International tourists’ perception of ethnic food at well-defined restaurants in Yogyakarta, Indonesia

Background

Indonesia has the extensive ethnic diversity that exists in the country, and it does reflect the multi-cultural inflection of Indonesian cuisines. Asian foods including Indonesian foods, begin to attract more attention (Porjes, 2005 cited in Choi, Lee, Cho, 2011). Morrison (2011) believes that one of the tourists’ trends that drive business opportunities to Indonesia is gastronomy tourism. In Indonesia, with regards to the food, tourists play vital role to the food industry, as they look for distinct local dishes from different parts of the country (Agriculture & Agri-Food Canada, 2010). Domestic and international tourists’ food spending reached 22-24% from their total expenditure. Indonesia is rich of blended flavors of cuisines, as the cooking varies by region and combines many different influences from India, China, Africa, Arab, and European explorers and colonists (Diner’s digest, 1997). Indonesian ethnic food flavors are strongly tied with that of Southeast Asian neighbors. Each ethnic group in Indonesia has its own cuisine characteristics. Javanese is the largest ethnic of Indonesia, who lives in Java, the most densely population island. It covers three major ethnic groups, namely West Java, Central Java, and East Java. In Yogyakarta, Central Java, where the study was conducted, is renowned for its sweetness for almost all meals, beverages, and snacks (Wikipedia, 2011). Most Indonesian perceived that most of the Central Javanese cuisine tastes rather sweet and less spicy than other Indonesian cuisines as it usage much amount of palm sugar and sweet soy sauce.

Yogyakarta is one of the topmost favorite destinations in Indonesia as it well-known as a centre of classical Javanese fine art and culture (Timothy, 1999). The kingdom (Sultanese) of
Yogyakarta played crucial role on the heritage of ethnic foods of the city. The ethnic restaurants in Yogyakarta offer some of the Sultan’s favorite foods, which are Gudeg, Paru Goreng, Ayam Goreng, Ayam Betutu, Bakpia, and Abon (Moerjijo, 1993). There are 504 restaurants and dining houses throughout the city (Dinas Pariwisata, 2010). In 2010, trade, hotel and restaurant sectors have a significant contribution of 20.8% to the regional income, an increase of 0.1% from 2009 (Dinas Pariwisata Provinsi DIY, 2010). Realizing a large contribution of restaurant industry to the regional income, the restaurants itself should have the attractiveness to motivate tourists to visit them. The city might have a chance in offering its ethnic food to promote the destination competitiveness. However, there is no study concerning Indonesian ethnic food potential in tourism industry yet. Therefore, having a better understanding on destination’s food perception and acceptance will become an important step to explore the ethnic food potential and promote gastronomy tourism in Yogyakarta.

The objectives of the research are to examine the international tourists’ perception on Indonesian ethnic food, define the international tourists’ acceptance on Indonesian ethnic food, investigate the difference of tourists’ perception and acceptance among personal information variables on Indonesian ethnic food, and examine the correlation between ethnic food perception and acceptance.

**Ethnic food perception and acceptance**

Food is an important part of the holiday, and accordingly, restaurants visit tends to be a peak experience to the tourists (Blichfeldt, Chor, Ballegaard, 2010). Hall, Sharple, Mitchell, Macionis, & Cambourne (2003), argue that because food is integral to the tourist experience, it has become an important element in the marketing of tourism and in determining visitor satisfaction. Exploring food is important in destination and tourism (Long, 2003 cited in Ryu &
Jang, 2006). Clark & Chabrel, 2007; Kneafsey et al., 2004 cited in Sims (2009) state that consumption of local foods will connect tourist more deeply with the people and the places. Therefore, experiencing the ethnic food and its culture is considered as a way to meet this necessity. Research on tourism and gastronomy/culinary is concerned with meetings between cultures (Hjalager, 2004). Ethnic food offers opportunity to explore the culture through taste, food preparation and the whole eating environment.

Experiencing ethnic food can be categorized as one of gastronomy tourism activity (Green & Dougherty, 2009). Gastronomy tourism refers as travelling for the aim to explore and experience the destination’s food and beverage (Wolf, 2002 cited in Kivela & Crotts, 2005). This type of tourists is a meaningful and might become a highly loyal market segment (Kivela & Crotts, 2005). Still in this work, it is found that gastronomy experience can be a powerful tool for promoting the destination. Promoting ethnic food is as same as promoting the destination. According to Hjalager and Richards (2002) cited in Kim et al (2010), gastronomy tourism is promoted to publicize the destinations’ identity and culture, and generate opportunities for local food producers by adding the value and creating a special experience for tourists afterwards.

Perception on food comprises on food products, situation and people as a whole food serving environment (Hansen, 2005). Food perception occurs during food consumption, when the brain receives variety of input (visual, gustatory, tactile, or trigeminal) and the information from physiologically distinct sensory modes is integrated (Prescott, 2004; Small & Prescott, 2005 in the work of Costel et al., 2010). Still in this work, it is stated that consumers response on food is not only based on sensory characteristic of products but also their past experience, attitudes, and beliefs (Aaron et al., 1994; Cardello, 1994; Zandstra et al., 2001; Schifferstein, 2001; Barrios & Costell, 2004; Wilcock et al., 2004). Furthermore, perception will drive
consumer acceptance (Brennan & Kuri, 2002; Clark, 1998). Font (2009) emphasizes that perception is an essential determinant of consumer acceptance, and whether perception moves along with acceptance. Acceptance methods measure the degree to which a product is liked or disliked in the interval or ratio data (Hein, Jaeger, Carr, & Delahunty, 2008). Clark (1998) argues that consumer acceptance is indicated by liking state of the eaten food which contributes to food choice decision, while Lusk & Coble (2005) and Ywason & Kuzma (2010) argue that acceptance is also measured by the willingness to buy and consume. For the purpose of the study, the perception and acceptance of ethnic food attributes comprise of appearance, sensory characteristics, variety of menu items, value for money, health-related, and traditional characteristics.

**Methodology**

A quantitative approach and descriptive study was undertaken to describe the characteristics of the variables in a situation. Therefore, frequency, mean, and standard deviations were employed as well as t-test and ANOVA. The items of questionnaire were measured using ordinal, nominal, and interval scale of 7-likert scale questionnaires. Furthermore, a correlational study was employed to examine the relationship between ethnic food perception and acceptance. A simple random sampling of 400 respondents was employed. The respondents were the international tourists who dined in any of the included well-defined ethnic restaurants. Personal information data namely gender, age, income per month, nationality, Indonesian ethnic food experience, and travel abroad experience were included in the questionnaire to investigate deeper founding from personal information point of view.
Data analysis

Data gained from the questionnaires were analyzed in three sections. Firstly, data used descriptive statistics to explain the importance of each factor analysis in the perception. A frequency and mean analysis were presented in this section. The mean value of 6 ethnic food attributes represent which ethnic food attributes get high or low value. High mean value of the ethnic food attributes represents positive perception and acceptance, while low mean value of ethnic food attributes represents negative perception and acceptance.

Secondly, independent samples t-test was performed to determine if significant mean score differences exist between gender and nationality toward ethnic food perception, while F-test of ANOVA was done to find out the significant mean score differences that might exist amongst age, income level, ethnic food experience, and travel experience toward ethnic food perception.

Thirdly, same treatments were employed for ethnic food acceptance. Lastly, correlation analysis using Pearson correlation was conducted in order to investigate the strength of the relationship between perception and acceptance. Generally speaking, in order to answer the research questions, the hypothesis and the statistical analysis techniques used can be described as follows.

Results

International tourists were strongly agreed on Indonesian ethnic food attributes as follows: traditional characteristics, value for money, appearance, and variety of choice. Even though sensory characteristics attribute achieved high mean value, there are two mean values however, which are perceived low: “the ethnic food is spicy” (5.19), “the ethnic food has the right temperature when served” (5.15). While three of five items in the healthiness attribute
were perceived low as well. They are “the ethnic food uses high quality ingredients (i.e. grade A meat)” (5.12), “the ethnic food is not oily” (4.97), and “the ethnic food is light (i.e. low fat, low calorie, sugar free)” (4.65).

The top highest mean for the ethnic perceptions are: “the ethnic food represents the culture” (6.10), “the price of the ethnic food is reasonable” (6.04), “the ethnic food has a good taste” (5.99), “the ethnic food gives an enjoyable feeling” (5.89), and “the ethnic food smells good” (5.80).

This finding was slightly similar with previous research done by Sukalakamala & Boyce (2007) which found taste or flavor as the most important component in diners’ perception on high quality ethnic restaurant. Diners seek for high quality ethnic restaurant as they believe in the usage of authentic ingredients in the cuisine. Taste, appearance and smell are considered to be the most important factors in judging the food attributes. However, texture contributes the strong effects on food perception and liking (Murphy, 1985; Moskowitz & Krieger, 1995; Daillant-Spinnler et al., 1996; Jaeger et al., 1998 cited in Kalviainen, 2002). The food price of each meal in the well-defined ethnic restaurants in Yogyakarta, Indonesia is about US $6.5-8.7, which might be the reason of why international diners perceive the ethnic food was value for money.

In the case of healthiness, the main issues are ethnic food oiliness and lightness. As Karen et al. (2002) argue that healthiness is one fundamental purchase motives, as important as taste. Healthiness element of the food became the most crucial consideration especially for specific food (Karen et al., 2002) such as ethnic food. Taste quality, freshness, and healthiness have been considered as important factors in evaluating ethnic food (Yurtseven & Kaya, 2011; Schutz and Wahl, 1981; Moskowitz and Krieger, 1995 cited in Kalviainen, 2002). Health concept
involves two main elements: eating healthily, which relates to nutritional aspects, and avoiding unhealthy foods, which relates to food safety. Cooking demonstration and food ingredients information on the menu instead of only food name might enhance the confidence of international tourists to try new food and evaluate the healthiness attribute.

However, the other two items of healthiness attribute are considered to be relatively high. The study taken in the well-defined ethnic restaurants, which serve high level of product, service, and atmosphere; hence diners might use these visible cues to determine the food healthiness. Consumers use some cues to judge the food healthiness (Karen et al., 2002). As Robson (1999), Berry, Wall, & Carbone (2006), Hansen (2005) and Bell, Meselmen, Pierson, & Reeve, 1994 as cited in King et al. (2007) also argue that the ambience of a restaurant will produce a positive guest experience. This might help explain the relatively high mean values in the healthiness attribute.

Traditional characteristics attribute is perceived and accepted similarly in all categories of personal information variable except nationality category. While for the other variables, diners perceive and accept them differently. However, gender variable is the only variable that perceives and accepts all attributes in the same way. This finding contradicts with the research done by Urala (2006) which argue that female has greater health concern, more familiar with health-related food products. However, Verbeke & Lopez (2005) found that socio demographic variables such as age, gender, and education have no effect on food perception and acceptance.

Age, income, culture (which reflects on nationality), and previous experience indeed play role in determining the difference of perception and acceptance. Age does affect food preferences and health concern (Tuorila, 1996). In terms of healthiness, as can be seen, older age
category came with the higher mean. Food healthiness is about safety and risk-related issues. In terms of new food such as ethnic food, older ages prefer of having less food risk when trying new food. These baby boomers, the persons who are now at the age 40 and above, have different attitude with Gen X and Y who are more adventurous to dine new and different cuisine (Hensley, 2000; Amour, 2005 cited in Reynolds & Hwang, 2006). Older people tend to avoid the risk of cancer food type and lowering cholesterol level, while the younger concern on increases energy level and emphasize on taste, quality, and price (Urala, 2006).

Income categories show different ethnic food perception and acceptance. This is because higher economic class is usually related to a greater degree of education, more open to try different food experience (Szczesniak, 1990 as cited in Kalvianen, 2002), and able to perceive more food appearance, variety of choice, sensory and texture (Szczesniak & Khan, 1971 as cited in Kalvianen, 2002). While Lowenberg et al. (1979) cited in Verbeke & Lopez (2005) argue, low education and income had more reluctant to try new and different food. Lower income also have low health food priority; while those with higher income mostly concerns on higher food quality diet and demands on health food (Conteto, 2011).

Asian and Non-Asian tourists also have the different perception and acceptance on appearance, sensory characteristics, and value for money attributes. Different nationality relates to different culture, which in turn affect food familiarity (Verbeke & Lopez, 2005). Interestingly, the research finding shows lower mean of Non-Asian diners in terms of healthiness comparing to those of Asian diners. This result opposes the findings of i.e. Lappalainen et al. (1997), Bech-Larsen & Grunert (2003), Childs & Poryzees (1998) as cited in Urala (2006) that argue Non-Asian diner (Europeans and Americans) do concern in health-related issues and specific health effects. However, as the research settings took place in some well-defined ethnic restaurants,
which offer full service and good decoration and ambience as well as high price, therefore most diners relate food healthiness with those restaurants’ environment. The food safety indicators in the ethnic restaurant are e.g. food cleanliness, quality, and appearance. They further argue that Non-Asian diners, especially Americans, seek for high quality ethnic restaurants to ensure food safety and avoid food risk.

In regards to Indonesian ethnic food experience and travel abroad experience, the results can relate to the genetic factor, which might take account for individual differences in sensory perception and acceptance (Drewnowski & Rock, 1995 cited in Cox, 2007). Therefore, it might affect the evaluation on variety of choice and healthiness attributes as Indonesian foods offer mixture of meat, fish, and vegetables. Various vegetables had in the food are considered healthy, especially for Non-Asian diners who cannot found such vegetables in their home country. As Contento (2011) argues, culture plays determinant role in the food evaluation, therefore it might explain why the first travelers, who are considered the ‘first-time’ experience to new culture of Indonesia, found different ethnic food experience. However, more frequent travelers’ perception declines as the familiarity of new culture rises.

The result also shows how perception relates to acceptance. The result confirms that the correlation between Indonesian ethnic food perception and acceptance is interdependently strong and positive. This finding is consistent with previous researches i.e. Grunert (2010), Brennan & Kuri, (2002) and Clark (1998). Perception will drive consumer acceptance (Brennan & Kuri, 2002; Clark, 1998). Furthermore, Font (2009) emphasizes that perception is an essential determinant of consumer acceptance, and whether perception moves along with acceptance. In this study, the ethnic food attributes that got high value of perceptions were experiencing the
same case in the acceptance. In other words, the attribute such as healthiness which got lower value of perception also obtained lower value of acceptance.

**Conclusion**

The findings show that the Indonesian ethnic food is perceived and accepted positively in terms of its traditional characteristics, value for money, appearance, variety of choice, and sensory characteristics. Therefore, the ethnic food of Yogyakarta might be considered as a potential factor to attract tourist arrival. However, healthiness attribute is the main issue in ethnic food perception and acceptance. Thus, healthiness attribute should get the important attention to improve and develop the image of Indonesian ethnic food in order to support the Indonesian tourism campaign.

There are some suggestions which business practitioner especially ethnic food providers and also regional government should consider on how to deliver the desired ethnic food to the international tourists. Massive marketing campaign in international level which points out the most accepted ethnic food attributes might be one way to enhance the Indonesian ethnic food familiarity and buying motivation. Again, as healthiness attribute became an important issue, some effort to improve ethnic food healthiness and safety should not be ignored. Further, to achieve the better ethnic food perception and acceptance, the personal information characteristics differences must be taken into account as well.

**Research contribution**

The research provides the examination of the international tourists’ perception and acceptance on ethnic food in Indonesia. Since there has been no study like this present study ever conducted before in Yogyakarta, Indonesia, the researcher expects the findings to be beneficial
in providing a deeper understanding about ethnic food attributes on tourists’ perception and acceptance, and about the difference of personal information variables towards perception and acceptance on ethnic food in Yogyakarta. It is expected that the study can be used as empirical contribution as well as a comparison with previous ethnic food researches from neighboring countries.

The significances of the study are expected to be in two ways. For business practitioners, there are at least two benefits that can be obtained from the study. Firstly, it supports the local economy, as the increased consumption of ethnic food will empower local producers such as farmers to boost the sustainability of traditional farming and society, which in turn promote the regional economic development as well. Secondly, it provides a new sight on tourism practitioners, especially ethnic food providers in Yogyakarta, about how to maintain and improve the ethnic food quality in the restaurants. As ethnic décor of food environment increases acceptability, thus the ethnic restaurants should enhance the service circumstances in desirable condition. Healthiness related issues should be also taken into consideration as it might be an obstacle of international tourists to dine Indonesian ethnic food. Thus, nutritional information as well as food ingredients information should be declared on the food menu to increase the willingness to consume and accept the ethnic food.

For government party, the research is expected to be able to show the evidence of the destination’s potential. Therefore there are two suggestions which might be taken into account. Firstly, the government should take into consideration on how to promote and expand Indonesian ethnic food familiarity throughout the world. Secondly, the government needs to differentiate Yogyakarta’s image as the food destination, such as support gastronomy tourism activities in the
country, which in turn might be potential to sustain the future of tourism promotion strategy in Yogyakarta, Indonesia.

**Limitations and recommendations of the study**

The research has some limitations, which are: was only conducted in regional basis, which is only in Yogyakarta instead of the whole country, was conducted in the cross-sectional data collection method rather than longitudinal method, and was conducted in the quantitative method, which only provides information based on the data rather than qualitative method which can describe and investigate the information in a deeper way.

The future studies might investigate the other attributes which are linked to the ethnic food attributes, such as service and atmosphere of the ethnic restaurants. Moreover, the qualitative method can also be applied to help understand the results of the quantitative study. Along with the growing number of tourists who care about local food, this qualitative method might be beneficial to give a better insight. Longitudinal study instead of cross-sectional study and more nationally-based rather than regionally-based might be better to be conducted in the future research. In this way, the larger sample size and deeper investigation can be obtained. Furthermore, more details in terms of nationality differentiation rather than Asian and Non-Asian nationality need to be involved in order to provide a deeper analysis on how the nationality might affect the ethnic food perception and acceptance.

**References**


