



# Understanding Chinese tourists' food consumption in the United States<sup>☆</sup>



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## ABSTRACT

Chinese tourism is a booming market that various international tourism destinations want to attract. Although Chinese tourists have an enormous economic impact on the restaurant industry, they seem to consume only Chinese cuisine during their international trips. This study applies the Theory of Planned Behavior (TPB) and uses the PLS-SEM method to evaluate different factors that influence Chinese tourists' consumption behavior toward local food in the United States. The results of this study show that the concerns for food safety (negatively) and table manners could aggravate Chinese tourists' attitudes toward consuming unfamiliar local food. However, communication and the food's sensory appeal are not significant in predicting their attitudes toward local food. A multigroup analysis also shows that food neophobia, a food-related personality trait, moderates Chinese tourists' decisions in regard to consuming local food.

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## 1. Introduction

The development of tourism plays a vital role in the growth of the global economy (Lee & Chang, 2008). Spending by Chinese tourists grew substantially from 79 billion dollars in 2009 to 110 billion dollars in 2013 (The World Bank, 2014). Further, the U.S. Department of Commerce (2014) reports that almost 2 million Chinese tourists visited the United States in 2013, 23% more than in 2012. This number might dramatically increase because the United States extended the length of short-term business and tourist visas for Chinese citizens on November 12, 2014 (U.S. Department of State, 2014). Hence, a better understanding of Chinese tourists' travel expenditures in the United States is crucial to the U.S. businesses that serve these customers.

Among the different travel expenditures, food consumption constitutes up to one third of the total spending of tourists (Telfer & Wall, 2000). The U.S. Department of Commerce (2014) reports that food consumption is the only activity that gradually increases among Chinese tourists while visiting the United States. However, a field study by Chang, Kivela, and Mak (2010) finds that Chinese food remains the main preference for the majority of Chinese tourists when they visit Western countries. This finding is consistent with Cohen and Avieli's (2004) argument that local foods can be attractions but their unfamiliarity can also be an impediment to consumption. Hence, a better

understanding of the behavior of rejecting local food while traveling abroad is appealing to both business owners and researchers.

This study references the Theory of Planned Behavior (TPB) to understand the factors that influence Chinese tourists' food consumption in the United States. The TPB posits that attitudes, subjective norms, and perceived behavioral controls together influence an individual's behavior (Ajzen, 1991). Consequently, different beliefs determine an individual's attitude. A review of the research (Bu, Kim, & Son, 2013; Cohen & Avieli, 2004) calls attention to both the importance of the local food market and the impact of particular beliefs (i.e., safety concern, communication gap, table manners, and the food's sensory appeal) on tourists' attitudes toward food consumption. Because unfamiliar local food is novel to tourists, Kim, Eves, and Scarles (2009) suggest that understanding food neophobia, a food-related personality trait, is important when researching tourists' food consumption. Overall, the purpose of this study is to explore the predictive factors on tourists', particularly Chinese tourists', food consumption in the United States.

## 2. Literature review and hypotheses

Tourists' food consumption is a prevalent research topic in the literature on consumer behavior (Kim et al., 2009; Seo, Kim, Oh, & Yun, 2013). However, the research shows two contrasting perspectives on food in tourism. One stream of research considers food as a tourist attraction (Hjalager & Richards, 2003), while the other stream of research finds food as an impediment that prevents tourists from exploring the food attractions of a travel destination (Cohen & Avieli, 2004). Because tourists in general tend to connect travel with risk and uncertainty, international tourists can feel uncomfortable in new environments and be resistant to unfamiliar local food (Sirakaya & Woodside, 2005).

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This study predicts Chinese tourists' behavior toward food consumption in the United States. Hence, the differences between the two countries' food cultures are relevant to understanding that behavior. Cooper (1986) points out that in Chinese culture, sharing main courses with other people at the table and only taking an appropriate portion is important. This sharing rarely happens in the United States where people usually order and eat their own food. Further, Atkins and Bowler (2001) mention that culture plays a significant role in what a person considers appropriate to eat. For instance, Chinese gastronomy perceives bird nests as nutritious; however, other cultures consider this ingredient frightening (Cheung & Wu, 2012). Thus, the fact that Chinese tourists frequently dine in Chinatowns during their visits is not surprising.

In order to better understand tourists' food consumption behavior, this research applies the TPB as the fundamental framework. Ajzen (1991) introduced the TPB, and since then various studies (Wu, Cheng, & Cheng, 2015; Zapkau, Schwens, Steinmetz, & Kabst, 2015) have adopted this theory to predict an individual's behavior. Several studies apply the TPB to food consumption in tourism and hospitality (Hornig, Su, & So, 2013; Padgett, Kim, Goh, & Huffman, 2013). Hultman, Kazeminia, and Ghasemi (2015) use the TPB to understand Swedish and Taiwanese tourists' decisions on ecotourism, which is an example of using this theoretical framework to predict international tourists' behavior.

The study bases the first hypotheses on the TPB literature (for more details refer to Ajzen, 1991):

**H<sub>1</sub>.** As Chinese tourists' attitude toward consuming unfamiliar local food becomes more positive, their intention to consume increases.

**H<sub>2</sub>.** As Chinese tourists' subjective norms about consuming unfamiliar local food become more positive, their intention to consume increases.

**H<sub>3</sub>.** As Chinese tourists' perceived behavioral control about consuming unfamiliar local food improves, their intention to consume increases.

Ajzen (1991) argues that predictions on the attitudes toward certain behaviors come from different behavioral beliefs. Hence, the present study introduces the beliefs that influence tourists' behavioral attitudes toward consuming unfamiliar local foods.

When traveling, the consumption of unfamiliar local food and, unsanitary food practices can make tourists ill. Hence, the fear of illness can be the principal reason for tourists' suspicion of local food (Cohen & Avieli, 2004). This type of health concern is consistent with food safety. When the Avian flu, a disease that spreads from migrating birds to humans, erupted in Asian countries, these countries saw a decrease in the volume of tourists and the consumption of poultry dishes. The research (Ha & Jang, 2010) also finds that food safety is very important for food preference. Because of the concerns about food safety, tourists might have more unfavorable attitudes toward consuming unfamiliar local food during their travel abroad. Thus, this study hypothesizes:

**H<sub>4</sub>.** As the safety concern about consuming unfamiliar local food increases, tourists' attitude toward consuming this food becomes more negative.

Cohen and Avieli (2004) find that difficulties in communication aggravate the anxieties of tourists. Already suspicious of being cheated or overcharged, travelers tend to express awkward feelings when they enter dining places that locals patronize. Hence, successfully providing proper communication with tourists in a dining setting can possibly resolve the tourists' anxieties that can then result in more positive attitudes toward consuming local food. Hence, this study hypothesizes:

**H<sub>5</sub>.** As communication from servers becomes more helpful, tourists' attitude toward consuming unfamiliar local food becomes more positive.

Table manners vary among different cultures. Each country has its unique gastronomical traditions, such as the selection of food,

presentation of dishes, and the skill in preparation (Long, 2004). Bessiere (1998) states that table manners are a very important part of experiencing the culture in a travel destination, particularly the understanding of the local cuisine. Therefore, if tourists feel more comfortable about the local table manners, they gain a more positive attitude toward having unfamiliar local food. Thus, this study hypothesizes:

**H<sub>6</sub>.** As tourists feel more comfortable with different table manners, their attitude toward consuming unfamiliar local food becomes more positive.

Further, the food's sensory appeal is also important. The literature defines sensory appeal as a tourist's need to experience a travel destination through specific sensory modes, such as touch, smell, taste, sight, and hearing (Pollard, Steptoe, & Wardle, 1998; Urry, 2002). The research (Clark & Wood, 1998; Namkung & Jang, 2008) also shows that individuals' sensory perception of the food's appeal is a strong determinant of their evaluation of the food's quality. The difference between the food tourists' consume in their home countries and the unfamiliar local food they consume during visits could induce negative reactions, particularly for those tourists who have a higher need for a food's sensory appeal. This study, therefore, hypothesizes:

**H<sub>7</sub>.** As tourists' concern for the food's sensory appeal increases, their attitude toward consuming unfamiliar local food becomes more negative.

Furthermore, Ajzen (2005) states that personality traits could also affect certain behavior. Thus, the research (Chang et al., 2010; Kim et al., 2009) explores the concept of food neophobia. Food neophobia, literally "fear of the new," is a characteristic of omnivores, such as humans, that leads to the avoidance of new or unfamiliar foods (Hobden & Pliner, 1995). Kim et al. (2009) propose that food neophobia is the trait that affects tourists' behavior toward food consumption and successfully verify this statement in a follow-up study (Kim et al., 2013). However, Hafiz, Zainal, Nizan, and Shahariah (2013) find that food neophobia is an insignificant predictor of tourists' food consumption. These inconclusive results call for more attention to the premise that food neophobia works as a trait that influences tourists' behaviors toward food consumption. The present study argues that food neophobia moderates the aforementioned relations. Therefore, this study hypothesizes the following:

**H<sub>8</sub>.** Stronger effects will occur in the results of the above hypotheses (H<sub>1</sub> – H<sub>7</sub>) among the tourists who have high food neophobia compared to those who have low food neophobia.

Fig. 1 displays the proposed theoretical model.

### 3. Method

#### 3.1. Sample and data collection

This study surveys Chinese tourists who visited the United States between March 2013 and September 2014. The study conducts a snowball sampling to collect the data by using international travelers the authors know through personal relationships (Zikmund, Babin, Carr, & Griffin, 2012). The survey initially uses English and then language professionals translate the English into Chinese and provide back translation. The questionnaire provides an explanation of the local food in Chinese. After translation, an online survey website provides a link to the Chinese questionnaire, and five initial participants receive this link. The online survey requests that all of the participants invite their friends and family who qualify to take the survey. In total, 421 people agree to participate and 304 of them complete the survey. The study eliminates inadequate surveys (e.g., length of the completion time and acquiescence bias) to leave a total sample size of 278, which yields an effective response rate of 66%. The average age of the sample is 43 (SD = 14.5). Table 1 presents the demographic information on the participants.

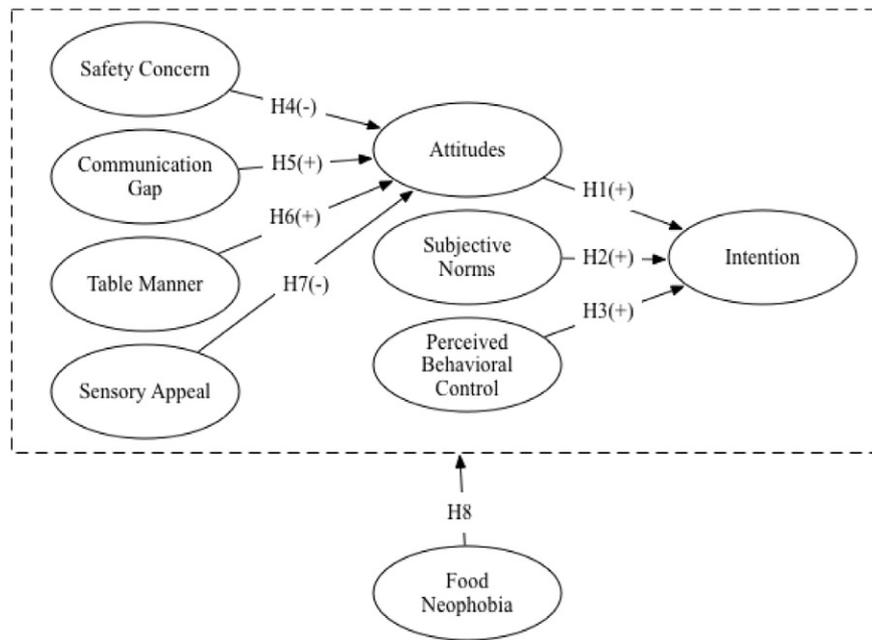


Fig. 1. Proposed theoretical model.

### 3.2. Measures

All of the scales in this study are seven-point Likert scales (1 = strongly disagree, 7 = strongly agree). All items in the TPB come from the literature with minor modifications (Han, Hsu, & Sheu, 2010; Sparks & Pan, 2009). A scale by Knight, Worosz, and Todd (2009) measures the food safety concern. A five-item scale from Juwaheer (2004) and Hudson and Shephard (1998) measures the communication gap. A newly developed scale with four items captures the acceptance of table manners. This scale summarizes the definitions of table manners in Long (2004).

The empirical studies in the business literature commonly use reflective measurement models according to the classic test theory

(Lord, Novick, & Birnbaum, 1968). However, the measurement misspecification in the model is a concern (Diamantopoulos, Riefler, & Roth, 2008). Henseler, Ringle, and Sarstedt (2016) discuss three forms of measurement in structural equation modeling (SEM): common factor (reflective construct), indicator models (formative constructs), and composite models. A composite model largely resembles the formative construct except this model does not have an error term at the latent variable level. The indicators in the composite model are the same as in the formative construct and explain the latent variable rather than serve as independent reflections of the construct, as in the case of reflective items. However, the combination of the formative indicators in a composite model fully explains the variance in the latent variable because no error term exists at the latent variable level. Thus, deleting an indicator in the composite factor actually changes the meaning of the latent variable. Given the fact that the four indicators (i.e., smell, flavor, taste, and appearance) in combination represent sensory appeal and the causes of variation in the construct, sensory appeal is a composite model (Diamantopoulos et al., 2008).

Table 1  
Demographic information.

N = 278		Demographic	%
Gender	Male		41.4
	Female		58.6
Education	Less than high school		1.8
	High school		14.7
	Some college degree		16.5
	Bachelor degree		43.2
	Graduate degree		23.7
Income	Less than RMB 50,000		15.8
	RMB 50,001 ~ RMB 100,000		25.2
	RMB 100,001 ~ RMB 150,000		15.5
	RMB 150,001 ~ RMB 200,000		13.3
	More than RMB 200,000		30.2
Purpose	Leisure		38.8
	Visiting family and relatives		33.5
	Business		14.0
	Education		13.7

### 3.3. Common method bias

Common method bias is a potential concern (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) when collecting behavioral and attitudinal data from self-report questionnaires at one time point (Chang, Van Witteloostuijn, & Eden, 2010). In order to reduce this bias, the study ensures that all participants understand the survey's confidentiality as well as the questions. This study also uses Harman's one-factor test to statistically access the common method bias. The exploratory factor analysis' (EFA) results show that the common factor explains only 38% of the variance in the model. And the confirmatory factor analysis' (CFA) results show that the one-factor model does not fit the data very well ( $\chi^2 = 9575.10$ ,  $df = 465$ ,  $p = .000$ ,  $CFI = 0.483$ ;  $RMSEA = .0176$ ), indicating a lack of concern for the common method bias.

## 4. Analysis and results

The analysis uses a partial least square structural equation modeling (PLS-SEM) with SmartPLS 3 to test the model. The research considers

the PLS-SEM a more appropriate analysis to provide an understanding of the individual constructs and the cause–effect relations among all of the constructs when a study has a predictive research goal and a relatively complex model (Chin, 1998; Hair, Sarstedt, Ringle, & Mena, 2012; Sarstedt, Ringle, & Hair, 2014). Further, the PLS-SEM is able to analyze composites whereas the covariance-based SEM (CB-SEM) cannot do so. The study evaluates the research model in two steps: the outer model (measurement model) and the inner model (structural model) (Hair, Hult, Ringle, & Sarstedt, 2013). The study then applies all of the resampling procedures (i.e., bootstrapping and blindfolding) to 5000 resamples (Hair et al., 2012). Further, the study evaluates the predictive validity by splitting the sample into two parts – a training sample (n = 243) for the main analysis and a holdout sample (n = 35) for validation.

4.1. Outer model results

4.1.1. Reflective measurement model evaluation

The study considers three aspects to evaluate the reflective measurement models: convergent validity, internal consistency reliability, and discriminant validity. Table 2 presents the specific results. The study deletes two indicators for the food safety concern (SC1, SC2) from the original model because of their low outer loadings. All of the outer loadings in the seven reflective measurement models are at least 0.69 and are statistically significant ( $p < 0.001$ ). The average variances extracted (AVEs) are higher than 0.5 for all of the constructs. Both results indicate a high reliability for the indicators. For the internal consistency reliability, Cronbach's alphas and composite reliabilities for all of the constructs are higher than the required 0.70 (Nunnally, 1978) and 0.60 (Bagozzi & Yi, 1988) respectively. These results show that the models are internally reliable. Following Henseler, Ringle, and Sarstedt's (2015) suggestion, the Heterotrait-Monotrait (HTMT) ratios (Table 3) are all lower than 0.85 and the upper confidence bounds (97.5%) are less than one. These HTMT results indicate satisfactory discriminant validity within the data.

4.1.2. Composite measurement model evaluation

The sensory appeal construct comprises four items that assess the importance of participants' perceptions of the unfamiliar food's smell,

**Table 3**  
Fornell–Larcker criterion analysis and HTMT ratios.

	FA	CG	Int	PBC	SC	SN	TM
FA	<b>0.93</b>						
CG	0.41 (.44)	<b>0.87</b>					
IN	0.68 (.71)	0.49 (.53)	<b>0.97</b>				
PBC	0.47 (.51)	0.53 (.60)	0.63 (.68)	<b>0.90</b>			
SC	0.08 (.09)	0.36 (.44)	0.26 (.31)	0.24 (.30)	<b>0.89</b>		
SN	0.33 (.35)	0.35 (.41)	0.47 (.51)	0.54 (.61)	0.40 (.53)	<b>0.84</b>	
TM	0.47 (.50)	0.73 (.80)	0.61 (.65)	0.47 (.52)	0.43 (.53)	0.37 (.41)	<b>0.90</b>

Note: HTMT ratios are in the parentheses. The diagonal elements (in bold) are the square roots of the variance between the constructs and their measures (AVE).

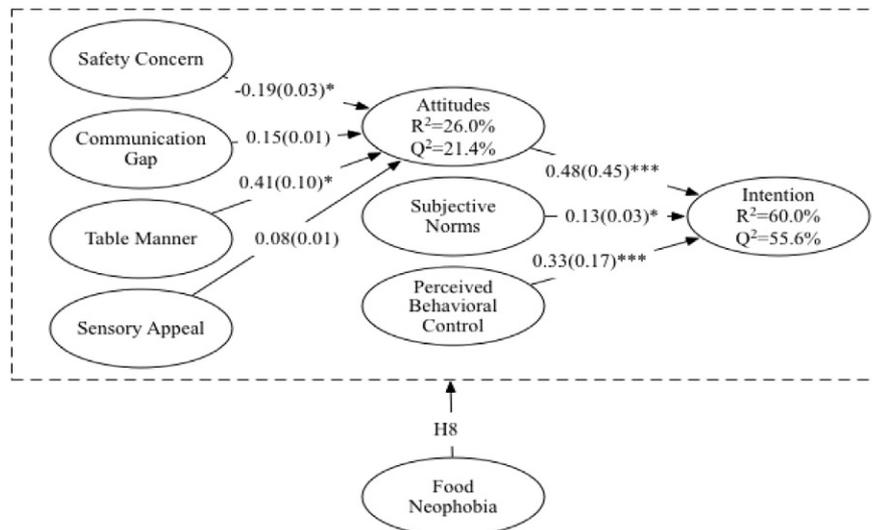
texture, taste, and appearance. The results indicate that the outer loading and outer weight of the appeal of unfamiliar food are not statistically significant. Hair et al. (2013) suggest that deleting such an indicator in a formative measurement model increases the construct validity but also hurts the content validity. Further, Henseler et al. (2016) confirm that deleting sensory appeal from a composite model changes the meaning of the construct, because the composite variables are all part of the construct. Hence, the study keeps the construct of the sensory appeal as is. In terms of the formative measurement, this study relies on the variance inflation factors (VIFs) to identify the multicollinearity in the indicators of the food's sensory appeal. The VIFs range from 1.58 to 2.37, which indicates a lack of concern for potential multicollinearity (Hair et al., 2013).

4.2. Inner model results

Fig. 2 shows the results of the SEM analysis by using the training sample. The Standardized Root Mean Square Residual (SRMR) of the model is 0.06 that indicates a good fit for the model. The evaluations of the structural model examine the  $R^2$  estimates, Stone-Geisser's  $Q^2$  value, standardized path coefficients ( $\beta$ ), and  $p$ -values. The proposed four beliefs predict a 26% ( $R^2$ ) variance in the food attitude that indicates a weak prediction; and the model predicts a 60% ( $R^2$ ) variance in the intention to consume that indicates a moderate prediction (Hair et al., 2013). Both of the  $R^2$ s are larger than the cutoff value of 0.10 (Falk & Miller, 1992). In addition,

**Table 2**  
Reliability and validity test for the complete data.

Constructs	Indicators	Outer loadings	$\alpha$	CR	AVE
Food attitude	FA_1. Unenjoyable vs. Enjoyable	0.95	0.96	0.97	0.86
	FA_2. Foolish vs. Fun	0.94			
	FA_3. Unpleasant vs. Pleasant	0.95			
	FA_4. Unfavorable vs. Favorable	0.83			
	FA_5. Dislike vs. Like	0.95			
Intention	IN_1. I am willing to consume unfamiliar local food when traveling.	0.97	0.97	0.98	0.94
	IN_2. I want to consume unfamiliar local food if I have a chance to revisit.	0.96			
	IN_3. I expect to consume more unfamiliar local food if I have a chance to revisit.	0.97			
Perceived behavior concern	PBC_1. Whether or not I consume unfamiliar local food when traveling is completely up to me.	0.90	0.88	0.93	0.81
	PBC_2. I am confident that if I want, I can consume unfamiliar local food when traveling.	0.91			
	PBC_3. I have time, money, and information to consume unfamiliar local food when traveling.	0.88			
Subjective norm	SN_1. Most people who are important to me think I should consume unfamiliar local food when traveling.	0.69	0.79	0.87	0.70
	SN_2. The expectation is that I should consume unfamiliar local food when traveling.	0.89			
	SN_3. People whose opinions I value would prefer that I consume unfamiliar local food when traveling.	0.91			
Communication gap	CG_1. When I tried unfamiliar local food, the employees of the restaurant made helpful suggestions to me.	0.84	0.90	0.93	0.77
	CG_2. When I tried unfamiliar local food, the employees of the restaurant showed consistent courtesy.	0.89			
	CG_3. When I tried unfamiliar local food, the restaurant had employees who communicated in a friendly and personal manner.	0.87			
	CG_4. When I tried unfamiliar local food, the restaurant had employees who were willing to help me.	0.90			
Table manners	TM_1. I feel comfortable using different utensils to eat unfamiliar local food when I am traveling.	0.91	0.92	0.95	0.81
	TM_2. I feel comfortable consuming unfamiliar local food in a local way when I am traveling.	0.90			
	TM_3. I accept the raw materials used for unfamiliar local food.	0.88			
	TM_4. I accept how unfamiliar local food is prepared.	0.92			
Safety concern	SC_3. I am concerned about the hygienic performance of the restaurants in general.	0.93	0.74	0.88	0.78
	SC_4. I have knowledge related to food safety.	0.85			



**Fig. 2.** SEM results of the complete data. Note: The \*\*\*, \*\*, and \* indicate  $p$ -values less than 0.001, 0.01, and 0.05 respectively. The figure presents the effect sizes ( $f^2$ ) in the parentheses next to each path coefficient ( $b$ ).

all of the dependent variables' Stone–Geisser's  $Q^2$  are larger than zero (Hair et al., 2013) and therefore further confirm the model's predictive validity. All of the proposed paths are statistically significant except for the paths from the sensory appeal to attitude ( $t = 1.05, p = 0.29$ ) and from the communication gap to attitude ( $t = 1.67, p = 0.10$ ). Overall, the analysis supports all of the hypotheses except 5 and 7.

#### 4.3. Predictive validity

To examine the predictive validity of the PLS path model, this study follows the subsequent procedures when using the holdout sample proposed by Cepeda, Henseler, Ringle, and Roldán (2016). This study first standardizes each indicator of the holdout sample and creates the construct scores for each construct by using the weights obtained from the training sample. This study then standardizes the construct scores and creates the prediction scores for each endogenous construct by using the path coefficients from the training sample. Finally, the proportion of explained variance ( $R^2$ ) requires the calculation of the squared correlation of the prediction scores and the construct scores of the endogenous constructs.

For the two endogenous constructs, the paths toward intention have a strong predictive validity because of high explained variances in both the training sample ( $R^2 = 0.60$ ) and the holdout sample ( $R^2 = 0.72$ ). The paths to predict attitudes also perform well and satisfy the explained variances in both the training sample ( $R^2 = 0.26$ ) and the holdout sample ( $R^2 = 0.12$ ).

#### 4.4. fsQCA

The research (Woodside, 2013) calls attention to the importance of testing for causal asymmetry and proposes the fuzzy-set qualitative comparative analysis (fsQCA) technique. This study therefore examines the significant paths for the outcome variables from the SEM result by using the fsQCA.

This study calculates the value for each construct by multiplying the construct's item scores to convert the raw data into a fuzzy-set scale. Next, the study assigns each construct a new score following the thresholds in Krishen, Agarwal, Kachroo, and Raschke (2016): a score of 0.05 (full non-membership) where the multiplicative product score is 8% of the distribution of the product scores; a score of 0.5 (intermediate membership) at the median product point; and a score of 0.95 (full membership) where the multiplicative product score is 92% of the total product scores. Table 4 displays the details of the calibration values

for all of the constructs. The fsQCA 2.0 software codes all of the constructs into a fuzzy scale. Table 5 shows the fsQCA results for predicting intention.

Woodside (2013) states that a model is informative when the consistency is above 0.74. Hence, the overall solutions in the sample are informative. These sufficient conditions explain more than 90% of the empirical evidence because of their very high value in consistency (Woodside, 2014). Regarding the necessary conditions, none of the constructs is a necessary condition of intention (results are available on request). The fsQCA results show that all of the significant constructs from the SEM results are sufficient but not necessary conditions for intention.

#### 4.5. Multi-group analysis results

This study uses a permutation test for a multi-group analysis (MGA) to detect the potential differences between Chinese tourists with a high level of food neophobia and those with a low level (H8). A permutation approach does not have distributional assumptions as a  $t$ -test does (e.g., normal population distribution), but the approach requires a similar sample in both groups (Chin & Dibbern, 2010; Sarstedt, Henseler, & Ringle, 2011). This study separates the training data into three groups based on the participants' mean score for six food neophobia indicators (Preacher, Rucker, MacCallum, & Nicewander, 2005). The low food neophobia group constitutes the first 33% of the participants, and the high food neophobia group constitutes the last 33% of the participants.

The analysis follows the three steps in the MICOM test that Henseler et al. (2016) suggest in order to measure the invariance of the composites. The results support the sensory appeal's configured invariance, compositional invariance ( $p = 0.49$ ), and equal variance

**Table 4**  
Calibration values for all constructs.

Construct	Range	Full nonmembership	Median	Full membership
IN	1–343	60	216	343
FA	1–16807	1000	5880	16807
PBC	8–343	48	144	294
SN	4–343	60	210	343
CG	1–2401	144	625	2058
SC	1–49	20	36	49
TM	1–2401	192	1080	2058
CG	1–2401	144	625	2058

**Table 5**  
Findings from fsQCA intermediate solution using training sample (n = 243).

Frequency cutoff: 1; consistency cutoff: 0.850526	Raw coverage	Unique coverage	Consistency
FA* ~ SC	0.482329	0.006964	0.860314
SN*FA	0.649626	0.044158	0.890695
SN*TM	0.672148	0.077424	0.868966
FA*TM	0.676668	0.039268	0.894515
PBC*SN* ~ SC	0.392976	0.007335	0.881502

Solution coverage: 0.900645; solution consistency: 0.815183.

( $p_{\text{variance}} = 0.10$ ) but do not support the equal mean values ( $p_{\text{mean}} = 0.003$ ). Therefore, sensory appeal fulfills the partial measurement invariance (Henseler et al., 2016). Further, after examining the AVE, CR, and indicator loadings of the common factors in the model, the results support the partial measurement invariance in the intention and the full measurement invariance in the food safety concern, communication gap, table manners, perceived behavioral control, and subjective norm (Ringle, Sarstedt, & Zimmermann, 2011; Hair, Black, Barbin, & Anderson, 2010). But the data do not support the measurement invariance in food attitude except in one measurement item. However, this study keeps the previous measurement of the attitude to food because the multi-group analysis results do not differ.

Table 6 shows that all of the constructs show satisfactory reliability and validity (all CRs are higher than 0.7 and all AVEs are higher than 0.6). The results of the permutation test show that the paths from the sensory appeal to attitude, from the perceived behavior control to intention, and from subjective norm to intention are all statistically different between the groups (Table 7), which partially supports hypothesis 8.

**5. Contributions and limitations**

*5.1. Contributions*

Methodologically, this research elaborates on the use of the PLS-SEM method to evaluate a predictive-based model with both reflective and formative measurements, to conduct a multigroup analysis with a test to measure invariance, to perform a predictive validity test, and to operate an fsQCA.

Theoretically, this study confirms that the TPB is suitable to predict individuals' behavior in the context of tourists' food consumption (Ajzen, 1991). Although the literature suggests that food's sensory appeal is a predictive factor of consumption (Namkung & Jang, 2008), this study finds an insignificant result. An explanation for this result might be that foods with different sensory appeals do not alter tourists' attitudes because tourists already assume the food is essentially different. Hence, sacrificing the authenticity of local foods for Chinese tourists is not necessary (Ebster & Guist, 2005; Jang, Ha, & Park, 2012). This study also extends the previous understanding of table manners, food

**Table 6**  
Reliability and validity results for different food neophobia groups.

Constructs	Low food neophobia (n = 75)			High food neophobia (n = 82)		
	$\alpha$	CR	AVE	$\alpha$	CR	AVE
FA	0.91	0.93	0.73	0.96	0.97	0.85
IN	0.92	0.95	0.87	0.96	0.98	0.93
PBC	0.89	0.93	0.81	0.82	0.89	0.74
SN	0.66	0.81	0.60	0.83	0.87	0.70
CG	0.87	0.91	0.71	0.92	0.94	0.80
TM	0.91	0.94	0.80	0.92	0.94	0.80
SC	0.53	0.72	0.60	0.90	0.94	0.90

**Table 7**  
MGA results.

	$\beta_{\text{low}}$	$\beta_{\text{high}}$	Permutation p-value
SA → FA	0.19	−0.30	<b>0.04</b>
SC → FA	0.01	−0.36*	0.11
CG → FA	0.20	0.01	0.38
TB → FA	0.26	0.41*	0.50
FA → IN	0.41**	0.53***	0.36
PBC → IN	0.01	0.35***	<b>0.01</b>
SN → IN	0.37*	0.09	<b>0.02</b>

Note: p-Values that are bold indicate a significant difference on this path relation.  $\beta_{\text{low}}$  represents the path coefficients in the low food neophobia group.  $\beta_{\text{high}}$  represents the path coefficients in the high food neophobia group. The \*\*\*, \*\*, and \* indicate p-values less than 0.001, 0.01, and 0.05 respectively.

safety concerns, and the communication gap (Cohen & Avieli, 2004) that influence tourists' attitudes toward food consumption. This study finds that communication does not affect attitudes. This result might be because employees' advice and help could affect the customers' perceptions of service quality but not of the food quality. In addition, higher concern about food safety and differences in table manners lead to negative attitudes toward consuming unfamiliar local food in travel destinations, which confirms Cohen and Avieli's (2004) observations.

This study finds that tourists with high and low food neophobia show different psychological reactions and behavior patterns. Specifically, the perceived behavioral control has a significantly stronger effect on tourists who are more food neophobic, whereas the subjective norm has a significantly powerful influence on tourists who are less food neophobic. Hence, this study solves the conflict in the research by supporting the argument (Kim et al., 2009) that food neophobia plays a moderating role in tourists' food-related decisions.

This study suggests several strategies that local restaurateurs should consider to attract more Chinese tourists. Local restaurateurs need to ensure that they keep the authentic preparation of their food, because Chinese-style American food might actually push Chinese customers away. Restaurants should also ensure the safety of the food. Providing a safe and hygienic environment is crucial. Further, restaurateurs should train their employees to be aware of the appropriate table manners in the Chinese culture and try to cater to them if at all possible.

The findings in this study might also apply to other business sectors. Retailers in the United States purposely promote their businesses to lucrative Chinese customers nowadays. The safety concerns that this study discloses might communicate to retailers to focus more on the quality of their products. The insignificance of the food's sensory appeal might indicate to manufacturers that although the designs of their products are different from what Chinese customers are used to, these customers might still be very willing to purchase these products. Hence, sacrificing authenticity in order to cater to Chinese tourists is not an ideal marketing strategy.

*5.2. Limitations*

This study also contains several limitations. First, this study does not completely control the potential common method bias, because the study does not collect a marker variable. Hence, future research could also apply other statistical remedies (Podsakoff et al., 2003). Second, although Rossiter (2002) states that the validity of formative constructs should use theoretical rationales, Henseler, Ringle, and Sinkovics (2009) propose statistical analyses that examine nomological validity and external validity for formative constructs by having an instrument that measures at both the construct and item levels. However, this study does not have an item for the construct level of sensory appeal (the only formative measurement), and thus the study does not implement this technique to check the validity of the formative construct beyond

the theoretical rationale. Hence, future research could determine the validity of the sensory appeal by adding measurement items at the construct level.

Further, the participants' past experiences are the basis for the survey. Therefore, ensuring that the information they recall is reflective of their actual experience is difficult. Future research could survey Chinese tourists while they are actually visiting the United States or on their immediate return. Further, perceptions of unfamiliar local food can vary for each tourist based on his or her previous exposure to different local foods. For example, the most frequently mentioned unfamiliar local cuisines are Mexican, Italian, and French. However, this study does not distinguish between different kinds of local foods. Therefore, future research could test similar models by using different local foods. Finally, the data in this study is from a nonrandomized convenience sample that limits the ability to generalize the findings to represent a large population of Chinese tourists.

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