

Sinh Duc Hoang; Tučková, Zuzana

## Article

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Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration

## Provided in Cooperation with:

Faculty of Economics and Administration, University of Pardubice

*Suggested Citation:* Sinh Duc Hoang; Tučková, Zuzana (2021) : The impact of sensory marketing on street food for the return of international visitors: Case study in Vietnam, Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration, ISSN 1804-8048, University of Pardubice, Pardubice, Vol. 29, Iss. 2, pp. 1-14, <https://doi.org/10.46585/sp29021282>

This Version is available at:

<https://hdl.handle.net/10419/334748>

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# The Impact of Sensory Marketing on Street Food for The Return of International Visitors: Case Study in Vietnam

Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration 2021, 29(2), 1282.  
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DOI: 10.46585/sp29021282  
editorial.upce.cz/SciPap

**Sinh Duc Hoang** 

Tomas Bata University in Zlin, Faculty of Management and Economics, The Czech Republic  
Ho Chi Minh City University of Foreign Languages – Information Technology, Vietnam

**Zuzana Tučková** 

Tomas Bata University in Zlin, Faculty of Management and Economics, The Czech Republic

## Abstract

This research was conducted to check the impact of factors related to sensory marketing on street food to the return of international visitors in Ho Chi Minh city (HCMC). The study applied the PLS-SEM model to estimate with five scales groups of factors related to sensory marketing (such as visual, tactile, auditory, olfactory, and flavorful factors). And using the surveyed and cleaned up data with reliable information of 250 international tourists in HCMC in 2020.

The research results found that all factors in the proposed research model have a positive statistically significant effect on visitor satisfaction on street food. And then, street food satisfaction continues having a positive effect on the return to HCMC. The degree of influence of Sensory marketing factors on street food to Visitor satisfaction in descending order is as follows: (1) The smell of street food; (2) the sound of the food and drink shops, street vendors; (3) taste of street food; (4) sight of street food; (5) Tourist's touch to the equipment and street vendors. This paper contributes to provide more empirical evidence to fill the current research gaps regarding the impact of sensory marketing on revisit decisions in Vietnam. Moreover, this really usefull for HCMC tourism to build a marketing strategy, design marketing programs on cuisine suited to promote, attract more international tourists to return in the future.

## Keywords

Sensory marketing, Visitor satisfaction, Revisit decisions, Return decision, International tourists, Street food, Ho Chi Minh City

## JEL Classification

M31, Z32

## Introduction

Although food is just a basic physiological need of human beings (Maslow, 1943), but food is one of indispensable things that every tourist must experience first in each of his travels.

According to Hudman (1986), food is an indispensable factor for the tourism industry. Food costs make up a quarter of the travel costs and are increasing. More than just eating to become full, tourists still make more effort to spend more to experience the local cuisine and thus want to receive enjoyable and memorable experiences (Quan & Wang, 2004).

Many countries have treated cuisine as a bridge to attract and retain international tourists to visit. In addition to the uniqueness of the taste and the art of cooking, promoting through sensory marketing elements is also essential for the image of the destination to be engraved in the mind of visitors, creating an impression, urging them to learn about the destination, encouraging new visitors to experience the destination, or influencing past visitors' desire to return. Some countries have achieved promotion through sensory marketing elements; for example, visitors often mention Chinese cuisine, Mexican cuisine, French cuisine, and Thai street food. To gain this achievement, countries have paid attention to exploiting the potential of culinary factors in national destination promotion and marketing programs.

In the last few decades, many studies have tried to determine the relationship in food-related travel decision making. Studies link-local cuisines as a critical facet of a destination's image, which influences the emotions and experiences of tourists. So, developed countries have developed the sensory marketing model in the tourism industry, which focuses on attracting emotions through affective and cognitive images. Nowadays, many studies

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## Corresponding author:

Sinh Duc Hoang, Address: nám. T. G. Masaryka 1281, 760 01 Zlín, Czech Republic  
Email: dhoang@utb.cz and sinh.hd@hufit.edu.vn

have investigated and studied influence of sensory marketing on travel behavior. In 2012, Agapito et al. (2012) acknowledged the lack of studies investigating the influences of the five senses on tourist experiences. Nevertheless, today many studies have investigated the phenomenon. For example, Kim et al. (2017) also established that promotions involving affective and cognitive images on social media had a high chance of creating fascinating image on tourists. Notably, Qu et al. (2011) study determined a positive correlation between the revisit intention of tourists and the perceived value of the destination's food. Hui et al. (2007) determined that destination satisfaction was a primary factor influencing recommendation and coming-back among tourists. Folgado-Fernández's (2017) inquiry reinforced the notion by identifying that if tourists developed a positive culinary image in their mind, would enhance satisfaction on destination, which later influences their tourism behaviors. Other studies also agree that effective and cognitive branding is achieved through the five senses and experience gained through the consumption of the food (Seo et al., 2017; Dao et al., 2019; Nguyen et al., 2019).

Although most studies confirm the effect of food images on consumer decision, there is a gap regarding impact of sensory marketing of local cuisine on tourists' return decisions. / Most most studies have only identified the correlation between affective food images and tourist behavior (Seo et al., 2017; Nguyen et al., 2019). The studies are limited in their discussion about the benefits of sensory marketing on the tourism industry. The phenomenon creates a knowledge gap that requires more investigation. Especially in Vietnam, the research gap on this issue is still extremely significant.

Meanwhile, Ho Chi Minh City (HCMC) is considered as the convergence of population of the whole country with many diverse cultures that have merged together and complemented each other to create the phenomenon of "common cultural roof" with global flavors: Vietnamese - Chinese - English - Indian - Russian - Korean - American - French - Japanese... In which, street food is one of the cultural characteristics in HCMC where spread street food culture to localities throughout the country. So, the local cuisine has also left a good impression on international tourists when traveling in HCMC (Tran Minh Phuong (2017).

Therefore, we carry out this empirical study to better understand the influence of sensory marketing factors in the field of street food on the decision to return of international tourists, with a specific case study - HCMC, Vietnam. Research has not only contributed to the enrichment of empirical evidence on the subject but also a scientific basis to help HCMC tourism build a marketing strategy, design marketing programs suited to promote, attract more customers, and build the brand cuisine of HCMC to increase efficiency and attract tourists to return in the future.

## **Literature Review**

### **Theory of sensory marketing factors**

The trend of marketing based on human emotions has been developed worldwide by many marketers (Kotler et al., 2011). For almost all services and products, consumers need to experience all or at least of the senses such as sight, taste, touch, sound and smell (Krishna, 2011). Especially for the culinary field, experience of the senses is very important, because it helps to imprint in the hearts of tourists or users about beautiful and impressive image of the destination. Krishna (2012) pointed out that Sensory marketing helps to engage the user's senses and influence the user's behavior. In several decades, consumer behavior researchers have incorporated visual, tactile, auditory, olfactory, and gustatory factors in their research over the decades. Houston et al.(1987) studied the effectiveness of verbal and visual advertising. Kahn and Isen (1993) studied the effects of taste, but did not study the effects of other marketing tools at the point of purchase, such as color packaging, samples, and store music. Huleténn et al. (2009) laid the foundation for marketing based on multiple senses, including smell, hear, see, taste, and touch. The study focused on different consumer experiences through sensory perceptions, thereby forming consumer awareness of businesses, products, and brands. Aradhna (2011) defined sensory marketing as marketing that connects with the customer's senses and influences their ideas, assessments, and behavior. Recent studies have investigated the influence of sensory marketing factors on consumer loyalty in the food sector (Murimi et al., 2016; Sharafat, 2018; Chan et al., 2018; Mannan, et al., 2019; Ha-Won Jang and Soo-Bum Lee, 2019; Amer Rajput and Raja Zohaib Gahfoor, 2020; ) and in tourism (Ching-Fu Chen, Fu-Shian Chen, 2010; Rangana Sri Khalika Wadippuli Arachchi et al., 2015; Yongping Zhong and Hee Cheol Moon, 2020)

### **The theory of satisfaction**

There are many various perspectives on customer satisfaction, such as:

According to Oliver (1980), satisfaction is the difference between what products and services perform and what consumers expect. Accordingly, satisfaction is measured as follows: customers (1) think about their expectations for the product/service before buying or using, (2) purchase the product/service, and (3) compare the performance of the purchased product/service with the expectations. Customers will be disappointed if their perception and experience with the product/service are not as expected and will be satisfied if the product/service performance is equal to or beyond what is expected.

According to Kotler and Keller (2006), satisfaction is the degree of customer perception after comparing product

perception with one's expectations. Customers will feel dissatisfied when their awareness level is lower than expected and satisfied when their perception level is equal to or greater than what is expected.

In the tourism sector, visitor satisfaction is understood as follows. Before going to a destination, visitors have ideas and expectations. After the experience, they can have good and bad experiences. Their satisfaction depends on the comparison of their expected and actual experiences.

Visitor satisfaction is defined by the level of positive feelings acquired after an experience at a destination. The main focus of satisfaction assessment is assessing the increase in satisfaction when customers compare their feelings against their initial expectations with "confirmation theory" (Yuksel et al., 2002; Prayang, 2008). This theory asserts that customers will compare the destination organization's "performance" and their "expectations" through the information they have received, such as promotions and word of mouth. Satisfied tourists will be more than happy when they feel that the service is beyond expectations. However, perceived service performance that is below service expectations leads to dissatisfaction in customer experience (Coban, 2012).

### **The theory of the return**

The concept of intention to return stems from the concept of behavioral intent, which is defined as the intent to perform a certain behavior (Oliver, 1997; Cryan and Glendon, 1998). When individuals have strong intentions to perform the behavior, they are inclined to perform the behavior (Ajzen, 2002). In the tourism sector, the intention or decision to return means buying back experienced tourism services, going to an attractive tourist destination, and returning to this place.

Some studies have also suggested that customer loyalty is similar to consumers' revisitation to service (Grzybowska et al., 2013; Hanaysha, 2016; Sharafat, 2018; Yongping Zhong and Hee Cheol Moon; 2020). Alternatively, loyalty refers to committed behavior represented by a tendency to participate in an entertainment service (Backman & Crompton, 1991). Researchers agree that destination loyalty emphasizes a vertical point of view. It considers the travelers' lifelong visitor behavior rather than just the point of view where today's visit may not necessarily be relevant to the previous visit.

Destination loyalty is desirable by the country/locality of the destination. It guarantees a relationship between the visitor and the host/local country (destination) because visitors are regularly in contact with many attractive and competitive offers and advertisements of other destinations.

Visitor loyalty can be seen through trust and commitment to the destination despite exposure to many other advertisements. Furthermore, when providing a service, loyal tourists are ready for a second chance if something goes wrong (at the destination). According to Weiner (2000), loyal customers will generally think of other services as having "uncertainty factors" (i.e., uncontrollable factors) instead of destination-controlled factors, thus remaining loyal despite other visitors' unsatisfying experiences. According to Lobata et al. (2006), the loyalty measurement can be divided into two, namely, tourists' attitudes about service acquisition and intentions toward the destination. This measurement is complete and includes two factors, namely, travelers' attitude and behavior toward a destination.

Numerous studies have indicated a close relationship among traveler satisfaction, return intentions, and positive referral recommendations. Chi and Qu (2008) demonstrated that the destination's image has a strong impact on the satisfaction of visitors to a destination. The quality of experience and the value received explain and positively impact visitor satisfaction, and the satisfaction and the value received impact behavioral intent (Chen and Chen, 2008). Extending the above research, Su and Fan (2010) further investigated the relationship of satisfaction and intention to return. The results showed that service quality has a positive impact on satisfaction, and satisfaction also has similar effects on intention to return. Moreover, Som and Badarneh (2011) show that the value received and the image of the destination impact customer satisfaction and that customer satisfaction affects the intention to return temporarily. Manhas and Ramjit (2013) pointed out that a close relationship exists among traveler satisfaction, return intentions, and positive referrals. According to Manhas and Ramjit (2013) and Matos et al. (2012), destination image and satisfaction are two important variables that influence the intention to return of tourists.

### **The influence of sensory marketing on consumer satisfaction**

There are several studies on the impact of sensory marketing factors on consumer satisfaction in the culinary field, typically:

Food quality is a decisive factor in the satisfaction and loyalty of customers. In this study, food quality refers to the aspect of sight (presentation) and taste (taste and freshness) (Hanaysha, 2016).

Sensory marketing factors have a positive influence on customer loyalty of international fast food chain restaurants. In particular, creating a pleasant environment, where customers like to come, plays an important role in determining customer satisfaction, the duration of their visit and the intention to return to the restaurant (Sharafat, 2018).

Sensory marketing makes the buying process more enjoyable; creating a positive and lasting relationship between a customer and a product or a brand or a customer with a shopping location (Grzybowska et al., 2013).

Jang and Lee (2019) studied the impact of sensory marketing on coffee shop business governance. They tested the impact of five-factor sensory marketing on the satisfaction mediating variable and then tested the impact of satisfaction on the intention to return. As a result, the odor factor has the opposite effect on satisfaction, the rest (seeing, hearing, tasting, and touching) has a positive effect on satisfaction. Meanwhile, studies (Mannan, et al., 2019; Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020; Yongping Zhong and Hee Cheol Moon, 2020) all believe that sensory marketing factors have a positive influence on customer or visitor satisfaction.

## Hypotheses

*Sensory marketing and visitor satisfaction*

### Sight

Color and shape are the first aspects of differentiating and defining a product that are made before it is consumed. Imagery is powerful because it creates visual attention, perception, and memory (Chan, Boksem & Smidts 2018). According to Yilmaz, Dyer, Rossler & Spaethe (2017), in the field of dining, color or shape has an apparent impact on users, making most users comfortable and satisfied with the restaurant experience, therefore encourage them to come back for further. Studies (Hanaysha, 2016; Ha-Won Jang and Soo-Bum Lee, 2019; Yongping Zhong and Hee Cheol Moon, 2020) also confirm that visual sensory marketing has a positive impact on satisfaction of customers or visitors. But Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim (2020) argue that touch variable has a negative impact on customer satisfaction.

*Hypothesis H1a: Sensory marketing by image has a positive effect on the satisfaction of international tourists about street food.*

### Smell

Fragrances at shopping malls and smell of products affect on consumers' health and create a positive atmosphere. Fragrance can have a positive effect on customer loyalty to the store (Grzybowska et al., 2013). For the culinary field, taste is very fatal because it will help users recognize, or remember destinations they often visit. Smell activates certain parts of the brain being responsible for creating emotions and memories (Chackravarty, 2017). And smell plays an important role in stimulating users feel happy, satisfied, and relaxed. Then, it has a strong impact on purchasing decisions and customers loyalty (Harrop, 2007). Studies (Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020) show that sensory marketing through smell has a weight in visitors' satisfaction and indirectly positively affects their intention to return. Meanwhile, Ha-Won Jang and Soo-Bum Lee (2019) found the smell factor has an inverse influence on customer satisfaction at the coffee shop.

*Hypothesis H1b: Sensory marketing by smell has a positive effect on the satisfaction of international tourists about street food.*

### Sound

From the past to now, sound has always been applied in many advertisements because it helps consumers remember longer and have a better impression of a product or service. According to Chik, Zulkepeley, Tarmizi & Bachok, (2019) sound has the power to influence consumer mood and buying habits. Sensory marketing through audio is also found to have a positive impact on customer satisfaction in the culinary sector (Ha-Won Jang and Soo-Bum Lee, 2019; Mannan, et al., 2019; Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020).

*Hypothesis H1c: Sensory marketing by sound at street food stalls has a positive effect on international visitor satisfaction.*

### Taste

Cuisine of each region, each country will bring various flavors and different impressions. Flavor characteristic is also a key factor that makes each destination diverse and unique. Murimi et al. (2016) confirmed that besides smell and appearance, taste is one of the main factors affecting food choice. Or studies (Hanaysha, 2016; Ha-Won Jang and Soo-Bum Lee, 2019; Mannan, et al., 2019; Amer Rajput and Raja Zohaib Gahfoor, 2020) show that the sensory marketing element through tasting has positive impact on customer or visitor satisfaction.

*Hypothesis H1d: Sensory marketing by taste at street food stalls has a positive effect on international visitor satisfaction.*

### Touch

Tactile marketing makes it easier for consumers to perceive a product and be satisfied with it (Haugtvedt, Herr,

&Kardes, 2018). Because they feel the product in their hands and stimulate buying pursuit. Citrin et al. (2003), Peck and Childers (2003) discovered that some customers prefer to evaluate products by touching the product and feel disappointed if they do not have an opportunity to touch the product during shopping tour. Touching a product increases attitudes and purchase intention toward that product (Peck and Childers 2003). Ha-Won Jang and Soo-Bum Lee (2019), Amer Rajput and Raja Zohaib Gahfoor (2020) also believe that performing sensory marketing through touch will make customers feel interested and satisfied with services and products, so that increasing the chances of customers returning to the store more often.

In addition, tactile marketing is not only applied in aspect of product but also through the communication of seller (Hultén et al., 2009; Amornrat Pattarakitham, 2015; or perception of the environment or atmosphere inside and outside the store (Booms and Bitner, 1982; Namkung, 2009; Lim, 2010; Hanaysha, 2016), as follows:

Lim (2010) showed that high-quality food and good service, coupled with a pleasant atmosphere, are critical to restaurants. They directly contribute to high customer satisfaction and even affect behavioral intentions in the foodservice sector.

The surroundings can reinforce and reshape a customer's perceptions and directly impact customer satisfaction (Booms and Bitner, 1982).

According to Hanaysha (2016), tangible and intangible values inside and outside the restaurant, including ambient factors, such as temperature, light, noise, atmosphere, and music, impact the existing customers and attract new ones.

Namkung (2009) pointed out that atmosphere and service are stimulants that enhance positive emotions. Research also shows a relationship between the three variables of quality (product, atmosphere, and service), customer emotions (positive/negative), and restaurant consumer behavioral intentions.

According to Hultén et al. (2009), tactile communication between the salesperson and the customer will boost their friendship. This communication can be through a handshake, high five, etc. Or the customer can interact with the seller by practicing together how to create a product or taking a photo with the booth in the role of a salesman, etc. Research by Amornrat Pattarakitham (2015) shows that the factors of customer interaction, diversity, and convenience positively affect customer satisfaction. As for the research results of Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim (2020), touch variables have a negative impact on customer satisfaction.

*Hypothesis H1e: Sensory marketing by touch at street food stalls has a positive effect on international visitor satisfaction.*

Thus, from the hypotheses H1a, H1b, H1c, H1d, H1e can be summed up into the main hypothesis:

*H1: Sensory marketing on street food is positively related to the tourist satisfaction.*

*The satisfaction and return of the tourists*

Numerous studies have indicated a close relationship among traveler satisfaction, return intentions, and positive referral recommendations on destinations (Manhas and Ramjit, 2013; Abubakar et al., 2017). Chi and Qu (2008) demonstrated that the destination's image has a strong impact on the satisfaction of visitors to a destination. The quality of experience and the value received explain and positively impact visitor satisfaction, and the satisfaction and the value received impact behavioral intent (Chen and Chen, 2008). Extending the above research, Su and Fan (2010) further investigated the relationship of satisfaction and intention to return. The result showed that service quality has a positive impact on satisfaction, and vice versa

Research by Som and Badarneh (2011) Manhas & Ramjit (2013), Matos, J.Mendes & P.Valle (2012) shows that in addition to the image of the destination and service quality, visitors' satisfaction is an important variable that has a positive influence on customers' intention to return. for food or tourism (Ching-Fu Chen, Fu-Shian Chen, 2010; Rangana Sri Khalika Wadippuli Arachchi et al., 2015; Amornrat Pattarakitham, 2015; Hanaysha, 2016; Ha-Won Jang and Soo-Bum Lee, 2019; Mannan, et al., 2019; Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020; Amer Rajput and Raja Zohaib Gahfoor, 2020)

*Hypothesis H2: Tourist satisfaction is positively related to the tourist intention to return.*

## **Research Model**

Based on an overview of related theories of sensory marketing, satisfaction, return behavior and previous studies, this paper uses the PLS-SEM model to estimate the impact of factors related to sensory marketing for street food on the return of international tourists in HCMC. And the authors have established two main research hypotheses (H1 and H2) and five component hypotheses (H1a, H1b, H1c, H1d, H1e) about sensory marketing factors affecting the intention to come back. Retention of international tourists is as follows (Fig.1).

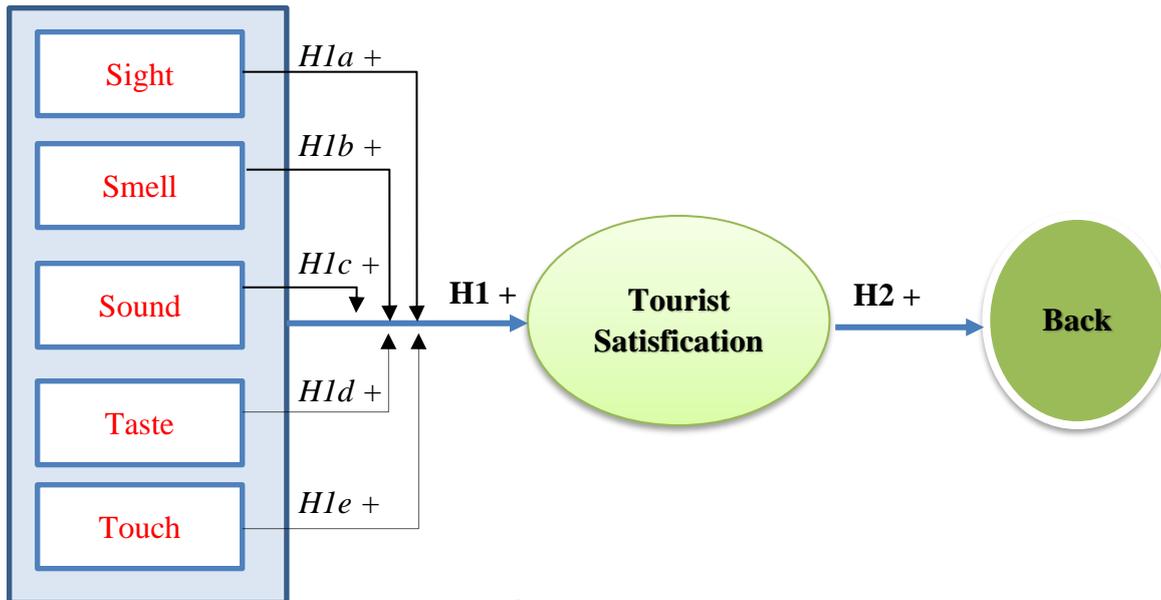


Fig. 1. Proposed research model.

## Methods

Based on the theoretical overview and related previous studies, the research is conducted to analyse the impact of 05 sensory marketing factors (sight, smell, sound, taste and touch) on the satisfaction of international visitors (intermediate variable) and then test the impact of satisfaction on tourists' intention to return.

The PLS-SEM model has proven efficiency in many studies regarding the field of marketing management (Hair et al., 2012). The PLS-SEM model can be applied to structurally complex estimation models (Hair et al., 2019) and effectively applies even to complex relationships between structural variables. architecture according to the annotation network diagram is not simply unilinear (contains intermediate variables). And many previous studies on the topic related to sensory marketing, customer/visitor satisfaction and return (Ha-Won Jang and Soo-Bum Lee (2019; Mannan, et al., 2019; Yongping) Zhong and Hee Cheol Moon, 2020; Amer Rajput and Raja Zohaib Gahfoor, 2020). Therefore, this study also continues to apply the PLS-SEM model for empirical analysis.

### Research sample and implementation workflow

According to Hair et al. (2006), Nguyen Dinh Tho (2014), the number of suitable variables in the analysis must be at least 50, preferably 100, and the observed / measurement ratio is 5: 1, which means the measurement variable requires a minimum of 5 observations. That means the minimum required number of observations is  $n = 5k$ . In this research, the total number of observed variables is 25, so the minimum number of samples is 125.

In addition, according to the 10-fold rule commonly used in PLS-SEM model analysis (Hair et al., 2011; Goodhue et al., 2012), the minimum dataset size is 250 samples. However, the PLS-SEM model is less constrained by the number of samples, the distribution of the data, and the level of measurement (Esposito et al., 2010; Hair et al., 2012). There is no standard on minimum sample size, but research by Reinartz (2009) has shown that with a sample size of less than 100, at acceptable statistical power level.

The study applied convenience sampling technique to collect survey samples. Survey subjects are international tourists present in HCMC. The main target areas are districts 1, 3, and 5, where there are many street food shops, shopping areas and entertainment areas for visitors, and some others also. We conducted a survey of 310 questionnaires with tourists who can communicate in English, of which the majority of visitors are from Europe, Australia and Asia. Finally, 250 survey samples were screened to ensure that all reliable information was included in the data analysis. These 250 observations were considered suitable for analysis in the PLS-SEM model (Esposito et al., 2010; Hair et al., 2011; Hair et al., 2012; Goodhue et al., 2012). In addition, the number of samples in this study is equal or higher than that in some other studies conducted in the context of satisfaction and loyalty or return to the field of tourism and cuisine (Ahmet, 2008; Abubakar et al., 2017).

The collected data were input into Microsoft Excel software and analyzed using STATA 15 and Smart-PLS version 3.0 to analysis.

### Scale and measurement

The authors have applied the scales that have been used by some previous studies on sensory marketing factors, satisfaction and return of tourists (Ha-Won Jang and Soo-Bum Lee, 2019; Yongping Zhong and Hee

Cheol Moon, 2020). The scales are measured based on the level of agreement of the respondents. Observed variables are measured using a 5-point Likert scale, ranging from 1 (Disagree) to 5 (Strongly agree).

## Results

### The current situation of visitors in Ho Chi Minh City

The total number of visitors to HCMC has increased throughout 2015–2020 from 23.9 million visitors in 2015 to 41.39 million visitors in 2019. The average annual increase is approximately 4.5 million visitors/year, which is equivalent to 13%–16% over the same period last year.

**Table 1.** Number of visitors in HCMC

|   | 2015  | 2016   | 2017   | 2018   | 2019   |
|---|-------|--------|--------|--------|--------|
| 1. Number of arrivals of domestic visitors                  | 19.30 | 21.80  | 25.00  | 29.00  | 32.77  |
| Domestic arrivals growth (%)                                |       | 12.95% | 14.68% | 16.00% | 13.00% |
| 2. Number of arrivals of international visitors             | 4.60  | 5.20   | 6.40   | 7.60   | 8.62   |
| International arrivals growth (%)                           |       | 13.04% | 23.08% | 18.67% | 13.48% |
| 3. Total number of arrivals of visitors to Ho Chi Minh City | 23.90 | 27.00  | 31.40  | 36.60  | 41.39  |
| Growth (%)  |       | 12.97% | 16.30% | 16.54% | 13.10% |

*Source: Compiled from statistics of Ho Chi Minh City Statistical Office. Unit: million people*

Street food (eating and drinking) is a tourist attraction. Besides popular types of tourism, such as sightseeing tourism, cultural tourism, green tourism, MICE tourism, and team building, food tourism is also a highlight. Vietnamese street food, in general, and TP HCMC, in particular, are attracting many tourists.

According to UNICEF, HCMC's street food ranks fourth, surpassing world culinary capitals, such as Beijing (China) ranking 44th, Korea ranking 13th, and France ranking 15th, and falling behind Singapore, Bangkok, and Hong Kong. The rankings are based on four criteria, namely, the number of street food sellers, food prices, easy or no access to street food, and food safety and hygiene.

### Current situation of street food industry in Ho Chi Minh City

Street food in Ho Chi Minh City is quite diverse and reasonably priced. There are types such as:

- Experience the culture of sitting on the side of the road while eating barbecue and chatting, watching the bustling streets (Bui Vien food area in District 1); Vinh Khanh Food Street (District 4) put into operation from March 2018 in order to promote Vietnamese dishes, this place has become a brand name for many visitors.
- Traditional food area: Ben Thanh Street Food Market is also a very attractive place for visitors with typical dishes including pho, rice noodles, chicken rice, Hue beef vermicelli.
- Street food is also a feature of street food in Ho Chi Minh City, visitors can experience shopping to take away or sit temporarily in the area around the lake, park...
- Folk cuisine in 3 regions with traditional fruit dishes and drinks in the North, Central and South regions.

#### *Difficulties and challenges of the street food industry*

Selling street food in HCMC is a spontaneous activity that has no consensus and precise planning. The ongoing encroaching on the roadside and chaos on the sidewalk endangers customers and pedestrians.

To attract customers back, the cuisine must meet at least the criteria of good taste (i.e., attractive presentation, clean and professional location, creating pleasant feelings, good quality products, and proper seasoning). However, street food hygiene and safety have not been given enough attention. Most businesses are spontaneous and have tight spaces. Given the competition, food price is low, leading to inadequate food quality. These street food sellers minimize costs. The cooking process is unclear because the seller prioritizes being quick, thus hiring unprofessional workers. District 1 implemented food safety and hygiene management but still faces difficulties because of the high number of street food stalls (more than 2,200 street food stalls) and burdens of street vendors from other places.

The unfair practices of street vendors, such as enticing customers to buy goods by showing kneeling children, performing fire circus, and fake disability to force customers to buy involuntarily still exists.

#### *Orientation to develop street food for tourism*

The city currently strengthens the leadership of the tourism industry in the direction of synchronization, raising in-

depth awareness at all levels of the government, functional sectors, and people of the city about the role of the tourism industry in creating service quality, ensuring a safe tourism environment, and thus promoting the image of HCMC in the eyes of tourists.

The cuisine at the destination is always important to travelers. Visitors can understand culture through cuisine and experience life as locals. The city tourism department aims to exploit cuisine in tourism development, focusing on international tourists to combine sightseeing and learning and processing regional cuisine in tourist villages and tourist areas. It also aims to combine the learning of culinary styles inside and outside the city.

## Discussion about model results

### (1) Test for multicollinearity, convergent and discriminant values of the variables

Quantitative research results are analyzed in two stages including: (1) Confirmatory Factor Analysis, (2) estimation of structural model. The results in Table 2 show:

All factors are reliable with Cronbach's Alpha coefficient greater than 0.7, specifically ranging from 0.718 - 0.929 (Nunnally and Bernstein, 1994). The combined reliability (CR) of all factors is qualified with coefficients greater than 0.7 and ranges from 0.841 to 0.949. Finally, the coefficient of total variance extracted (AVE) of all factors is greater than 0.5 to meet the test requirements, ranging from 0.638 to 0.824 (Hair et al., 2014). These findings allow converging validation of the model.

The following is the Variance Magnification Factor (VIF) all within the acceptable range ( $VIF = 1-5 < 10$ ), (Hair et al., 2014). Therefore, the association between predictors do not violate the assumption of multicollinearity.

**Table 2.** Results of confirmatory factor analysis.

| Construct     | Measurement items  | Standardized factor loading | CA    | CR    | AVE   | VIF   |
|---------------|--|-----------------------------|-------|-------|-------|-------|
| SIGHT         | Pictures of street food  |                             | 0,929 | 0,949 | 0,824 |       |
| SIGHT1        | Clean place of business  | 0,895                       |       |       |       | 3,107 |
| SIGHT2        | Food is covered and kept hygienically  | 0,897                       |       |       |       | 3,245 |
| SIGHT3        | Food and drinks are decorated in an attractive manner  | 0,902                       |       |       |       | 3,204 |
| SIGHT4        | The restaurant uses natural and environment-friendly ingredients in the processing and decoration of dishes that make you enjoy  | 0,937                       |       |       |       | 4,117 |
| SMELL         | The smell of food and drink  |                             | 0,865 | 0,918 | 0,788 |       |
| SMELL1        | The smell of food is very attractive   | 0,86                        |       |       |       | 1,876 |
| SMELL2        | The smell of restaurants and shops makes you feel comfortable  | 0,903                       |       |       |       | 2,751 |
| SMELL3        | The smell of restaurants and shops stimulates you to eat / drink well  | 0,899                       |       |       |       | 2,572 |
| SOUND         | The sound of food restaurants, street vendors  |                             | 0,847 | 0,896 | 0,683 |       |
| SOUND1        | The music (or the advertisement) of the restaurant makes you enjoy   | 0,822                       |       |       |       | 1,723 |
| SOUND2        | The kind of music that is played at the restaurant makes you feel interested   | 0,844                       |       |       |       | 2,157 |
| SOUND3        | The volume around the restaurant is suitable   | 0,833                       |       |       |       | 2,262 |
| SOUND4        | The sound around the restaurant is very interesting and new  | 0,807                       |       |       |       | 1,678 |
| TASTE         | The taste of street food   |                             | 0,718 | 0,841 | 0,638 |       |
| TASTE1        | Food and drinks are delicious  | 0,768                       |       |       |       | 1,448 |
| TASTE2        | Food and drinks have a special taste and variety   | 0,789                       |       |       |       | 1,321 |
| TASTE3        | Fresh food and drink ingredients   | 0,839                       |       |       |       | 1,513 |
| TOUCH         | The touch or interactions of visitors with food, stalls and street food vendors  |                             | 0,829 | 0,897 | 0,745 |       |
| TOUCH1        | The interior of the restaurant makes you feel comfortable and comfortable  | 0,878                       |       |       |       | 2,229 |
| TOUCH2        | You are very excited to experience the role of a street vendor (visitors can interact with the street vendors, or customers can carry the Street hawkers to take pictures) | 0,857                       |       |       |       | 1,994 |
| TOUCH3        | The atmosphere around the restaurant is very "warm" and happy  | 0,854                       |       |       |       | 1,697 |
| SATISFICATION | Visitor satisfaction about street food   |                             | 0,918 | 0,939 | 0,754 |       |
| SAT1          | The restaurant / street food store meets your expectations   | 0,869                       |       |       |       | 3,259 |
| SAT2          | You will talk positively about Vietnam's street food to other people   | 0,895                       |       |       |       | 3,782 |

|                   |   |       |       |       |       |       |
|-------------------|---|-------|-------|-------|-------|-------|
| SAT3              | You will share and introduce acquaintances to try the street food of Ho Chi Minh City                     | 0,886 |       |       |       | 2,938 |
| SAT4              | Experience the street food in HCMC as your expectation  | 0,871 |       |       |       | 2,739 |
| SAT5              | The street food experience in HCMC is worth it to you   | 0,819 |       |       |       | 2,197 |
| REVISIT INTENTION | The visitors' return to Ho Chi Minh City  |       | 0,811 | 0,888 | 0,726 |       |
| BACK1             | You come back to HCMC because you love the food here  | 0,829 |       |       |       | 1,675 |
| BACK2             | You will continue to come back to Ho Chi Minh City again to explore and experience more about the cuisine | 0,841 |       |       |       | 1,795 |
| BACK3             | You will actively introduce the cuisine of HCMC to others   | 0,885 |       |       |       | 1,916 |

Note: CA= Cronbach's Alpha, CR=Composite reliability, AVE=Average variance extracted

## (2) Test the distinctiveness of the model

The heterotrait-monotrait (HTMT) test is also used to test for distinctness (Henseler et al., 2015) and Table 3 shows that all values are less than 0.9. Therefore, the reliability and validity of the model's specificity were checked both at the first and second level of the model.

**Table 3.** Heterotrait-monotrait ratio of correlations (HTMT).

|       | BACK  | SAT   | SIGHT | SMELL | SOUND | TASTE | TOUCH |
|-------|-------|-------|-------|-------|-------|-------|-------|
| BACK  |       |       |       |       |       |       |       |
| SAT   | 0,769 |       |       |       |       |       |       |
| SIGHT | 0,194 | 0,229 |       |       |       |       |       |
| SMELL | 0,714 | 0,637 | 0,087 |       |       |       |       |
| SOUND | 0,637 | 0,501 | 0,216 | 0,388 |       |       |       |
| TASTE | 0,453 | 0,427 | 0,275 | 0,323 | 0,247 |       |       |
| TOUCH | 0,36  | 0,283 | 0,113 | 0,174 | 0,167 | 0,397 |       |

## (3) Test of the suitability of the model

From Table 4 we can easily see that the results of the model are shown through indicators such as: Chi-square = 817,935 and the SRMR = 0.073 < 0.1 or 0.08 (Hulland & Bentler, 1999). and the NFI = 0.798 is less than 0.9 (Bentler and Bonett, 1980). In addition, Henseler et al. (2014) introduced SRMR as a very suitable measure for the PLS-SEM model that can be used to avoid variance in model parameters. This proves that the model is completely consistent with the research data.

**Table 4.** Test of the suitability of the model (model fit).

|            | Saturated Model | Estimated Model |
|------------|-----------------|-----------------|
| SRMR       | 0,056           | 0,073           |
| d_ ULS     | 1,032           | 1,715           |
| d_ G       | 0,497           | 0,567           |
| Chi-Square | 752,651         | 817,935         |
| NFI        | 0,815           | 0,798           |

### Estimated results of PLS-SEM model

According to Chin et al. (1996), when analyzing the effects of the independent variables on the dependent variable, the researcher considers not only the relationship as well as the significance or not between those relationships, but also strong and weak impacts of relationships as a basis for resource allocation. The result of Smart PLS-SEM is showed in Figure 2 and table 5.

Apply a non-parametric Bootstrap procedure (Hair & et al., 2014) to test significance. In this research the baseline sample had 250 observations; each bootstrap sample also contained 250 observations. The number of bootstrap samples should be high but must be at least equal to the number of valid observations in the data set. In this research, the authors conducted the Bootstrapping technique 500 times to ensure the requirement of testing a linear structural model. Estimation results from 250 observations show that the original weight is significant with Bootstrapping's average weight because all weights are within the 95% confidence interval. Thus, the estimates in the model can be concluded to be reliable.

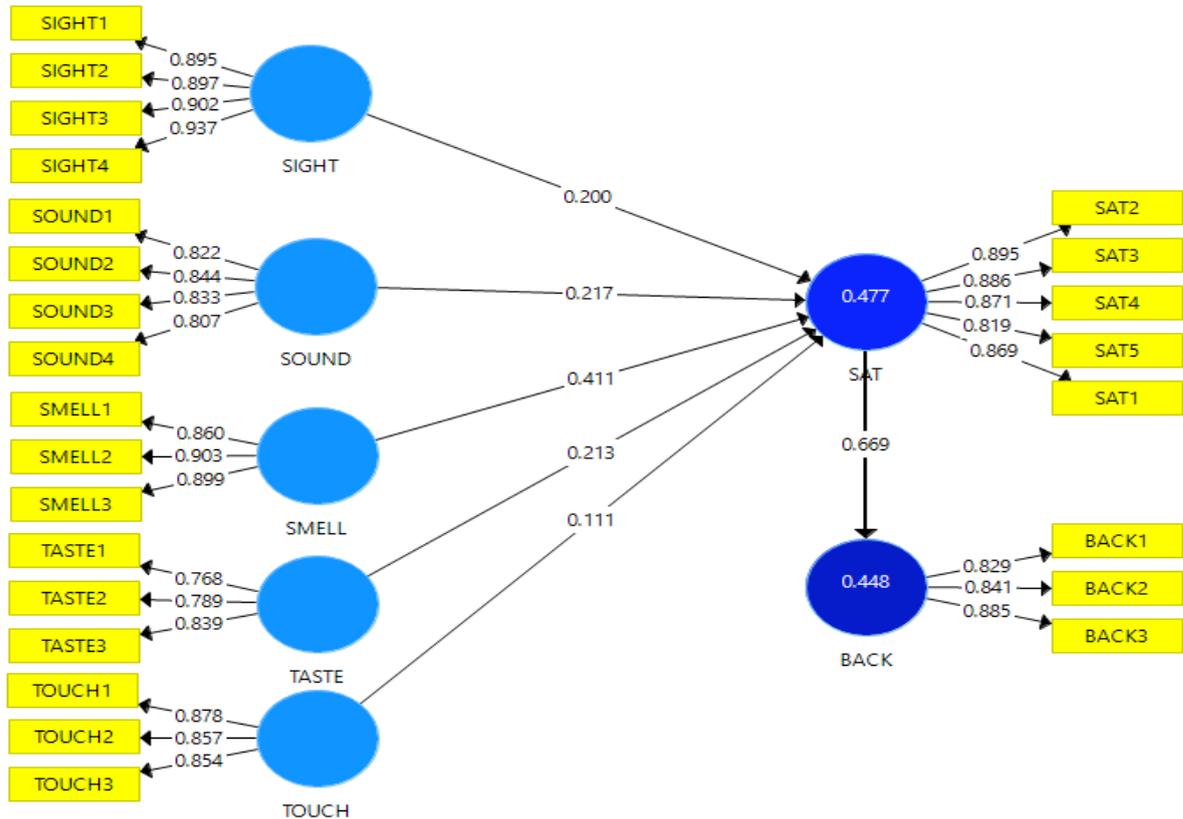


Fig. 2. Model of estimation via Smart PLS-SEM.

Table 5 with impact coefficients from 0.111 to 0.669 shows that the model with all relationships has statistical significance of 1% (P-value = 0.000 <0.01) except for the relation TOUCH -> SAT is statistical significance of 5% (P-value = 0.013 <0.05).

The adjusted R<sup>2</sup> value of BACK is 0.446, indicating that the model is moderately explained (Hock and Ringle, 2010). In detail, 05 sensory marketing factors (sight, smell, sound, taste and touch) explain 46.6% of the variation in satisfaction level and the rest is unexplained because other factors have not been included in the model. Similarly, the adjusted R<sup>2</sup> of SAT is 0.446, indicating that Street food satisfaction accounts for 44.6% of the variation in Return to HCMC.

Table 5. The result of the relationship between structures in the model.

| Relationship between variables | Original weight | Value t                 | Significance level (P-value) | Degree of influence |
|--------------------------------|-----------------|-------------------------|------------------------------|---------------------|
| H1a: SIGHT → SAT               | 0,200***        | 4,115                   | 0,000                        | Medium impact       |
| H1b: SMELL → SAT               | 0,411***        | 7,037                   | 0,000                        | Great impact        |
| H1c: SOUND → SAT               | 0,217***        | 3,805                   | 0,000                        | Medium impact       |
| H1d: TASTE → SAT               | 0,213***        | 3,946                   | 0,000                        | Medium impact       |
| H1e: TOUCH → SAT               | 0,111**         | 2,495                   | 0,013                        | Small impact        |
| H2: SAT → BACK                 | 0,669***        | 14,871                  | 0,000                        | Great impact        |
|                                | R <sup>2</sup>  | Adjusted R <sup>2</sup> | Square                       |                     |
| SAT                            | 0,477           | 0,466                   |                              |                     |
| BACK                           | 0,448           | 0,446                   |                              |                     |

Note: significance of 10%; (\*\*): significance of 5%; (\*\*\*): significance of 1%

Thus, the results in Table 5 show that: Sensory marketing factors (SIGHT, SMELL, SOUND, TASTE, TOUCH) on the field of street food have a positive and significant impact on the satisfaction of international tourists. Therefore, hypotheses H11a, H1b, H1c, H1d, H1e are accepted.

The research results also show that the intention to revisit Ho Chi Minh City also positively depends on the satisfaction on street food. Therefore, hypothesis H2 is confirmed and accepted.

### Discussion and Conclusion

Research results provide evidence to support the view that the application of all five sensory marketing tools is a factor that can enrich visitors' satisfaction with street food. Demonstrating a positive relationship of factors as

some previous studies have also previously shown (Hultén et al., 2009; Namkung, 2009; Lim, 2010; Amornrat Pattarakitham (2015; Hanaysha, 2016; Ha-Won Jang) and Soo-Bum Lee, 2019; Mannan, et al., 2019; Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020; Amer Rajput and Raja Zohaib Gahfoor, 2020) However, in contrast to Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim (2020) on the TOUCH variable; and Ha-Won Jang and Soo-Bum Lee (2019) on the SMELL variable.

The satisfaction of this street food has positively influenced the intention to revisit of tourists. This means that when the satisfaction of visitors about Street food increases, the probability of returning to HCMC increases. When visitors feel satisfied with street food in the city through the appreciation, they feel to get more benefits as well as interesting experiences when enjoying street food, especially typical local cuisine. This argument is consistent with some previous studies that have demonstrated the existence of a positive relationship between customer satisfaction and return (C.Chen and F.Chen, 2008; L. Su and X.Fan, 2010; Manhas and Ramjit, 2013; Rangana Sri Khalika Wadippuli Arachchi et al., 2015; Amornrat Pattarakitham, 2015; Hanaysha, 2016; Abubakar et al., 2017; Ha-Won Jang and Soo-Bum Lee, 2019; Mannan, et al., 2019; Yongping Zhong and Hee Cheol Moon, 2020; Woo-Hyuk Kim, Sang-Ho Lee & Kyung-Sook Kim, 2020; Amer Rajput and Raja Zohaib Gahfoor, 2020).

Therefore, in order to attract and retain international tourists through the field of street food, the city needs to strengthen marketing activities to customers through sensory marketing. In which, three variables SIGHT, SOUND and TASTE are said to have the strongest influence on tourists' satisfaction about street food in HCMC.

Therefore, the first problem, cuisine stores that are established on sidewalks or in small eateries need to enhance their eye-catching, clean, hygienic image, and create a good space for customers. This will make first impression of an interesting image that makes visitors more sympathetic and satisfied with street food. Therefore, the city has better build a long-term plan and plan clean and beautiful food streets; regularly propagate and guide business establishments in accordance with regulations on food safety and labor security; strengthen promotion of street food promotion through food fair channels; distribute flyers at the airport so that tourists could soon shape their experience plans during their trip.

With the strong low price, very affordable, suitable for the gathering of friends with the advent of social networks, Street food is increasingly strongly promoted online. Street food also has certain standards, and restaurants that are not hygienic, causing food poisoning will cause dissonance towards visitors. Therefore, the first impression is that the eye-catching and clean image will make visitors more sympathetic and satisfied with the street food.

Second, street food in HCMC is very diverse and rich, not only a combination of cuisines of different regions in the country but also a combination of many other countries in the world such as Thailand, China, Korea, Japan, Cambodia... Therefore, each restaurant and shop will need its own unique music. Then, this will help visitors be able to recognize characteristics of food and beverage in the store.

Street food in Tp. Ho Chi Minh City is very diverse and rich not only the culinary combination of different regions in the country but also the combination of many other cuisines in the world such as Thailand, China, Korea, Japan, Cambodia... Therefore, each restaurant and shop will need its own unique sound. The distinctive sounds will help visitors to recognize the features of the store that sells what foods and drinks.

Third, Saigonese (ie HCMC people) are very open-minded, generous and hospitable. However, there are still a few street food stall and street vendors with limited foreign language skills, especially English. This is a bottleneck for them to interact with visitors. In addition, existing matter is the act of cruelly chasing tourists to cause loss of sympathy. Therefore, sellers themselves need to put efforts into improving their foreign language skills. In addition, local authorities and tourism industry agencies also need training support to increase their awareness of communication styles with foreigners or know how to guide tourists experience hands-on experience at the store to create curiosity, interest, sympathy and happiness about the city's street food service.

Fourth, it can be said that street food is an indispensable part of HCMC, which stand out with the sophistication of combining spices together to bring out the typical local flavor. The street food of HCMC is convergence of many cultures of different regions of Vietnam, so besides pure dishes, there are also many new concepts of cuisine that have been initiated and set a trend in other provinces and cities. This is also a feature of Saigon street food that cannot be found anywhere else. Therefore, sellers need to strengthen traditional or non-traditional ways of promoting (through social networks) so that visitors can easily access and experience.

Street food in HCMC plays an important role in the tourism industry, significantly adding value to the trip, creating the attractiveness and difference of the locality. Because in the cuisine, there are hidden intangible cultural values of the destination, and through enjoying the food, visitors can discover and clearly feel the local cultural identity, create the impression of the destination. From there, it is easy to urge visitors to come back to experience further.

This research has meaningful not only for street food vendors but also for destination marketers based on street food development. The research results give them more evidence on the influence of sensory marketing factors on the satisfaction of international tourists and thereby encourage tourists return to visit the city in the future.

## **Contributions and Limitations**

### **Academic Contribution**

This inquiry will develop and supplement existing knowledge and models concerning the influence of sensory cues on tourist behavior. The study will provide an insight on how sensory marketing can transform Vietnam tourist and influence their revisit decisions. Currently, most literature focuses on the correlation between affective destination images and tourist experience, and future behavior. Therefore, this inquiry will explain how Vietnam street vendors utilize sensory marketing and how it influences international tourists' decision to revisit the destination. Unlike other studies, this inquiry will focus more on the impact of sensory marketing in the tourism industry. The research will be a reliable source of information that will influence scholars to conduct additional research on the new phenomenon.

### Practical Implications

The result findings, conclusion, and inferences derived from this study will be of vital importance to the food marketing and tourism sectors. The research aims to investigate the impact of sensory marketing on tourist behavior. The study will help the tourism industry evaluate its promotion and advertisement strategies to facilitate customer experience and loyalty. Travel destinations such as Vietnam, Hong Kong, and Thailand, whose local cuisines form primary attractions for tourists, can use the research to enhance their marketing activities. The resulting finding and inferences can also be applied in a unique business field to promote customer experience and loyalty.

### Limitations and directions for further research

Although the study has shed some light on sensory marketing, visitor satisfaction and intention to return to visit, there are still some limitations. The article has only studied this topic in a narrow scope for street food, not extended to the city's culinary industry as a whole. Due to the impact of the COVID-19 epidemic, the number of sample surveys encountered many struggles, so the convenient sampling method was applied. Although the number of response samples is enough to run the PLS-SEM model, the number of samples is not too large. Because this study used survey samples that focused on subjects whose only language was English, there was also a limitation on the number of countries studied.

Therefore, further research may examine these relationships extensively. A similar model can be tested in different culinary fields. In addition, other effects should be studied, such as gender, age, continent, or can be studied simultaneously on the influence of Electronic word-of-mouth (eWOM) on satisfaction, and revisit intention.

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