple years. Last but not least, monitoring the prevalence of a phenomenon on Facebook allows researchers to correlate and compare that phenomenon with other data compiled via distinct approaches, which is beyond the scope of the present study. For example, the content and sentiment of eating-out habits and patterns shown on an aggregation of Facebook messages could be linked to the census tracts of obesity (Centers for Disease Control and Prevention, 2016) or food deserts (US Department of Agriculture, 2016).

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## THE IMPACT OF NOVELTY SEEKING ON INTENTION TO VISIT A COUNTRY: THE MEDIATING ROLE OF OVERALL CUISINE IMAGE

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### ABSTRACT

Participation in travel is continuously increasing throughout the world. Seeking novelty, particularly novel cuisine, is one of the motivating factors underlying travel. Image is one of the most important factors that affect intention to visit a country and experience the cuisine. This study examines the mediating effects of Turkish cuisine image on the relationship between novelty seeking and intention to visit. In this regard, Turkish cuisine image and its effect on individuals from the United Kingdom (U.K.) who had eaten at Turkish restaurants was analyzed. Individuals at Turkish restaurants were asked to fill out self-administered questionnaires with 78 questions. An online platform of people was also utilized. It was seen that cuisine image has a significant mediating role on the intention to visit Turkey.

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### INTRODUCTION

According to data from the World Tourism Organization (WTO) before the COVID-19 pandemic, while an average of 1.4 billion tourists participates in international travel annually, it is predicted that this will climb to approximately 1.8 billion tourists by 2030 (UNWTO, 2011, 2017a). Studies have found that most of the tourists indicate that seeking novelty and

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escaping from their routine are their main motivations for traveling (Iso-Ahola, 1982; Jang & Cai, 2002, S. Chang, 2011; Šimková & Holzner, 2014; Levitt et al., 2019). Although tourism began mainly with general interest tourism (GIT), i.e., sun, sea, and sand tourism, currently there is an increasing trend towards special interest tourism (SIT) (Koc, 2005; Koc & Altinay, 2007). However, most tourists still report that their interest in traveling to Turkey is for GIT (Koc, 2005; Okumus et al., 2012; Albayrak, 2013). The Turkish destinations most preferred by tourists are consistent with this fact.

Since the Turkish tourism industry primarily caters to general interest tourism (i.e., sun, sea and sand tourism), and the fact that the special interest tourism is growing at the expense of general interest tourism, Turkish tourism may be considered to be vulnerable due to the change in the demand pattern in the market. Product differentiation was thought to be an influential tool for reducing risk in tourism and strengthening the industry (Koc, 2005). In this sense, special interest tourism products are of vital importance for the future of the Turkey's tourism industry. In addition, considering Turkey's wealth of cultural resources (Okumus et al., 2012), product differentiation is foreseen to be beneficial. Therefore, improving special interest types of tourism such as gastronomy tourism is crucial for sustaining and increasing Turkish tourism demand in the future.

Novelty constitutes one of the main motives for participation in gastronomy tourism (Trauer, 2006; W. Chang, 2011; López-Guzmán et al., 2017). Novelty seeking is regarded as one of the primary intrinsic motivations for international travel (Dann, 1977, 1981; Lee & Crompton, 1992; Uysal & Jurovski, 1994; Baloglu & Uysal, 1996; Jang & Cai, 2002; Chen & Chen, 2015; Levitt et al., 2019). Yet, according to Cohen (1972), individuals traveling in search of novelty are also looking for environmental familiarity. This situation constitutes the tourist's paradox. Particularly discouraging of visits to a country is perceived risk associated with the visit (Karamustafa et al., 2013). Therefore, familiarity with a certain destination is a key factor for tourists seeking novelty. This familiarity with some aspects of a country reduces the anxiety associated with traveling there (Alvarez & Korzay, 2011; Mak et al., 2012).

Through globalization, immigration (Kesteloot & Mistiaen, 1997; Roseman, 2008; Clemes et al., 2013) and tourism, many elements of certain cultures are assimilated by countries in other parts of the world. One such element is the cuisines of the other countries. Cuisine is an important part of a country's image (Min & Lee, 2014) that can contribute significantly to



tourists' desire to visit it through its novelty. In addition, the cuisine plays an important role in acquiring familiarity with the country. As a result, cuisines have become a powerful tool for developing and marketing destinations (Kivela & Crotts, 2005; Okumus et al., 2007; Horng & Tsai, 2012; Guzman & Canizares, 2012; Chi et al., 2013; Okumus & Cetin, 2018; Antón et al., 2019).

As seen from the above-mentioned explanations, cuisine image (CI) is one of the essential elements for the development of tourism within the context of gastronomy. However, despite the fact that a country's cuisine and the image created of its cuisine has positive effects both on the image of the country and on the visiting intention, a research gap exists in terms of Turkish cuisine in this respect. On the other hand, in other countries, research is needed on the perceived image of the individuals who experience Turkish cuisine within the context of seeking novelty and as to whether the intention arose to visit Turkey which is the country of origin. Especially, it remains uncertain whether cuisine image mediates the relationship between seeking novelty in terms of cuisine and intention to visit. Therefore, the present study aims to demonstrate the effects of novelty-seeking on Turkish cuisine image and how it affects intention to visit Turkey. Furthermore, the mediating role of Turkish cuisine image, formed via visiting Turkish restaurants abroad, in the likelihood of visiting Turkey was investigated. By demonstrating the mediating role of cuisine image in the relationship between visitors' novelty-seeking motivation and their intention to visit, the present study aims to make both a practical contribution to Turkey's tourism efforts and a theoretical contribution to the tourism literature.

## CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

### Visit Intention

Consumer behavior varies greatly depending on what is being consumed (Solomon et al., 2012) along with its complexity (Howard, 1989). There are many factors that affect consumer behavior (Howard, 1989; Lam & Hsu, 2006; Hawkins & Mothersbaugh, 2010; Hsu & Huang, 2010). However, intention is the most essential of these factors (Ajzen, 1991; Madden et al., 1992; Hsu & Huang, 2010). Although behavioral intention does not always result in performing the behavior, it has a strong impact on the performance of the behavior (Howard, 1989; Ajzen, 1991).

Behavioral intention can vary depending on the object of the intention. However, in the tourism context, the behavioral intention that has been of greatest interest is the intention to revisit and willingness to recommend a tourist destination (Ramkissoon et al., 2011). Intentions are indications of how strongly people are willing to try to perform a behavior and how much of an effort they will expend to engage in an act (Ajzen, 1991, p. 181). Although behavioral intention is claimed to have a significant effect on the realization of behavior, even a strong intention does not always result in the performance of a behavior (Howard, 1989). Studies performed on intention to visit and intention to re-visit have indicated (Chen & Tsai, 2007; Phillips et al., 2013; Alvarez & Campo, 2014; Hallmann et al., 2015; Molinillo et al., 2018; Zhang et al., 2018) that image is the common factor affecting both.

### **Novelty-seeking**

Novelty seeking is known to be one of the most important motivations for traveling (Crompton, 1979; Uysal & Jurowski, 1994; Dimanche & Havitz, 1995; Baloglu & Uysal, 1996; Jang & Feng, 2007; Chen & Xiao, 2013; Chen & Chen, 2015; Chi et al., 2019; Skavronskaya et al., 2019; Hong & Desai, 2020). In general, travel motivations are grouped under two different categories: push and pull (Dann, 1977, 1981; Uysal & Jurowski, 1994; Baloglu & Uysal, 1996; Jang & Cai, 2002; Chen & Chen, 2015), or seeking and escaping (Iso-Ahola, 1982; Šimková & Holzner, 2014). Novelty seeking is considered to be one of the primary intrinsic push motivations for travel (Baloglu & Uysal, 1996; Jang & Cai, 2002; Chen & Chen, 2015). Since the desire to explore and experience new food and to observe various cultures constitutes the central motivation for gastronomy tourism (Fields, 2002; Harrington & Ottenbacher, 2010), cuisine image influences the amount of attraction to a culture for novelty-seekers. According to Van Trijp et al. (1992) in the psychology literature, the basis for novelty seeking is exploratory behavior. Optimal stimulation level (OSL) is the fundamental concept in this theory (Van Trijp et al., 1992; Assaker et al., 2011; Assaker & Hallak, 2013). Researchers hypothesize that when actual stimulation does not correspond to the OSL, individuals attempt to regulate their level of stimulation and bring it in line with OSL through exploratory behavior. The motivations to seek novelty and engage in exploratory behavior are the leading motivators for tourist visits as well (Wong & Zhao, 2016; Hong & Desai, 2020).

Tourism is widely acknowledged to play a pivotal role in presenting opportunities for those seeking to escape routine and seeking novelty (Hong & Desai, 2020). Experiencing different cuisines and tasting different

food are considered to be among the many examples of such opportunities (Quan & Wang, 2004). Furthermore, several studies have concluded that experiencing cuisines constitutes an important aspect of travel experiences (Rimmington & Yüksel, 1998; Kivela & Crofts, 2005; Chen, 2013; Seo & Yun, 2015). On the other hand, research findings indicate that individuals traveling for the purpose of seeking novelty may be hesitant about a new cuisine (Cohen, 1972; Cohen & Avieli, 2004; Choi, 2019; Derinalp Çanakçı & Birdir, 2020). It is argued that this hesitation is alleviated to a certain extent by previous gastronomic experiences via restaurants (Choe & Cho, 2011) or being familiar with the dishes (Seo et al., 2013). Furthermore, hesitation or concerns not only diminish novelty-seeking motivation (Seo et al., 2013; Choi, 2019), but also causes the development of negative attitudes leading to abstention from other countries' cuisines (Asperin et al., 2011; Ji et al., 2016). In other words, attitudes and desires tend to change in a positive manner, while hesitation is alleviated (Lai et al., 2020). This leads tourists traveling for novelty to experience cuisines risk-free, and further helps them to form an impression of a country's cuisine without prejudice.

Seeking novel cuisine affects tourists' attitudes and behavior, image of a cuisine, and intention to visit the country from which it originated. Mun et al. (2018) concluded that novelty-seeking has a significant effect on participants' attitudes towards visiting a country. According to Albaity and Melhem (2017), there is a significant positive correlation between novelty seeking and image. However, according to Assaker et al. (2011), novelty seeking and intention to revisit are negatively related. Jang and Feng (2007) examined the effect of novelty seeking on intention to revisit in the short, medium, and long term and they determined that novelty seeking only affects intention to revisit positively and significantly in the medium term.

Theoretically, novelty-seeking has an impact on a country's image and desire to visit it (Albaity & Melhem, 2017; Mun et al., 2018). Although some studies have examined the correlation between novelty seeking and intention to revisit a country, the relationship between novelty seeking and intention to visit for the first time has not been examined. The current study investigates the intention to visit a country for the first time rather than the intention to revisit it. In addition, the effect of novelty seeking on the image of Turkish cuisine was investigated for both traditional and modern restaurants. In this context, the following hypotheses were proposed:

*H1: Novelty seeking affects the visiting intention of a country positively among visitors to traditional restaurants.*

*H2: Novelty seeking affects the visiting intention of a country positively among visitors to modern restaurants.*

*H3: Novelty seeking affects overall cuisine image (OCI) positively among visitors to traditional restaurants.*

*H4: Novelty seeking affects OCI positively among visitors to modern restaurants.*

## **Gastronomy Tourism and Turkey**

Travel for gastronomy purposes is considered a niche market in the tourism industry (Ab Karim & Chi, 2010). Gastronomy tourism is conceptualized as visiting different locations, producers, and businesses for culinary purposes (Hall & Sharples, 2004). In gastronomy tourism, the main motivation is to dine, become familiar with local culture, develop new relationships, and gain self-respect as well as status (Fields, 2003; Harrington & Ottenbacher, 2010; Çalışkan, 2013). Gastronomy tourism is claimed to possess a loyal market segmentation (Kivela & Crofts, 2005). In addition, there is no seasonal dependency in this market segment (UNWTO, 2017b) as there is in others. Unlike many other travel activities, gastronomic travel is usually available year-round and any time of day without restrictions. This is considered an influential factor in motivating travel to destinations that are not highly seasonal (UNWTO, 2017b). On the other hand, gastronomy tourism is interpreted to have the potential to increase the sustainability of local, regional, and national economies (UNWTO, 2017b). Tourism provides 11% of the gross domestic product (GDP) of Turkey (WTTC, 2022) and provides a high level of employment (Republic of Turkey Ministry of Culture and Tourism, 2007). Along with the manufacturing sector, tourism is one of the most important economic sectors in Turkey. In addition, tourism is a remarkably fast-growing industry not only in Turkey but in almost all developing countries (Bahar & Bozkurt, 2010). One dollar generated by the tourism industry has either a direct or indirect effect on 30 different sectors (Koc & Altinay, 2007). Therefore, the government and other stakeholders spend much effort in attracting tourists interested in local cuisine. The tourism goals of Turkey for 2023 are one of the indications of the aforementioned efforts (Republic of Turkey Ministry of Culture and Tourism, 2007). Turkish cuisine forms one of the important values that needs to be operated effectively. Like other nations' cuisine, Turkish cuisine has spread all over the world through Turkish restaurants (Kesteloot & Mistiaen, 1997). Therefore, individuals who are seeking novelty may prefer to visit and dine in traditional and modern Turkish restaurants.

## Cuisine image (CI)

Image, which has both cognitive and affective components, has a complex structure. Evaluating the cognitive and affective components of products results in image formation (Peštek & Činjurević, 2014; Seo & Yun, 2015). Image is an important component of destination attractiveness (Uysal & Jurowski, 1994; Guzman & Canizares, 2012; Ab Karim & Chi, 2010; Cömert, 2014; Peštek & Činjurević, 2014; Nelson, 2016). Studies also demonstrate that cuisine image has affected the behavior of tourists who visit a country (Ab Karim & Chi, 2010; Ling et al., 2010; Karim et al., 2011; Ramkissoon et al., 2011; Lertputtarak, 2012; Chi et al., 2013; Seo et al., 2014). A number of studies of various countries have found that CI has a significant effect on visiting intention (Ab Karim & Chi, 2010; Lertputtarak, 2012; Chi et al., 2013; Wang, 2015; Chatterjee & Suklabaidya, 2020; Lai et al., 2020). The uniqueness of destinations' cuisines is a key factor in a destination becoming popular and attractive (Horng & Tsai, 2012; Okumus et al., 2013; Okumus & Cetin, 2018).

Table 1. *The relationship between intention to visit, cuisine, and behavioral intention*

Author	Food image/Cuisine	Travelers' intentions to visit country		Behavioral intention
Ab Karim & Chi, 2010	French	Directly	No	-
		Indirectly	-	-
	Italian	Directly	Yes	-
		Indirectly	-	-
	Thai	Directly	Yes	-
		Indirectly	-	-
Lertputtarak, 2012	Thai	Directly	Yes	-
		Indirectly		-
Chi et al., 2013	Malaysian	Directly	No	-
		Indirectly	Yes	-
Seo et al., 2014	Korean/ Cognitive	Directly	-	Yes
	Korean/ Affective	Directly	-	No
Wang, 2015	Macau	Directly	Yes	-
		Indirectly	-	-
Promsivapallop & Kannaovakun, 2019	Thai	Directly	-	Yes
		Indirectly	-	-
Chatterjee & Suklabaidya, 2020	New York/USA	Directly	Yes	-
	Delhi/India	Directly	Yes	-
Lai et al., 2020	Australian/ Cognitive	Directly	Yes	-
	Australian/ Affective	Directly	Yes	-
Rousta & Jamshidi, 2020	Iran	Directly	No	Yes
		Indirectly	-	-

Numerous studies have found that the more favorable a destination's cuisine image is, the more likely it is that individuals will visit it. However, there are no studies so far on the influence of Turkish cuisine's image on the intention to visit Turkey. Therefore, the following hypotheses

regarding the effect of Turkish cuisine image for different restaurant types were examined in the present study. Despite the fact that attractive cuisines increase the intention to visit by creating a significant attraction for those seeking novelty, it remains uncertain as to what kind of mediating role a cuisine's image has in the relationship between novelty-seeking and intention to visit. Therefore, the following hypotheses were developed.

*H5: OCI affects visiting intention to Turkey positively among diners at traditional Turkish restaurants.*

*H6: OCI affects visiting intention to Turkey positively among diners at modern Turkish restaurants.*

*H7: OCI serves as a mediator of the relationship between novelty seeking and intention to visit for diners at traditional Turkish restaurants.*

*H8: OCI serves as a mediator of the relationship between novelty seeking and intention to visit for diners at modern Turkish restaurants.*

### **Traditional and modern types of Turkish restaurants**

Basic characteristics differentiating restaurants from one another are general features such as type of service, product range, ambiance, price, and method of payment. Various classifications are made based on these features. When these classifications are examined, it has been observed that there is not any common type of classification both nationally and internationally.

Although there are different classifications made in the international literature, the following classifications are featured in general: sit down, fast-food, full-service, limited-service, fine dining, casual dining, theme, family, and ethnic restaurants. Jang et al. (2012) indicated that restaurants are divided into fast-food, casual dining, and fine dining restaurants, although there are no definite rules categorizing restaurants.

Restaurants abroad or restaurants that do not belong to the culture of the place they are located are often called ethnic restaurants (Olsen et al, 2000; Turgeon & Pastinelli 2002; Sriwongrat, 2008; Kılınç & Çavuş, 2010; Marinkovic et al., 2015). Turkish restaurants abroad also constitute the ethnic restaurants in the countries they are located. These restaurants are generally opened by immigrants to those countries (Çaglar, 1995; Kesteloot & Mistiaen, 1997; Roseman, 2008; Clemes et al., 2013; Min & Lee, 2014).

The U.K. is one of the countries where there are a significant number of Turkish restaurants. In 2013, there were nearly 200 Turkish restaurants



in London, apart from fast-food and take away kiosks (Karaosmanoglu, 2013). When the international classifications are taken into consideration, Turkish restaurants within the ethnic restaurant category fall into several different categories. According to Öğüt (2008), restaurants can be grouped into three categories: “traditional,” “modern,” and “casual,” while for Karaosmanoğlu (2013), there are two categories, “modern” and “traditional,” with fast-food and take away kiosks considered separately from full-service restaurants. Restaurants can also be categorized based on the food being served, décor, and customer profile.

According to the studies, insofar as the customers’ expectations differ in accordance with restaurant type (Öğüt, 2008; Jang et al, 2012; Karaosmanoglu, 2013), the effect of restaurant type on customers also differs. This shows that restaurant type must also be taken into consideration in research on cuisine image. Therefore, in this study, hypotheses were formulated based on specific restaurant types.

## METHODS

### Measurement

The current study utilized measures whose validity and reliability were verified in previous studies. To measure openness to novelty, an 8-item scale developed by Van Trijp et al. (1992) was used; to measure intention to visit, a 3-item scale developed by Alvarez and Cambo (2014) was used; and to measure cuisine image, a 15-item scale developed by Peštek and Činjarević (2014) was used along with two additional items, thus totaling 17 items. During the expert opinion stage, it was considered necessary to add items such as “Turkish cuisine is visually attractive” and “Turkish cuisine smells nice” to the cuisine image scale. The scales' content validity was evaluated by four experts, and a pilot study with 51 participants was conducted to verify the instrument's face validity. The pilot study was conducted with international students from Turkey who were native speakers of English. In this study, a 5-point Likert scale with endpoints ranging from “strongly disagree” (1) to “strongly agree” (5) and a semantic differential scale ranging from -2 to +2 were used. The semantic differential scale is claimed to be the most suitable type of scale for image studies (Martin & Eroglu, 1993).

## **Sampling and Data Collection**

The U.K., where many Turkish restaurants are located, was chosen as the location for the study (Karaosmanoglu, 2013). Compared with other societies, British society is known to be one of the most open-minded societies regarding ethnic issues, and also British people tend to have a strong inclination towards novelty or variety seeking behavior (Jamal, 1996). Additionally, according to 2022 WTTC data, the U.K. ranks fifth among all countries in terms of tourist visits to Turkey (WTTC, 2022).

The research data was drawn from consumers who had dined in traditional and modern types of Turkish restaurants in London. According to Karaosmanoglu (2013), apart from takeaway and fast-food restaurants, Turkish restaurants in London are characterized as modern and traditional. These two types of restaurants differ from each other in decor, consumer characteristics, and food being served. On the other hand, Turkish restaurants differ in terms of food preparation. For instance, while modern restaurants utilize standardized recipes in food preparation, in traditional restaurants, dishes are prepared based on the knowledge and the ability of the chefs. Since these restaurants have distinctive aspects and they have not been tested elsewhere, it was worth examining them separately. The target population of this study was people in the U.K. who had dined at Turkish restaurants (traditional and modern). Individuals were approached and 200 data was obtained through face-to-face solicitation. Furthermore, an online platform of people who had eaten at Turkish restaurants outside of the city was also utilized. Online data from 245 individuals were collected through the Amazon Mechanical Turk (MTurk) platform. MTURK, launched by Amazon in 2005, serves as an online subject pool for research (Holden et al., 2013). Statistical analysis revealed no differences in data collected by these two different techniques. A total of 445 questionnaires were collected. However, after eliminating unusable responses, only 400 of those remained as a sample for the study.

## **RESULTS**

### **Exploratory and confirmatory factor and reliability analysis**

To identify each variable that was related to each other, exploratory factor analysis was conducted (Tabachnick & Fidell, 2011). Maximum Likelihood was used as a factor determination method (Tabachnick & Fidell, 2011); in addition, oblique rotation was performed in order to obtain the best results with the data (Hair et al., 2010; Tabachnick & Fidell, 2011). The lower bound

for factor loadings was set at 0.30 (Hair et al., 2010). In this respect, the items which met those criteria were kept in the scale, while the others were deleted. Thus, three items were deleted one by one from the cuisine image scale, and analyses were performed.

Table 2. *Exploratory factor analysis*

Variables	Mean	Std.	KMO	Bartlett's test	Eigenvalue	Exp. Variance	Cronbach's Alphas
Novelty seeking	3.79	0.84	0.917	.0001	4.8	68.64	0.922
Quality and uniqueness of the cuisine	4.08	0.71	0.894	.0001	4.9	50	0.882
Health and visuality of the cuisine	3.77	0.78	0.894	.0001	1.6	16	0.830
Affective cuisine image	3.92	0.76	0.796	.0001	2.61	65.43	0.816
Intention to visit	3.13	1.15	0.696	.0001	2.46	82	0.890

First-and second-order confirmatory factor analysis results are presented in Table 3. The models' overall fit was evaluated in accordance with the  $\chi^2$ , CFI, GFI, SRMR and RMSEA indices proposed by Kline (2011). We also used the following criteria as acceptable values for goodness-of-fit indices:  $0.90-0.95 \leq \text{CFI}$ ;  $\text{SRMR} \leq 0.08-0.09$ ;  $0.85-0.95 \leq \text{GFI}$ ;  $\text{RMSEA} \leq 0.03-0.08$ ;  $\chi^2/\text{sd} \leq 3-5$  (Kline, 2011; Tabachnick & Fidell, 2011).

Table 3. *First and second order confirmatory factor analysis*

First order CFA	$\chi^2/\text{df}$	RMSEA	CFI	SRMR	GFI
Novelty seeking	2,91	,069	,920	,0613	,857
Quality and uniqueness of the cuisine					
Health and visuality of the cuisine					
Affective cuisine image					
Intention to visit					
Second order CFA	3.74	.083	.931	.0632	.902
Overall cuisine image					

Table 4. *Reliability and validity of the construct*

Variables	CR	AVE	Variables	CR	AVE
Novelty seeking	0.915	0.608	Overall cuisine image	0.943	0.543
Quality and uniqueness of the cuisine	0.888	0.570			
Health and visuality of the cuisine	0.828	0.548			
Affective cuisine image	0.819	0.531			
Intention to visit	0.889	0.731			

AVE and CR are presented in Table 4. The factor loading of composite reliability (CR) as shown in the table is far higher than 0.70, which is the ideal acceptable level. In addition, average variance extracted (AVE) loadings were found to be over 0.50, which is above the ideal acceptable point (Hair et al., 2010, p. 709).

### Structural model

In this study, a four-variable model design was tested: dependent, independent, control, and mediator. The research model was applied to traditional and modern restaurants separately and the differences between them had been previously determined. SPSS PROCESS (Hayes, 2012, 2013) was used for testing the model and hypotheses. Results of the analysis relating to traditional restaurants are presented in Table 5. As seen in Table 5, hypotheses H<sub>3</sub>, H<sub>5</sub>, H<sub>7</sub> were supported, however, H<sub>1</sub> was not. In the model, whether participants had visited Turkey was a control variable and the analysis was performed accordingly. Results suggested that the state of being in a country had a significant influence on overall cuisine image, -0.17 ( $p < 0.05$ ), while it did not have a significant influence on intention to visit ( $p > 0.05$ ).

Table 5. Summary of hypothesis testing results for traditional restaurants

Hypothesis	Std.	t	Bootstrapping (CI:%95)		Testing Result
			LLCI	ULCI	
H <sub>1</sub> . Novelty-seeking → Intention to visit	0.03	0.3193	-0.1372	0.1902	<b>Not supported</b>
H <sub>3</sub> . Novelty-seeking → Overall cuisine image	0.29	6.8159*	0.2036	0.3692	Supported
H <sub>5</sub> . Overall cuisine image → Intention to visit	0.79	6.6458*	0.5559	1.0245	Supported
H <sub>7</sub> . Novelty → Overall cuisine image → Intention to visit	0.23	-	0.1164	0.3460	Supported
Total effect	0.25	3.0618	0.0901	0.4156	
Direct effect	0.03	0.3193	-0.1372	0.1902	
<b>R<sup>2</sup>: .20; F (3, 229): 18.98; p &lt; .001</b>					

\*  $p < 0.001$ ; Bootstrap sample: 5000; CI: Confidence interval

Analysis results relating to modern restaurants are presented in Table 6. As seen in Table 6, hypotheses H<sub>4</sub>, H<sub>6</sub>, H<sub>8</sub> were supported, however, H<sub>2</sub> was not. This result shows similar results to the ones reported earlier for traditional restaurants. However, the effect coefficients are different. In other words, the effect coefficient of novelty seeking on cuisine image is higher in modern restaurants, while the effect coefficient of cuisine image serving as a mediator is higher in traditional restaurants. Also, in this

model, whether participants had visited Turkey was a control variable. Results suggested that whether participants had visited Turkey had no significant effect on either cuisine image or intention to visit ( $p > 0.05$ ).

Table 6. *Summary of hypothesis testing results for modern restaurants*

Hypothesis	Std.	t	Bootstrapping (CI: %95)		Testing Result
			LLCI	ULCI	
H2. Novelty → Intention to visit	0.01	0.0800	-0.2499	0.2709	<b>Not supported</b>
H4. Novelty → Overall cuisine image	0.32	4.4474*	0.1785	0.4653	Supported
H6. Overall cuisine image → Intention to visit	0.71	4.5633*	0.4025	1.0200	Supported
H8. Novelty → Overall cuisine image → Intention to visit	0.25	-	0.0898	0.4849	Supported
Total effect	0.24	1.8213	-0.0209	0.4999	
Direct effect	0.01	0.0800	-0.2499	0.2709	
<b>R<sup>2</sup>: .18; F (3, 115): 8.6101; p &lt; .001</b>					

\*  $p < 0.001$ ; Bootstrap sample: 5000; CI: Confidence interval

## CONCLUSION

This study investigated the influence of novelty seeking participants' image of Turkish cuisine, formed largely from visits to traditional and modern Turkish restaurants in the U.K., on intention to visit Turkey. In this context, hypotheses were developed based on the literature and tested with a structural equation modeling approach. Analyses demonstrated similar results for both types of restaurants. Accordingly, overall cuisine image plays a direct role in mediating the relationship between novelty seeking and intention to visit Turkey for both traditional and modern Turkish restaurants. In both models, while the novelty-seeking positively affect the OCI, the direct effect on the intention to visit is not significant. In addition, in both models, OCI has a powerful, significant positive effect on visiting intention. Therefore, the outcomes show that only H1 and H2 are not supported, while other hypotheses (H3, H4, H5, H6, H7, H8) are supported. This study also included participants who had previously been to Turkey for various reasons. Therefore, whether the participants had visited Turkey was a control variable, and the effect of this was considered.

### Discussion of the Results

Cohen (1972) reported that tourists' desire to travel was motivated by novelty, but they also desire a familiar atmosphere. In other words, they

would like to experience a familiar environment in the novel destination they visit (Cohen & Avieli, 2004).

Because of the positive relationship between image and familiarity (Fakeye & Crompton, 1991; Milman & Pizam, 1995; Baloglu, 2001; Ha & Perks, 2005; Phillips & Jang, 2010; Seo et al., 2013; Tan & Wu, 2016), image may be used to provide the necessary level of familiarity. Similarly, the results of this research support the idea that an optimum level of familiarity for the destination is achieved through cuisine image. Thus, as exhibited in the current study, cuisine image is considered to serve as a mediator in the relationship between novelty-seeking and intention to visit. According to the study results, cuisine image serves as a positive mediator of the relationship between novelty seeking and individuals' intention to visit the country of origin of the cuisine. However, the direct effect of novelty-seeking on intention to visit was not significant. Results obtained regarding novelty-seeking are in accordance with some studies (Albaity & Melhem, 2017) in the literature while they do not overlap with others (Mun et al., 2018). The results we obtained for cuisine image are fully compatible with similar results in the literature (Ab Karim & Chi, 2010; Lertputtarak, 2012; Chi et al., 2013; Wang, 2015; Chatterjee & Suklabaidya, 2020; Lai et al., 2020). On the other hand, in this study, as distinct from past research, the effect of cuisine image in mediating the relation between novelty-seeking and desire to visit was demonstrated.

### **Theoretical Implications**

Novelty seeking is widely acknowledged as one of the primary motivators of travel. The behavior of novelty-seeking emerges as a result of attempts to regulate congruity, driving exploratory behavior. In other words, the main factor driving individuals to seek novelty is the attempt to correct incongruity between optimum stimulation and actual stimulation. However, it is mostly associated with neophobia when novelty-seeking behavior is directed towards consumption (Asperin et al., 2011; Choe & Cho, 2011; Derinalp Çanakçı & Birdir, 2020). Despite individuals' motivation to seek novelty, they experience hesitation towards products they are not familiar with due to lack of knowledge and experience (Van Trijp et al., 1992; Choe & Cho, 2011). Reducing such hesitation facilitates and encourages novelty-seeking behavior. The results of this study are consistent with past theory.

Turkish cuisine has become familiar in the U.K. through the large number of Turkish restaurants. This familiarity alleviates perceived



hesitation towards Turkish cuisine, thus encouraging further experiencing the cuisine and seeking novel culinary adventures. In this sense, alleviation of hesitation leads to the development of a defined cuisine image among those seeking novelty or variety. This image provides new positive impressions of the cuisine's country of origin. Neophobia has been regarded as a possible explanation for the lack of a direct positive effect of novelty-seeking on intention to visit a destination. An implication of the results of this study is that one may consider a positive image to be an essential variable for novelty-seeking on account of avoiding the effect of neophobia and its effect on intention to visit. Therefore, image plays a pivotal role in facilitating novelty seeking and forming an intention to visit a destination.

### **Practical Implications**

We conclude that the familiarization of potential tourists with Turkish foods has a significant influence on visiting intention to the country. Therefore, the development of the cuisine is of paramount importance for attracting tourists to the country. In addition, we found that the image of Turkish cuisine plays an important role in mediating the relationship between novelty seeking and intention to visit Turkey for consumers who have dined in both traditional and modern types of Turkish restaurants. This familiarity reduces the perceived risk of visiting. Therefore, it is vital to increase the number of Turkish restaurants abroad. In addition, events such as Turkish food festivals and cultural festivals that include food and local drinks can be held in these restaurants. Free trials also can be offered to reduce consumer hesitation towards the cuisine. This can also be considered an effective marketing tool to improve the cognitive and affective image of Turkish cuisine. Furthermore, to enhance the consumer experience, creative marketing activities such as organizing workshops and cookout contests for Turkish cuisine could be effective tools for generating tourism demand for Turkey.

### **Limitations and Recommendations for Future Research**

The research sample was limited to people who dined in traditional and modern Turkish restaurants in the U.K., as these types of restaurants present more standardized service than fast food and take-away Turkish restaurants. Testing the study model with a sample of individuals who dine in fast food and take-away Turkish restaurants may provide valuable insights. Moreover, restaurant image and familiarity variables can be included to explore their interactions with other variables in the study

model. Lastly, this study was carried out in a single country, the U.K.. Future studies might investigate the role of cuisine image in a range of countries in comparison.

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