

Research note

Understanding international tourists' attitudes towards street food in Phuket, Thailand



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ABSTRACT

Street food is present throughout South East Asia, and represents a major tourist attraction in Thailand. Phuket, like other destinations, offers an array of different specialties from which to choose. This could be exploited as a visitor attraction, but certain factors need to be improved for the street food to be more attractive to international tourists visiting the island. The aim of this research was to describe the general attitude of international tourists towards street food in Phuket, as well as to identify what dimensions are most important in predicting their behavioral intentions. This study surveyed 294 international tourists, and using a multiple regression model, identified that out of hygiene, affection, food quality, service quality, satisfaction and value; affection is the most important predictor of tourist's behavioral intentions towards street food in Phuket.

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1. Introduction

Tourism is one of the most important industries in Thailand. According to the Ministry of Tourism and Sports of Thailand (2015), Thailand received nearly 25 million tourists in 2014, and earned >1.20 trillion THB in direct revenue, which is equivalent to >11% of Thailand's total gross domestic product (GDP). Thailand is 11th in the most visited countries ranking of the world, and 6th in the countries with most revenue from tourism receipts (UNWTO, n.d.). Thai food plays an important part in the image of Thailand as a destination. Campaigns such as "Amazing Thai food" or the "Thai street food festival in 2014" showcase authentic local dishes that have helped building a better reputation for the gastronomical offer throughout the kingdom (TAT, n.d.). Studies have concluded that food is one of the most important factors for tourists in deciding whether they want to visit or revisit a particular destination (Cohen & Avieli, 2004; Mak, Lumbers, Eves, & Chang, 2013; Quan & Wang, 2004), and it constitutes an important motivator for tourists to visit Thailand (Kururatchaikul, 2014; Yiamjanya & Wongleedee, 2014).

In Thailand, the street food industry plays a very important role. There are approximately 90,000 street food outlets across the country (Street Stalls/Kiosks in Thailand, n.d.). In 2012, it was reported that annual earnings from the sale of street food amounted to nearly 250 billion THB. In the same year, street vending was responsible for the highest per capita spending in the food industry in Thailand with a total of six

billion transactions, and an average outlay of approximately 34 THB per transaction. In addition, according to a statistical report by Jalis, Che, and Markwell (2014), it is expected that the street food industry in Thailand will continue to expand with a compound annual growth rate of 0.3% in coming years (Nirathron, 2006).

Phuket is the second most important tourist destination in Thailand after Bangkok, almost one third of all Thailand's visitors arrive through Phuket. According to TAT statistics, in 2013, Phuket received 8,395,921 international tourists who produced revenue of >233 billion THB. These figures are predicted to increase in the coming years. Recently, Phuket local government have joined the UNESCO's creative cities network, and Phuket has been granted with the title of "creative city of gastronomy". Phuket is the only city in South-East Asia to have such title, this could serve as a competitive advantage for Phuket, to distinct their destination from other cities in the region that also use local gastronomy as a selling point (Phuket, n.d.). However, some studies have found that not all tourists are interested in street food in Thailand, due to the low standards of food sanitation or because they simply find it unappealing (Sirigunna, 2015; Yiamjanya & Wongleedee, 2014; Lertputtarak, 2012; Henderson, Yun, Poon, & Biwei, 2012; Howard, 2009).

Although a number of studies have examined the experience of tourists with food in Thailand (Choovanichchannon, 2015; Sirigunna, 2015; Yiamjanya & Wongleedee, 2014, 2013; Lertputtarak, 2012; Pullphothong & Sopha, 2012), little attention has been paid to explore the attitude of tourists towards local street food. As such, this is the first study that attempts to gain an understanding on international tourists' attitudes towards street food in Phuket, Thailand. All information

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obtained in this research was gathered by using a model based on previous studies, which explored and explained food related behaviors by using the theory of planned behavior (see Fig. 1).

This study is one of the first attempts to apply this model to street food. Information was gathered by applying a self-administered survey to international tourists visiting Phuket, it had three major purposes: first, to explore the characteristics of international tourists visiting Phuket; second, to investigate their attitude towards street food in Phuket. And third, to assess how their attitudes towards street food affect their behavioral intentions.

2. Literature review

2.1. Street food

Street food is an essential industry in many countries, it provides families that otherwise would not have any source of income with a significant revenue, with no tax payment and a very low capital investment is an option worth considering for a great number of vendors. In Southeast Asia street food or hawking is considered an important part of the social, cultural and economic organization (Toh & Birchenough, 2000). In countries like Singapore, Thailand and Malaysia street food is even considered as a touristic resource and authorities encourage the diversity of offers because it brings color and life to the destination landscape (Henderson et al., 2012; Jalis et al., 2014; Ramli et al., 2016; Muhammad, Zahari, Shariff, & Abdullah, 2016).

As famous chef Thompson and Carter (2009) said in Thailand “It’s all about the food” (page 27), a walk around the streets of big cities such as Bangkok, Chiang Mai, Pattaya or Phuket can confirm this statement. The streets are full with food of all kinds, from market stalls and ambulant vendors, to Michelin starred restaurants and five-star hotels, food plays a central role in Thai society. For example, sharing food precedes most of the business dealings, and treating or inviting friends and family to dine out is signal of social accomplishment (Walker & Yasmeen, 1996). This trend goes from locals to visitors, as several studies have found, food is one of the most important motivators for tourists to visit Thailand (Yiamjanya & Wongleedee, 2014; Kururatchaikul, 2014; Lertputtarak, 2012), this does not come as a surprise, Thai food is so unique, that is considered one of the best cuisines of the world (CNN, 2015).

The street food sector offers ready-to-eat food and beverages prepared partially or entirely in public areas. As such, it relies in fresh locally sourced ingredients that allow little or no storage time. In this way, local street food helps the consumers understanding the relationship between food and territory, and shortens the distance between producers and final consumers (Sengel et al., 2015). Furthermore, street food represents a way of interacting with the host culture, it offers the opportunity to understand the local way of life, and a richer and more meaningful holiday experience. Eating out on the street is more convenient than going to a restaurant. Usually, food is cheaper and better than more formalized food offers. Moreover, street food is available at any time of the day and there is a wide range of variety to select from.

Normally, street food is made with ingredients sourced from local markets and the recipes vary from vendor to vendor. Because of this, tourists who are familiar with street food from Kuala Lumpur or Bangkok could be less familiar with street food from Penang or Phuket. Differences in the local culture and geography across South-East Asia make street food unique in every region. These differences could therefore be a motivation for tourists that are familiar with Thai street food to revisits Thailand, and experience food of different regions (Kururatchaikul, 2014; Privitera & Nesci, 2015).

Unfortunately, in Thailand the economic benefits of street food are suppressed by health and social problems. Previous studies have identified several problems related to this industry such as limited knowledge of the vendors about food hygiene, food-handling standards, and personal hygiene. Additional challenges include bad design of food stalls and carts, poor management, inappropriate location of hawkers, lack of law enforcement, and the tendency to illegality and bribery. These problems cannot be solved easily, but a possible solution could involve changing the status of informality of street food vendors. In countries such as Malaysia or Singapore street food has evolved into a micro industry in which the government sets standards and provides education for vendors to regulate the food handling process. These measures have proved to be effective in improving the quality of the offered food and the image tourists have towards those countries’ street food (Henderson et al., 2012; Proietti, Frazzoli, & Mantovani, 2014; Toh & Birchenough, 2000).

2.2. Food and tourism

Food has a role in the social identity of every individual; thus, everyone selects food influenced by different factors such as culture or religion, socio-demographic factors, personal motivation, previous food experience, food related personality traits and other psychological factors (Cruwys, Bevelander, & Hermans, 2015; Mak, Lumbers, & Eves, 2012; Mak et al., 2013). However, when individuals go abroad they are outside of their routine, they no longer can procure their normal diet, and are forced to participate in the local culinary supply (Cohen & Avieli, 2004; Mak, Lumbers, Eves, & Chang, 2012).

Previous studies have shown that gender is an important factor in tourists’ food consumption, Kim, Eves, and Scarles (2009) suggested that “women were especially interested in tasting local food and excited about local food on their holidays” (Page 429). Nonetheless, studies in other disciplines have found that men show risk taking behavior more often than women (Stark & Zawojka, 2015; Yiamjanya & Wongleedee, 2013; Jianakoplos & Bernasek, 1998), and the consumption of local food could be described as an adventurous risk taking behavior, particularly if the destination is located in an unfamiliar country (Cohen & Avieli, 2004). It could be expected then, to find a significant difference in the attitude of male and female international tourists towards street food in Phuket. Mak, Lumbers, and Eves (2012) suggested that age is an important factor in food consumption, and that older people have different food preferences due to loss of sensorial capacities and health concerns, it would be likely then, that tourists of different age groups have a different attitude towards street food in Phuket.

Cohen and Avieli (2004) suggested that people from different regions experience cuisines in different ways. People from western countries have been exposed to cuisines from other parts of the world due to the effect of immigration, while Asian cuisines have not been subject to the same degree of influence by outsiders. Mak, Lumbers, Eves et al. (2012) pointed out that “past experience can significantly affect food consumption behavior” (Page 929) and that previous exposure to a kind of food could create food memories and thereby improve the consumer’s attitude towards it. In this sense, there could be a significant difference in the attitude towards street food in Phuket between tourists who have visited Phuket in the past and those who have not. Other studies have suggested that factors like familiarity and exposure effect can have an influence in the attitude of consumers towards food related behaviors (Bagozzi, Wong, Abe, & Bergami, 2000; Cohen & Avieli, 2004; Kim et al., 2009).

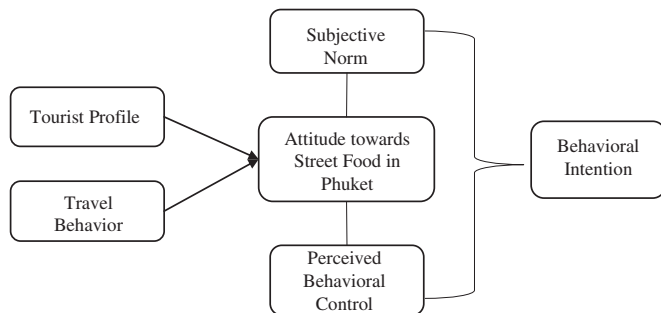


Fig. 1. Conceptual framework of this research adapted from the theory of planned behavior (Ajzen, 1991).

Studies suggest that some of the major motivations for people to travel include “acquiring new knowledge”, “getting experience in a foreign country” or “learning about a different culture”, local cuisine represents cultural knowledge that adds value to the image of the destination, since culinary tradition is considered an intangible heritage passed on from one generation to another, it is impossible to participate in a truly authentic food experience without visiting the specific region and interacting with the locals that gave origin to that food, in this sense, the food provides the tourists with a historical context of the destination's identity becoming one of many forms of cultural tourism (Okumus, Okumus, & McKercher, 2007; Pullphothong & Sopha, 2013; Kim et al., 2009; Horng & Tsai, 2010; Ramli et al., 2016; Muhammad et al., 2016; Knudsen, Rickly, & Vidon, 2016).

2.3. Conceptual background

This study was developed based on previous research using the theory of planned behavior. It considers behavioral intention to be a consequence of attitude, subjective norms, perceived behavioral control and past experiences (Heung & Gu, 2012; Ryu, Lee, & Kim, 2012; Bhuyan, 2010; Kim, Kim & Goh, 2011; Lee, 2009; Namkung & Jang, 2007; Bagozzi et al., 2000; Ajzen, 1991). Attitude is considered to have a major role in the consumer behavior of tourists, it is formed based on previous experiences; it refers to a predisposition for liking or disliking specific stimuli, which include actions, ideas and objects. Attitude is comprised of three components; beliefs (cognitive), which involve the knowledge an individual has about the object of attitude; emotions (affective) which consist of the feelings of individuals towards a stimuli and are based on their beliefs; and finally, intentions (conative) which refers to how individuals are likely to respond towards an object based on their emotions and beliefs (Lee, 2009; Evans, Jamal, & Foxall, 2006; Blackwell, Miniard, & Engel, 2001). The subjective norm is a psychological concept based on each individual's perception, about how people that are important to them might react if they behave in a certain way, for instance by consuming certain products or services, measured against the motivation to comply with the social pressures created by other people's expected reactions (Bagozzi et al., 2000; Sheats, Middlestadt, Ona, Juarez, & Kolbe, 2013). Perceived behavioral control can be defined as the degree to which a consumer can affect or control a future behavior. Since measuring the actual resources and opportunities an individual has to perform an expected behavior is difficult, this variable actually measures the belief of control the consumer has (Evans et al., 2006; Kim, Ham, Yang and Choi, 2013a).

3. Methodology

3.1. Research instrument

A three-part self-administered survey was employed in this study, which was designed to examine international tourists' attitude towards street food in Phuket. Most of the items in the survey questionnaire were adopted from previous studies and modified to fit the scope of this research (Pullphothong & Sopha, 2013; Heung & Gu, 2012; Ryu et al., 2012; Bhuyan, 2010; Kim et al., 2011; Horng & Tsai, 2010; Lee, 2009; Kim et al., 2009; Namkung & Jang, 2007; Okumus et al., 2007). Additional variables were added to the revised version based on feedback from five tourism experts and the results of a pilot study of 40 international tourists. The first part of the questionnaire aimed to gather information about tourists' attitudes towards street food in Phuket, and was constructed to measure six major elements; physical environment hygiene, food quality and service quality, affection, satisfaction, and price and value (Ab Karim, Lia, Aman, Othman, & Salleh, 2011; Liu, Pieniak, & Verbeke, 2013). The food quality dimensions included taste, smell, freshness, food variety, appealing presentation, texture, juiciness, serving temperature and healthiness (Mosavi & Ghaedi, 2013). The service quality dimensions included the speed and efficiency of the service

staff, their friendliness and disposition to help (Ryu et al., 2012) and the respondent's perception of the hygiene of the physical environment including the cleanliness of the establishment and the staff (Juric & Worsley, 1998; Sulaiman & Haron, 2013). The second part of the questionnaire was designed to obtain information about past travel behavior and experience, future behavioral intentions, subjective norms and perceived behavioral control (Yazdanpanah & Forouzani, 2015; Sheats et al., 2013; Bhuyan, 2010). The last part covered the respondent's socio-demographic characteristics (S. Seo, Kim, Oh, & Yun, 2013; Zoltan & Masiero, 2012; Chen & Tsai, 2007).

3.2. Population sample and data collection

This study was implemented on Phuket Island, one of the most important tourist destinations of Thailand, from December 2015 until January 2016. The population was considered to be all international tourists over the age of 18 years visiting Phuket. The population sample (the respondents) was selected using a non-probabilistic convenience sampling technique through direct interception in different locations in Phuket. To avoid over representation of any one group of people, special care was taken to include male and female respondents equally, and to incorporate tourists from a variety of nationalities in order to increase the representativeness of sample to the population (Gray, 2009; Bryman, 2008). In total, 400 questionnaires were distributed. After data collection and preparation for multiple regression modeling, the final sample consisted of 294 respondents.

3.3. Respondents' profiles

The demographic profile of the respondents is summarized in Table 3. 52% of the respondents were males and 48% females. 50.3% of the participants were younger than 30 years, 35.4% were from 30 to 49 years old, and 14.3% were 50 years or older. 77.6% of the participants were westerners, while 22.4% were from Asia. 62.6% of the respondents stated that they were Christians, 5.1% were Muslims, 2.7% were Hindus, 10.2% were Buddhists and 19.4% reported having other or no particular religious' beliefs. 49% of the respondents indicated being single, 46.3% married, 3.4% divorced or separated, and 1.4% were widowed. 66% reported having a university degree or equivalent, 17.7% a college diploma, 9.2% a secondary certificate, and 7.1% said they had other qualifications. A total of 28.6% of the participants were private company employees, 25.2% were students, 22.8% were self-employed, 10.9% worked for a government organization, 8.5% were retired 1.7% were unemployed and 2.4% reported having other occupations. 22.8% reported earning less than USD 1000 per month while 28.2% reported that they had a total monthly income of between USD1001 and 3000. 23.8% had incomes of between USD3001 and 5000, 10.2% had incomes of between USD5000 and 7000, 5.4% earned between USD7001 and 9000 and 6.8% reported earning more than USD9000 per month, while 2.7% preferred not to disclose their personal income. 49% reported that their household size was 1 or 2 persons, 37.4% indicated 3 or 4 persons, 12.9% said 5 persons or more, and 0.7% did not wish to reveal this information.

3.4. Data analysis and reliability of scale

Descriptive statistics were used to summarize participants' general attitude towards street food in Phuket and to explore the most significant attributes of street food. Then, a multiple regression analysis was used to determine which attributes of food are the best predictors of tourist's behavioral intentions. The scale used to measure attitude towards street food in Phuket included 25 items that evaluated different attributes of food. Three items assessed respondent's affection towards street food in Phuket. A reliability test was performed and the result showed a Cronbach's alpha value of 0.747. Four items evaluated the overall impression of the tourists towards the hygiene of street food in Phuket and for this scale; the Cronbach's alpha value was 0.766. Eight

items evaluated food quality attributes such as flavor and smell and this scale had a Cronbach's alpha value of 0.775. Seven items measured different aspects related to service quality; the reliability of this scale showed a value of 0.706. Two items measured overall satisfaction with street food in Phuket and showed a Cronbach's alpha value of 0.713. Finally, one item measured value for money, these six factors measured as a scale to evaluate attitudes resulted in a Cronbach's alpha value of 0.779. Table 1 summarizes this information.

The second part of the questionnaire dealt with three main scales; Three items measured the tourist's subjective norms towards street food consumption in Phuket; this scale had a Cronbach's alpha value of 0.766. Four items measured behavioral intentions and had a 0.802 reliability coefficient. Two items measured perceived behavioral control and the reliability coefficient of this scale was below the threshold value of 0.7 as is often the case when a scale is constituted by only a few items. However, Pallant (2013) suggests that scales with a small number of items can be used as long as their internal item correlation matrix presents a value above 0.3, and in this case, the correlation was 0.446. Table 2 summarizes this information.

Table 1
Demographic profile of respondents.

Attributes	Frequency	Percentage
Gender		
Male	153	52.0%
Female	141	48.0%
Age		
<30 years	148	50.3%
30–49 years old	104	35.4%
50 and above	42	14.3%
Region of origin		
Westerner	228	77.6%
Asian	66	22.4%
Religion		
Christianity	184	62.6%
Buddhism	30	10.2%
Islam	15	5.1%
Hinduism	8	2.7%
Other or no religion	57	19.4%
Marital status		
Single	144	49.0%
Married/living together	136	46.3%
Separated/divorced	10	3.4%
Widowed	4	1.3%
Highest level of education		
University degree (BSc, BA, MSc, MBA, PhD, PGCE)	194	66.0%
College diploma (NVQ/SVQ, HND/HNC)	52	17.7%
Secondary certificate (GCSE, SCE)	27	9.2%
Other qualifications	21	7.1%
Occupation		
Private company employees	84	28.5%
Students	74	25.2%
Self-employed	67	22.8%
Government employees	32	10.9%
Retired	25	8.5%
Unemployed	5	1.7%
Other	7	2.4%
Monthly income in USD		
Less than \$1000	67	22.8%
\$1001–\$3000	83	28.2%
\$3001–\$5000	70	23.8%
\$5001–\$7000	30	10.2%
\$7001–\$9000	16	5.5%
More than \$9000	20	6.8%
Not reported	8	2.7%
Household size		
1–2 persons	144	49.0%
3–4 persons	110	37.4%
>4 persons	38	12.9%
Not reported	2	0.7%

Table 2
Reliability of attitude measurement items.

Factor	Item	Cronbach's alpha
Affection	Street food in Phuket makes me feel good Thinking about street food in Phuket makes me happy I feel trying street food in Phuket is a fun experience	0.747
Hygiene	Street food in Phuket is hygienic I am not afraid of getting sick from street food in Phuket Street vendors in Phuket are well groomed and clean Food stands and carts in Phuket are clean and well-organized	0.766
Food quality	Street vendors in Phuket use fresh ingredients Street food in Phuket is natural and free of additives Street food in Phuket has a good taste The smell of street food in Phuket is appealing It is easy for me to eat street food in Phuket Street food in Phuket is healthy and nutritious Street food in Phuket is visually attractive Street food in Phuket is served at the right temperature	0.775
Service quality	Street food in Phuket is unique and exotic Street food in Phuket represents an authentic local culture There is a big variety of street food options in Phuket Food venues are conveniently located around Phuket Street food venues in Phuket provide a fast service It is easy to order my meal at street food venues in Phuket Street food vendors in Phuket are friendly	0.706
Satisfaction	I am satisfied with the street food quality in Phuket I am satisfied with street food service in Phuket	0.713
Value	Street food in Phuket is good value for money	–
Total		0.779

4. Results

4.1. Comparison of means

A general value for attitude was computed from 25 items measuring different attributes of street food in Phuket, this value was then compared among different demographic groups to discover if there was any difference among them. An independent sample *t*-test was used to establish if there were significant differences between the attitudes of males and females. Levene's test of equality indicated that equal variances could be assumed. A *t* value of 0.157 was established which with 292 degrees of freedom had a 2-tailed significance level of 0.876. Therefore, it was concluded that no significant difference exists between genders in regards to their attitude towards street food in Phuket. A one-way ANOVA was used to compare the differences among different age groups. A non-parametric Levene's test was performed to assess the homogeneity of the variances and the *p* value was 0.057. It could therefore be assumed that the variances were homogeneous. The ANOVA produced a significance level of 0.405 indicating that there were no statistically significant differences in attitudes towards street food in Phuket among different age groups. An independent sample *t*-test was performed to compare the mean attitude values of respondents from western countries and those from Asia. The test for equality of variance result was 0.707 meaning that equal variances could be assumed. The *t* value was 0.896 with 292 degrees of freedom and the 2-tailed significance was 0.371. Meaning that there is no significant difference in the attitude of Asian and Western travelers towards street food in Phuket.

Likewise, several comparisons were made to determine if international tourists with diverse travel behavior reported a significant difference in their attitude towards street food in Phuket. Three independent sample *t*-tests were used to determine if there were significant differences in the attitudes of tourists who had visited Phuket in the past and those who were visiting for the first time, as well as between tourists that travel often and those who seldom travel abroad, and between

Table 3
Reliability of scales measuring SN, PBC and BI.

Factor	Item	Scale value
Subjective norms	I believe my family and friends would appreciate it if I tried street food in Phuket I believe my family and friends would like to try street food in Phuket	Cronbach's alpha: 0.766
Perceived behavioral control	People whose opinions regarding food are important to me think that I should try street food wherever I travel If I wanted to, I could buy other food instead of street food while visiting Phuket It is mostly up to me whether or not to buy street food in Phuket	Item correlation: 0.446
Behavioral intentions	I would like to come back to eat street food in Phuket I would recommend street food in Phuket to friends and others Based on my experience with street food In Phuket I would like to come back in the future Based on my experience with street food in Phuket I would recommend it as a destination for friends and family	Cronbach's alpha: 0.802

tourists that had tried street food before coming to Phuket and those that had never tried it before. For the first comparison, the Levene's test significance value was 0.717, so equal variances were assumed. The *t* value was -0.357 with 292 degrees of freedom of, and the 2-tailed significance level was 0.721, this suggests no significant difference exist between first time and repeated travelers. For the second test, Levene's test of equality indicated a significance level of 0.296 and equal variances were again assumed. The *t* value was -0.164 with 292 degrees of freedom and the 2-tailed significance value was 0.870, indicating that no difference exists between tourists that travel often and those ones that rarely travel. In the third analysis the equality of variance test had a value of 0.125 and in the paired sample *t*-test, the *t* value was -0.717 with 292 degrees of freedom that is a 2-tailed significance level of 0.474, this indicates there is no significant differences in the attitude of tourists that had tried street food before coming to Phuket and those that had not.

The respondents mean attitude scores towards street food in Phuket are summarized in Table 4.

The results show a positive inclination to most of the attributes, signifying that overall there is a good attitude towards street food in Phuket. Means of over 4 points were achieved in the items measuring street food taste, variety and ease of eating, the friendliness of the street vendors, value for money, street food as a fun experience and as an experience that represents local culture. Interpretation of these scores would suggest that tourists perceive street food in Phuket to be an easy and fun way of consuming food that allows them to interact with friendly locals, and try a wide variety of authentic, delicious and

inexpensive dishes. These findings support previous studies that suggested that local food is regarded as a means of interacting with the host culture and its authentic cuisine (Sengel et al., 2015; Okumus et al., 2007; Cohen & Avieli, 2004; Quan & Wang, 2004). On the other hand, it is noticeable that the lowest values were those for items measuring hygiene, this result indicates that there is still a general concern among tourists about the hygiene and sanitation standards of street food vendors in Phuket. Such concerns are a reflection of the failure of government programs to regulate street food, of which tourists do not appear to be aware of. Furthermore, most street food vendors do not abide by the government regulations, and no measures are taken to prevent vendors without a license selling food on the street.

4.2. Multiple regression

The regression model used in this study shows an adjusted R square value of 0.618, meaning that the model can explain 61.8% of the variance in tourists' behavioral intentions towards street food in Phuket using the selected predictors. The dependent variable adopted was behavioral intentions as measured by the mean value of the four items in the scale. A Durbin-Watson test resulted in a value of 1.871 indicating a significant difference between the dependent and independent variables. To further rule out any possibility of autocorrelation, a visual inspection of the Pearson correlation table was conducted to confirm that none of the values among the construct exceeded 0.7. The F value was equal to 60.33 (df, 8, 285) with a significance level of 0.001 ($p < 0.05$). This result demonstrates that the independent variables were good predictors

Table 4
Mean values of attitudes towards street food in Phuket.

Item	Mean	Std. deviation	Factor	Factor mean	Factor std. deviation
I feel trying street food in Phuket is a fun experience	4.10	0.780	Affection	3.92	0.598
Street food in Phuket makes me feel good	3.90	0.728			
Thinking about street food in Phuket makes me happy	3.76	0.810	Hygiene	3.20	0.685
I am not afraid of getting sick from street food in Phuket	3.38	1.014			
Street vendors in Phuket are well groomed and clean	3.19	0.899			
Street food in Phuket is hygienic	3.13	0.887			
Food stands and carts in Phuket are clean and well-organized	3.13	0.902	Food quality	3.70	0.493
Street food in Phuket has a good taste	4.12	0.770			
It is easy for me to eat street food in Phuket	4.01	0.828			
The smell of street food in Phuket is appealing	3.79	0.880			
Street vendors in Phuket use fresh ingredients	3.66	0.762	Service quality	3.96	0.494
Street food in Phuket is visually attractive	3.60	0.895			
Street food in Phuket is natural and free of additives	3.54	0.914			
Street food in Phuket is served at the right temperature	3.46	0.933			
Street food in Phuket is healthy and nutritious	3.43	0.851	Satisfaction	3.80	0.682
Street food in Phuket represents authentic local culture	4.05	0.853			
Street food vendors in Phuket are friendly	4.05	0.824			
There is a big variety of street food options in Phuket	4.01	0.866			
Street food venues in Phuket provide a fast service	3.99	0.792	Value	4.07	0.867
It is easy to order my meal at street food venues in Phuket	3.96	0.817			
Street food in Phuket is unique and exotic	3.88	0.870			
Food venues are conveniently located around Phuket	3.78	0.782			
I am satisfied with street food service in Phuket	3.84	0.774	Satisfaction	3.80	0.682
I am satisfied with the street food quality in Phuket	3.76	0.810			
Street food in Phuket has good value for money	4.07	0.867	Value	4.07	0.867

Table 5
Regression coefficients of factors relating to street food.

Variable	Standardized coefficients	Sig.	Collinearity statistics	
	Beta		Tolerance	VIF
Affection	0.312	0.000	0.578	1.730
Hygiene	0.006	0.881	0.705	1.419
Food quality	0.019	0.708	0.484	2.067
Service quality	0.188	0.000	0.544	1.839
Satisfaction	0.171	0.001	0.544	1.837
Subjective norms	0.248	0.000	0.746	1.340
Perceived behavioral control	0.178	0.000	0.802	1.248
Value for money	−0.016	0.703	0.764	1.309

for behavioral intentions. Table 5 presents each of the predictors of behavioral intentions, their standardized Beta coefficients, and the significance and collinearity statistics.

The model suggests that affection, subjective norms, service quality, satisfaction, and perceived behavioral control are all significant predictors of the dependent variable, it also indicates that hygiene, food quality and value for money do not contribute to a significant level in predicting behavioral intentions towards street food in Phuket. The predictor with the highest beta value was affection (0.312), which is a similar outcome to the results by Mosavi and Ghaedi (2013), which indicates that positive feelings have a positive relationship with behavioral intentions. This finding could be the result of the inclusive nature of feelings as a global factor that encompasses all other factors. If respondents consider that any of the attributes in street food do not meet their expectations, it will almost certainly lead to a change in the overall feelings of the individual towards street food. Service quality (0.188) and satisfaction (0.171) were mildly predictive of tourist's behavioral intentions towards street food in Phuket, these results support previous studies that linked service quality and satisfaction with future consumer behavior (Kim et al., 2011; Namkung & Jang, 2007; Ryu et al., 2012). It is important to mention that not all attributes in the dimension of attitudes towards street food have the same predictive capabilities. Likewise, results from the linear regression indicate that subjective norms (0.248) and perceived behavioral controls (0.178) play an important role in predicting behavioral intentions. These results support previous studies that adopted the theory of planned behavior as a research framework (Yazdanpanah & Forouzani, 2015; Kim, Park, Kim and Ryu, 2013b; Bhuyan, 2010).

5. Discussion

In contrast to previous studies, in which authors have concluded that age, gender, nationality and previous experience had a strong influence in tourists' attitude towards food (Seo et al., 2013; Mak, Lumbers, Eves et al., 2012; Kim et al., 2009), this study did not find strong evidence that suggests any demographic group has a more favorable attitude towards street food in Phuket. Males and females report a favorable attitude towards street food. Furthermore, both groups seemed to score each of the attributes food in a very similar way, they are wary of hygiene, and consider food quality to be good in the same categories. It was expected to encounter a difference in the attitude of Western and Asian tourists, because food in Phuket may have been more familiar to travelers from Asian countries. However, in this research both groups reported similar attitude, this might be a result of globalization, availability of information, and an increasing presence of ethnic Thai restaurants in both Western and Asian countries (Lee, 2012; Privitera & Nesci, 2015). Previous studies pointed out that age significantly affects the attitude of consumers towards food (Bagozzi et al., 2000; Cohen & Avieli, 2004; Mak, Lumbers, Eves et al., 2012). Nonetheless, the three age groups considered for this study reported similar attitude towards

street food. Although a small difference existed in the way older people perceived hygiene of street food vendors, it was not found to be significant. Preceding studies pointed out that previous experience affected consumer attitude towards food (Kim et al., 2009; Quan & Wang, 2004; Cohen & Avieli, 2004), however, the present study found similar results in the attitude of tourists who had previous experience and those coming to Phuket for the first time.

The second part of this study explored the attitude of international tourists towards several attributes of street food in Phuket. The highest score by factor was achieved by "Service quality" and the lowest score was obtained by "Hygiene". It is worth mentioning that although hygiene presented the lowest mean value among the street food attributes, it was not found to predict or affect consumer behavioral intentions. This apparent contradiction could be related to consumers' previous knowledge of the attribute's flaw. Street food in developing countries is known to have poor sanitation (Privitera & Nesci, 2015; Proietti et al., 2014; Toh & Birchenough, 2000), yet tourists are still willing to consume it, revisit its source and recommend it to others. A similar situation could explain why value for money and food quality did not explain any variance in consumer behavioral intentions. Even though both values obtained very high mean scores, these are attributes that are anticipated in respect of street food by consumers, and therefore, they do not constitute a decisive factor in determining future behavior.

The final part of this study confirmed that the theory of planned behavior can be applied in the field of street food. The model was able to predict 61.8% of the variance of consumer's behavioral intentions towards street food in Phuket by using attitude (as measured by affection, perception of hygiene, food quality, service quality, satisfaction and value for money), subjective norms and perceived behavioral control (Bhuyan, 2011; Kim et al., 2011; Kim et al., 2013a, b; Ryu et al., 2012). It also indicates that among the factors that constitute consumers' attitude towards street food, affection, perceived service quality and satisfaction have the highest predicting ability of tourists' future behavior. These findings do not imply that hygiene, value for money, and food quality, are not important, since a change in these attributes could still lead to a change in the overall attitude of tourists, but it serves as guidelines to understand why tourists might be more willing to revisit or recommend if expectations of service quality, satisfaction and affection are exceeded.

6. Conclusions

The information gathered in this study has practical implications for destination managers, including Phuket local authorities and the Tourism Authority of Thailand. The newly acquired "creative food of gastronomy" title implies that the food landscape has an important role in the marketing of Phuket as a tourist destination. Based on the findings of this research it is important to create a marketing campaign that emphasizes on the factors that are more significant for tourists; such as activities that create a strong affectional bond, highlight the cultural value of street food, and remind tourists of the good service, and street food vendors. These could reinforce the desire of tourists to revisit or recommend Phuket to others. In addition, it is necessary to change the perception of tourists on the hygiene of street food vendors in Phuket, by initiating a program to improve street food sanitation and production standards. Such program could include training for street food vendors, thorough sanitary control, and even a ranking system to identify which street vendors follow stricter food production standards. Recently, the Thai government has introduced a travel insurance scheme for all tourists known as the "Thailand Travel Shield" (Vananupong & Jirakittikul, 2014), other recommendation to improve the image of food hygiene, could be, to include food related health problems in this program, as a guarantee to travelers that they would be covered in case of suffering from any foodborne illness.

6.1. Limitations and future research

There were a number of limitations in the present study that need to be taken into consideration. First, the information in this research was obtained during the peak season in Phuket, this could mean that tourists that are traveling during the low season could have been underrepresented in the sample of this study. Repetition of this investigation may consider sampling across seasons which would help to obtain more insightful data. Second, this survey was applied in English. Therefore, only English-speaking tourists were included in the sample. Since the most important markets for Phuket are Chinese, Russian and Australian tourists, future researchers may consider using translated versions of the survey to include a more randomized and representative number of these tourists. Third, during the statistical analysis of this research all attributes of street food were considered equal in importance in the way they affect consumer's attitude, the use of different scales that combine multiple rating and Likert variables may reveal different results. Lastly, the present research only focuses on tourists visiting Phuket. Therefore, generalization of the results would require replication of similar studies in comparable destinations.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.tmp.2016.11.005>.

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