Kim YG, Eves A, Scarles C (2012) Empirical verification of a conceptual model of local food consumption at a tourist destination. *International Journal of Hospitality Management* Available on-line

1. Introduction

Despite the importance of food consumption in the context of the hospitality and tourism, relatively little attention has been given to examining local food consumption in this research area (Cohen and Avieli, 2004; Kim, Eves, and Scarles, 2009). In recent years, however, a few studies have addressed food consumption and described local food experiences in hospitality and tourism environments; from general arguments about tourist dining behaviour and tourist food consumption at a tourist destination (e.g., Chang, Kivela, and Mak, 2010, 2011; Quan and Wang, 2004; Mak, Lumbers, and Eves, 2012) to tourists' desire for experiencing local food and beverages on their trips and holidays (e.g., Cohen and Avieli, 2004; Kim, Eves, and Scarles, 2009; Torres, 2002).

More specifically, Kim et al. (2009) explored local food experiences and developed a conceptual model of local food consumption at a tourist destination using grounded theory, based on in-depth interviews with 20 individuals. The conceptual model comprised three categories: 'motivational factors' (i.e., exciting experience, escape from routine, health concern, learning knowledge, authentic experience, togetherness, prestige, sensory appeal, and physical environment); 'demographic factors' (i.e., gender, age, and education); and 'physiological factors' (i.e., food neophilia and food neophobia). This research gave tentative explanation of the factors affecting local food and beverage consumption by tourists, developed through investigation of participants' local food experiences and a synthesis of existing literature on tourism and food.

However, as mentioned in their article (2009), the model developed by grounded theory should be modifiable as new information emerges from literature or further research; that is; this study only showed an initial understanding of what tourists think about local food and beverages. Also, the authors noted the necessity for an empirical study to confirm these initial ideas and to establish the ability to generalise their results.

Based on the above arguments, this study empirically verifies the conceptual model of local food consumption at a tourist destination proposed by Kim et al. (2009). More specifically, this study formulated research objectives: i) to quantitatively investigate factors influencing consumption of local food in a tourist destination; and ii) to examine the relationship among the key factors found in the model.

2. Description of the respective tourism destinations

The current study used convenience sampling and a personally distributed questionnaire. The population was set as British tourists who had tasted local food during their holiday. The survey was conducted in South Korea, Spain, and the U.K between the beginning of April and the end of July, 2009. These are because this study intended to consider food-related personality traits and to examine the difference of food experience amongst local foods regarded as unfamiliar, a little unfamiliar, and familiar to British tourists.

In the current study, the city and coast of three destinations were chosen. In South Korea, Seoul (the city) and Busan (the coast) were selected. Seoul is the capital of South Korea with over 600 years of history. It is the heart of Korea's culture, education, politics and economics. Seoul is unique in that historical sites and modern cultural

facilities co-exist in harmony, for example, museums, palaces, parks, mountains, and parks (Korea Tourism Organisation, 2011). Busan is the fifth largest port in the world and the second city in South Korea. There is a good mix of modern and traditional culture, lively markets and beaches. Busan is also famous for its seafood and beaches. Landscape of Busan includes a coastline with fine beaches, scenic islets and tall mountains. In South Korea, overall, there are many restaurants, including Korean restaurants, western style restaurants, ethnic restaurants, and fast food restaurants, and Busan is well-known for fresh fish; hence here are many seafood restaurants (Korea Tourism Organisation, 2011).

In Spain, Barcelona (the city) and Malaga (the coast) were chosen. Barcelona is the second largest city in Spain and the capital of Catalonia. This city is also one of the most popular tourist destinations in the world. Each part of Spain has different and distinctive typical dishes. Barcelona offers a variety of food experiences, including specialised local restaurants and regular restaurants, such as ethnic restaurants and fast food restaurants. In particular, Catalan cuisine and seafood dishes are famous in Barcelona. The food of Malaga is typical Mediterranean. Main food is fish, and the most consumed fish dishes are Andalusian style (Spain, 2011).

In the U.K., York (the city) and Padstow (the coast) were selected. York offers many restaurant choices, such as local bistros, chain restaurants and tearooms. Especially, a traditional English tearoom such as Bettys Cafe Tea Rooms is one of the famous foodie attractions in York, and there are regular restaurants, such as ethnic restaurants and fast food restaurants. Padstow is also well-known for offering fresh dishes with Chef Rick Stein leading local restaurants and traditional Cornish food such as pasties, cream teas, saffron buns (Visit Britain, 2011). Thus, Padstow can be regarded

as a major food attraction in the U.K. (Honkanen, 2010). However, local cafes, tearooms and local pubs are also located in Padstow.

3. Methodology

The motivational items used in the present study were extracted from the interview results of Kim et al. (2009), and related literature examining travel motivations and food choice. In the pilot survey, a valid and reliable 31-item scale was identified comprising 37 items, and consisting of seven interrelated dimensions: ‘cultural experience’; ‘excitement’; ‘sensory appeal’; ‘health concern’; ‘prestige’; ‘togetherness’; and ‘different environment’ through the pilot survey. The items measuring the dimensions were internally consistent, and the reliability was satisfactory. The responses were measured using a Likert scale ranging from 1 to 7 points for ‘strongly disagree’ to ‘strongly agree’ respectively.

The conceptual model by Kim et al. (2009) suggests that personal characteristics may influence local food consumption in a destination; therefore, this study adopted the Food Neophobia Scale (FNS) developed by Pliner and Hobden (1992) and the Food Involvement Scale (FIS) suggested by Bell and Marshall (2003). Food neophilia, one of personal characteristics suggested by Kim et al. (2009), may be linked to Food Involvement, since Bell and Marshall (2003, p.237) noted that “high food-involved individuals may be more inclined toward new food experiences, i.e., food neophilic.”

The six item FNS scale of Ritchey et al. (2003) was used, as Ritchey et al suggested that using the six items can be more valid than using the original 10 items of the FNS. These are because they suggested that removal of the item, ‘ethnic food looks

too weird to eat', as it refers to a specific sensory dimension, its appearance, and does not refer directly to food familiarity or to willingness to try a food. Item 'I will eat almost anything' was considered too general, for instance vegetarians may be very willing to try new foods, but do not eat meat. They further excluded items 'I don't trust new foods' and 'I am very particular about the foods I eat' (Ritchey et al., 2003): 1) I am constantly sampling new and different foods; 2) If I don't know what a food is, I won't try it; 3) I like foods from different cultures; 4) At dinner parties, I will try new foods; 5) I am afraid to eat things I have never had before; and 6) I like to try new ethnic restaurants.

In relation to FIS, this study modified the 12 original items to 6 revised items, considering a previous study (Kim et al., 2010) and the location of this study in hospitality and tourism, thus, statements related to disposal ('I do most or all of the clean up after eating' and 'I do not wash dishes or clean the table and preparation ('I care whether or not a table is nicely set') were deleted: 1) I don't think much about food each day; 2) Talking about what I ate or am going to eat is something I like to do; 3) Compared with other daily decisions, my food choices are not very important; 4) When I travel, one of the things I anticipate most is eating the food there; 5) When I eat out, I don't think or talk much about how the food tastes; and 6) I do most or all of my own food shopping.

The population was set as British tourists who had tasted local food during their holiday. To allow statistical analysis to be undertaken and to obtain a converged and proper solution for models with three or more indicators per factor, the general recommendation is that sample sizes between 30 and 500 are appropriate for most surveys (Cooper and Schindler, 2005). More specifically, Hensley (1999) suggested that

factor analyse for scale development may require a minimum of 150 observations. The current research follows recommended levels of the sample size 150 at minimum (Anderson and Gerbing, 1988; Hair et al., 2006). Thus, the sample is set as at least a total of 150 British tourists who had taken a holiday in case destinations.

Tourists with children and those travelling in tour groups were excluded in the main study, since their local food choice might be affected by their children or tour programs that tour agencies provided (Kang and Hsu, 2005). Therefore, the periods of the main survey were intentionally selected as being outside school holidays. Therefore, convenience sampling was used, and respondents were approached on the streets, around shopping malls and restaurants in tourist attractions and the airports in South Korea, Spain, and the U.K. Intentionally, the main study was conducted between 9th of April and 16th of May, 2009 in South Korea; between 14th of June and 29th of June in Spain; and between 10th of July and 20th of July in the U.K.

Nine hundred self-administered questionnaires were distributed (300 in each destination) and 751 (83.4%) usable questionnaires were finally obtained. More specifically, 269 (89.6%) usable questionnaires were collected in South Korea, 246 (82.0%) usable questionnaires were collected in Spain, and 236 (78.0%) usable questionnaires were gathered in the U.K. The proportion of males was slightly higher than that of females (males 50.3% and females 49.7%), and most respondents were in the 25 to 34 age group (27.3%), followed by the 35 to 44 age group (19.4%). The majority of respondents were well educated (undergraduate 36.9% and postgraduate 24.0%), and, 29.3% had family incomes between the £ 25,000 and £ 39,999.

Respondents recruited in South Korea were staying in South Korea for approximately 9 days. A large proportion (65.1%) of them had booked air travel and

accommodation with a travel retailer. British travellers in Spain were staying for on average 4 days, and a large proportion of respondents (65.4%) were independent travellers who had not booked a package with a travel retailer. Respondents visiting the U.K were staying for on average 3 days, and most people (70.8%) were independent travellers.

4. Findings

The data of the sample sets out to accomplish an exploratory factor analysis (EFA). The EFA was conducted on 31 items, and items with loadings of lower than 0.40 or of that loaded on more than one factor were eliminated (Hair et al. 2006). Also, eigenvalue and scree plot were used to determine the number of factors extracted, and the minimum eigenvalue of 1.0 criterion was used for factor extraction consideration. The results of the EFA that five dimensions were identified, explaining 67.70% of overall variances. Bartlett's test of Sphericity and KMO measure of sampling adequacy were used to assess the factorability of the data. KMO value at 0.83 exceeds the acceptable minimum value which is 0.60 (Hair et al., 2006). The Bartlett's test of Sphericity was found to be significant ($p < .00$).

{PLEASE insert Table. 1 about here}

CFA is to confirm the scale's structure found in the EFA. The covariance matrix was used as input data, and maximum likelihood method of estimation was used. In terms of the 'model fit test', other than adopting the χ^2 value as a reference based on past studies (Hair et al., 2006), a good model should also conform to the following:

goodness of fit index (GFI), adjust goodness of fit index (AGFI), normed fit index (NFI), and the comparative fit index (CFI) should be greater than 0.9; root mean square error of approximation (RMSEA) should be less than 0.1; and χ^2 relative value to degree of freedom (χ^2 / df) should not exceed 3. The CFA revealed that the fit index displayed an acceptable level of fit: $\chi^2 (d.f) = 678.35 (276)$; $\chi^2 / d.f = 2.45$, goodness-of-fit index (GFI)=0.94; adjusted goodness-of-fit index (AGFI)=0.92, normed fit index (NFI)=0.93, comparative fit index (CFI)=0.97 and root mean square error of approximation (RMSEA)=0.04. In addition, average variance extracted (AVE) was also calculated to identify the convergent validity of constructs (Hair et al., 2006). The AVE of all constructs was higher than the suggested value of 0.50 suggested by previous studies.

Discriminant validity is the degree to which the measures of different concepts are distinct (Hair et al., 2006). In order to examine discriminant validity of the measurement, mean values for the constructs were compared to correlations between the constructs and the Pearson correlation test was used to do this. The mean factor score was derived by averaging the individual items scores under each factor.

{PLEASE insert Table. 2 about here}

Responses were measured using a Likert scale ranging from 1 to 7 points for ‘strongly disagree’ to ‘strongly agree’, respectively. In this study, food neophobia (FNG) and food involvement groupings (FIG) were determined based on an overall score in each case. Overall scores, calculated from six statements, ranged from 6 to 42. Thus, respondents can be classified into groups representing low food neophobia (involvement) between 10 and 22.4, medium food neophobia (involvement) between

22.5 and 45.3, and high food neophobia (involvement) between 45.4 and 70 in this study. As a result, the respective number of subjects in each subgroup was: 41.5 %, 47.5 %, and 11.3 % in FNG; and 11.1 %, 18.6 %, and 70.3 in FIG. Thus a majority of respondents (88.5%) had a tendency of low and medium food neophobia, and a majority of 88.9 % of participants belonged to the medium FIG and high FIG.

{PLEASE insert Table. 3 about here}

{PLEASE insert Table. 4 about here}

The conceptual model of local food consumption (Kim et al., 2009) suggested relationships among factors identified (motivations, demographics, and physiological factors). This study empirically examined these relationships.

Firstly, the current study used χ^2 analysis to investigate differences between food-related personality traits (food neophobia and food involvement) and demographic variables (gender, age, education level, and annual income). In relation to FNGs, there were significant differences of gender ($\chi^2=6.64$, $P=.04$), age ($\chi^2=265.66$, $P=.00$) and income ($\chi^2=27.77$, $P=.00$). In term of gender, more male respondents than female were in the high FNG. Tuorila et al. (1998) showed high food neophobia among the elderly, and Tuorila, et al (2001) reported that older people are more neophobic than younger. This study indentified a significant difference in food neophobia between income groups: ($\chi^2=27.77$, $P=.00$). An examination of the relationship between them has rarely been reported. However, this finding showed that a large proportion of respondents earning over £25,000 was in the low or medium FNG. This result may be related to the tourism characteristic that rising income levels have driven tourism activity including

local food experiences (e.g., Douglas and Derrett, 2001; Franklin and Crang, 2001). There was no difference in the FIG with demographic variables.

{ PLEASE insert Table. 5 about here }

This study investigated relationships between demographic profile and motivations using independent samples t-test and one-way ANOVA. As a result, differences related to gender and age among motivations were identified. Gender varied in relation to ‘cultural experience’ ($t=2.09$, $P=.03$) and ‘interpersonal relationship’ ($t=-2.18$, $P=.03$). Males were more interested in ‘cultural experience’, whilst females were more concerned than males about ‘interpersonal relationship’. These findings coincide with Campbell (1994), suggesting that male tourists are interested in different or special cultures and Zhang et al. (2008), mentioning that females’ travel motivations can be affected by their family and friends. Age groups varied in regard to ‘interpersonal relationship’ ($F=5.63$, $P=.00$), and the differences between under 25 age group and 35-44 age group and between under 25 age group and over 55 age group were significant. This finding also supports the argument of Ryan and Kinder (1996) that a social relationship need is a key motivation for young people who travel. Correlation found no relationship amongst motivational factors, the FNS, and FIS.

{ PLEASE insert Table. 6 about here }

5. Discussion and conclusions

The conceptual model of local food consumption (Kim et al., 2009) suggested relationships among factors identified (motivations, demographics, and physiological factors). This study empirically examined these relationships.

{PLEASE insert Figure. 1 about here}

Firstly, the finding showed that ‘gaining knowledge’ and ‘authentic experience’ suggested as two separate motivations by Kim et al. (2009) were grouped in ‘cultural experience’ in this study. However, this is not considered to be a problem. This is because existing literature has indicated that ‘cultural experience’ at a tourist destination can include ‘gaining knowledge’ such as learning about history and understanding different countries, and ‘authentic experience’, such as exploring authentic cultures and experience of unique cultures. For example, Hjalager and Corigliano (2000) pointed out that during holidays and trips, eating a particular dish and drinking a local beverage means sharing the local food culture, and Getz (2000) stated that local food experience can include the chance to learn local wine culture, such as table manners and how to eat and drink as local people do.

This study identified ‘interpersonal relationship’, which was created by combining the nominated factors, ‘togetherness’ and ‘prestige’ suggested by the work of Kim et al. (2009). Previous studies have indicated that ‘interpersonal relationship’ can be regarded as a desire to spend time with family and/or friends as well as a need to meet new people from beyond the normal circle of acquaintance. According to Ignatov and Smith (2006), spending time with family and friends is a crucial motivation when

choosing food attractions, and Mennell et al. (1992) suggested that eating together builds personal relationships, develops functional relationships between individuals, and maintains desired forms of social integration.

In this study, 'excitement' was established as a combination of 'exciting and thrilling' and 'escape from routine', separately proposed by Kim et al. (2009). This result, showing two motivations in the same dimension can be supported by Mayo and Jarvis (1981), who suggested that the two concepts ('exciting' and 'escape from routine') can be widely seen as a similar psychological outcome. Also, Iso-Ahola (1982) thus suggested that tourist motivations are influenced by both a process of escaping personal and/or interpersonal environments and seeking personal and/or interpersonal rewards. In other words, tourists do not just have an escape attitude towards taking a holiday, they also seek new experiences.

Therefore, in comparison to the proposed model built by Kim et al. (2009), motivational factors were reduced from nine to five, with the final instrument comprising 24 items: that is, 'cultural experience' included 'gaining knowledge' and 'authentic experience', and 'interpersonal relationship' pertained to 'togetherness' and 'prestige', and 'excitement' contained 'exciting experience' and 'escape from routine'. However, 'physical environment' was removed in this study. The five motivations reflected not only the findings of qualitative study (Kim et al., 2009) and this quantitative research but also prior studies on tourism and food research. These motivational factors were developed through investigation of tourists' local food experiences and a synthesis of existing literature on travel motivation (e.g., Getz, 2000; Hjalager and Corigliano, 2000; Iso-Ahola, 1982) and food choice motives (e.g., Ignatov

and Smith. 2006; Lindeman and Vaananen, 2000; Mennell et al., 1992; Pliner and Hobden, 1992).

In relation to food-related personality traits, food neophobia and food involvement were still recognised to be critical features. The current study found that a majority of tourists, who had eaten local food on their holiday, were highly-involved in food. Therefore, this model can sustain the argument of Cohen and Avieli (2004) which indicated that food-related personality traits are considered as a key element, since eating involves actual bodily involvement with the intake of food and beverages.

Considering demographic factors, when they are compared with the proposed model (Kim et al., 2009), gender and age remained as important variables, affecting local food consumption. Annual income was also added as a key component through the findings of this study. This coincides with the work of Steptoe et al. (1995) that pointed out that food choice motives can be associated with demographic characteristics, such as gender, age and socio-economic factors including income.

The relationship amongst key themes was not measured in the model proposed by Kim et al. (2009), however, this study empirically identified relationships amongst them. This model showed that demographic variables (gender, age, and income) are related to some motivational factors. Males were more interested in ‘cultural experience’, and females were more concerned than males about ‘interpersonal relationship’. Age groups varied in regard to ‘interpersonal relationship’. This research showed significant differences in the FNG associated with gender, age and income; however, there was no difference in overall the FIG with demographic variables. There was no relationship between motivational factors and food-related personality traits.

This study provides useful information for marketers of tourism management. The findings suggest that the food-related personality traits can be an influential factor. The results from this study may be helpful for the continued development of local food and beverages as a tourist attraction. It is important for marketers to target tourists who are likely to try local cuisine, and this concern should be considered when organising food-related events and festivals, because food neophilic and high food-involved tourists can be loyal and be likely to become repeat visitors.

For tourism marketers, an application of the measurement scale can also offer them with detailed information on the marketing strategies for local food in tourism. For example, with regard to ‘sensory appeal’, marketers should understand that consumption of local food can enrich tourist experiences by reinforcing a sense of unique regional identity and place. Hence, they should encourage cooks and chefs to develop the kitchen skills to produce better taste, smells and appearance of local foods. Also, ‘excitement’ is regarded as a key motivation. Thus, marketers could promote local food experiences as an opportunity to have some leisure, escape from their routine, and feel refreshed by the food experience. Additionally, offering fresh locally grown foods which have not travelled great distances may satisfy the ‘health concern’ of the tourists. From this point of view, marketers should promote the consumption of local food and beverages and locally grown products.

The limitation of this study is its generalisability. Thus, further research with samples from other populations and replications, would allow the conclusions to be validated in other cultural groups and give evidence of generalisability. That is, further testing of the model developed in this study is needed in order to examine if this model is applicable to local food in the context of the hospitality and tourism in other regions

and sample. This effort will overcome the weak points of each method and obtains more accurate findings.