

VISUALIZATION OF MALAY TRADITIONAL FOOD: EMOTIONAL EXPRESSION OF THE IMMIGRANTS IN MALAYSIA

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Citation: Yusoff, N., Samsuri, N., Ayob, S., & Reza, F. (2019). VISUALIZATION OF MALAY TRADITIONAL FOOD: EMOTIONAL EXPRESSION OF THE IMMIGRANTS IN MALAYSIA. *GeoJournal of Tourism and Geosites*, 26(3), 905–915. <https://doi.org/10.30892/gtg.26318-406>

Abstract: Adapting to the new home settlement has significant implications on psychological dimension. This study aims to examine the emotional expression of the immigrants towards the Malay traditional food - the cultural heritage of the ethnic majority in Malaysia, in comparison to Malaysian Malay and Malaysian non-Malay. Through the visualization approach, participants were asked to respond to a series of Malay traditional food images and self-rated their emotional expression by using the Self-assessment Manikin. Emotional expression was significantly lower in immigrants in comparison to Malaysian Malay and Malaysian non-Malay. Acculturation (tendency towards own cultural heritage) factor explained 6% of the variance of emotional expression of the immigrants. Immigrants are undergoing an emotional adaptation while settling in new home.

Key words: Traditional food, immigrant, emotional expression, valence

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INTRODUCTION

Malay Traditional Food

The Malay ancestry had brought a wide variety of traditional food to the Malay community in Malaysia such as *ketupat palas*, *lemang*, *nasi lemak* and so on. These cuisines had been given recognition by Department of National Heritage Malaysia as traditional food of Malay (Department of National Heritage, Malaysia, 2019). Traditional Malay food is often seen during Islamic festivals. Some of the Malay traditional food such as *ketupat palas* are believed to have existed as early as the 15th century. Today, traditional Malay food is served in official events besides during Islamic celebrations. Thus, these Malay traditional foods have become an Islamic and Malay identity.

The existence of Malay traditional food is closely intertwined with the development of Malay history (Milner, 2010). Malay traditional food as a symbol of Malay civilisation was found to develop rapidly in the era of the Malacca Sultanate (Alexanderll, 2006; Wolters, 1999). At that time, Malay customs (e.g. Malay traditional food and Malay language) were developed and spread widely by traders who sailed around Southeast Asia for trading. Hence, this indirectly caused Malay traditional food to be known at that time. Moreover, the introduction of the Islamic religion in the 12th century among Malay societies formed a unique Malay custom and identity of the Malay people. During that era, Malay traditional food is closely associated with Islamic teaching and life principle.

Perspective of Food in Non-Malaysian

The existence of Non-malaysian population in Malaysia may come from many sources and reasons such as tourism (short and long staying), as workers (short and long contract) and as post-graduate students. According to Hall et al. (2004), food can be one of the important motives among travellers (especially tourism) in planning their travelling to other countries. Relying upon the intensity and the extent of the influence of food as a form of motivation to undertake a journey, Hall et al. (2004) provide three forms of tourists as below:

a) Food as primary motive. In this form, tourism can be classified into three forms which are gourmet tourism, gastronomic tourism and cuisine tourism. The differences of these three kinds of tourism is depicted in Table 1.

b) Food as secondary motive. Also known as culinary tourism

c) Attention in food and food degustation is of lesser importance to other travellers

Table 1. Different Type of Tourism According to the Food as Primary Motive

Type of tourism	Characteristics
Gourmet tourism	<ul style="list-style-type: none"> • Small percentage than gastronomic and cuisine tourism • Focusing on food tasting for appreciation and this degustation is the largest of all
Gastronomic tourism	<ul style="list-style-type: none"> • Almost like gourmet • Interest in culinary products degustation is of primary importance. • Emphasizes on quality, status, and prestige • Willing to accept a wider range of gastronomic products • Involved laymen who are less demanding tourists (compared to gourmet tourism)
Cuisine tourism	<ul style="list-style-type: none"> • Focus on the production of certain agricultural products or some traditional culinary specialties. • Tasting and learning about the traditional local culinary specialties.

According to Hjalager and Richard (2002), food and culinary tourism reflects a certain kind of national cultural heritage which plays a role in capturing the attention (interest) of potential tourist to learn more about the history of a territory based on the customs and traditions in gastronomy. This type of tourism which involves both food and

culinary includes a variety of activities ranging from food tasting, to visiting restaurants with the purpose of food pleasure, cooking shows and demonstrations, to farmers markets, gastronomic festivals, food fairs or similar events. Both urban and rural tourism in terms of place of realisation, determine the possible variants of its form, whether it is towards agro-tourism, festival tourism, or even other forms. In addition, according to Matlovičová and Pompura (2013) as based on the point of view of the culinary tourism, the focus of tourist in travelling is based on several perspectives as below:

- (a) Tourist who see eating as an inevitable part of the travelling experience
- (b) Tourist who choose both destination and activities related based on food and the aim of enjoying the excepted gastronomy experience
- (c) As a means or an inevitable part of a tourist journey or as a goal of a tourist journey.

The interest towards the food heritage of certain countries, in fact, also depend on the 'brand' of the country such as the famous history of the country that attract the attention of many people to have a visit (Matlovicova & Kormaníková, 2014). Other than that, the destination image of the chosen country for travelling and possibilities of its formation indicated preference of good food as a functional (tangible) characteristic that need to be achieved (Matlovicova & Kolesarova, 2012)

Visualization, Emotion and Food

Perception towards a picture or visualization can be an indicator to determine emotional tendency. Thus, this approach of visualization technique has been used by many researchers in the field of psychology to understand perception (e.g. Peterson & Kimchi, 2013; Wagemans et al., 2012) and really depends on a person's goal and concentration (e.g., Vecera et al., 2004; Desimone & Duncan, 1995). On the surface, perception towards visualization is a person's ability to interpret a subject (or its environment), which depends on the lighting towards an object in the spectrum it is able to receive. In reality (outside the laboratory), both human and animal always go through the process of visualization or perception by which information from its surrounding is integrated for survival. This research which is based on visualization, in fact, not only involves physical eye solely, but also involves both the biological and psychological function. Therefore, it becomes a significant approach and is used especially in the field of cognitive neuroscience, psychology and linguistics.

In addition, since a few decades ago, the principle of visualization which is known as a theory by Gestalt has helped many researchers to understand perception (Koffka, 1935; Kohler, 1938). This theory has contributed and solved many questions in the field of visual science and applied to the field of emotion research. In the field of emotion research, the valance element is an element that translates a person's subjective experiences which can be measured in a continuum of 'pleasure-displeasure' (Russell, 1991). Hence, valence is an element inside someone that gives feedback to positive stimulation and also negative stimulation that is triggered by various resources in shape of object or non-object. It is clear that valence is emphasized as a basic and prime component in one's emotional life (Barrett, 2006 a, b) and is thoroughly detailed in many psychology models (Rolls, 1999; Russell, 2003; Smith & Ellsworth, 1985; Scherer, 1984).

The basic theory of emotion such as Circumplex Model of Affect pointed out that valence is an emotional element that indicates linear relationship with another emotional element (i.e. arousal) in the human psychobiological system. This theory suggests that the pleasant and unpleasant feeling of an individual is basically activated by positive and negative valence in emotional systems (Posner et al., 2005). Hence, valence is high in some individuals and is lower than other individuals, depending on the focus (Barrett, 2006c). In relation to this valence, it is suggested that factors such as past experiences, similarities in perception and contextual interpretation are things that affect the subjective experience of

valence (Posner et al., 2005; Russell, 2003). Emotional effects are very influential in nutritional context (Macht & Simons, 2000). Negative emotions especially (such as depression and stress) are found to be significantly affecting food intake (Mehrabian, 1980). This is supported by several studies that investigate the impact of emotions (negative and also positive) on food intake (Lyman, 1982; Patel & Schlundt, 2001). Other findings take pressure or cognitive capacity (Lattimore & Caswell, 2004; Wallis & Hetherington, 2004; Herman & Polivy, 1984) as a factor that may affect the cognitive system associated with controlling food intake. This study is implemented to look into the influence of social phenomenon of acculturation on the emotional dimension (related to traditional food) of immigrants. It is reported that the social phenomenon of acculturation (known as “the process of cultural change that occurs when individuals from different cultural backgrounds come into prolonged, continuous, first hand contact with each other” – Redfield et al., 1936, p. 146) has indicated significant implication on the psycho-behavioural (i.e. dietary pattern) of the immigrants (e.g. Satia-Abouta et al., 2002).

Two possibilities that we can expected, as based on the previous studies. First, immigrants tend to maintain their traditional dietary. For example, the scenario that can be seen among South Asians people who migrated and were living in America. They were more likely to maintain their traditional diets than American diet (Wang et al., 2016). This was also observed among Arab people who migrated to America. They were trying as much as they could to maintain the original preparation of their traditional meal while living as an immigrant in America (Tami et al., 2012). Similarly, previous study reported that Arab Muslim mothers in Canada retained traditional food preparation even in the challenge of other contemporary food from the host country (Aljaroudi, 2019).

Secondly, immigrants prefer new home dietary than their country origin dietary. For example, people who were born in Thailand and had lived in the United States for at least 3 months, were asked on the food preference between Thai food and American food. Surprisingly, they indicated preference for the American food (Sukalakamala & Brittin, 2006). This tendency of food preference was slightly different among the Filipino American immigrants. They were observed to adapt with both cultures – their country origin dietary and American dietary as well (Dela Cruz et al., 2013).

Even though the context of traditional food and daily eating food is slightly different, the previous studies lead us to make some hypothesis justification. As described above, we tend to hypothesize that immigrants in Malaysia had a strong feeling towards their own food tradition, and thus, tend to express low emotional response when viewing Malay traditional food – the food of the ethnic majority in Malaysia. There are several important possibilities that guide us with this postulation.

First, the immigrants prefer their own cultural heritage than the cultural heritage of the new settling country. Throughout food, they were maintaining connection with their home cultural heritage (Koc & Welsh, 2017). Another reason is that, the easiness of finding ingredients in stores is a factor that lead the immigrants to be convenient to prepare their traditional food at home and have their meal with family rather than eating outside that may not suit their taste (Paxton et al., 2017).

In addition, we proposed the regression model of selected socio-demographic (age and duration of staying) and acculturation (tendency towards own cultural heritage, tendency towards new settling (Malay) cultural heritage) as factors that predict the emotional expression of the immigrants towards the Malay traditional food. This postulation was based on several studies that pointed out the significant contribution of these factors in the issue of immigrants. For example, South Asian people who migrated to America, increased in age was likely to be associated with more traditional home diets (Wang et al., 2016). This age effect was also observed among

Iraqi immigrants that settled in Malaysia in which the factors of age indicated significant effect on their physical and mental health (Aqil et al., 2011). Meanwhile, the factor of the duration of staying in the new settling country was critically reviewed in Ro (2014). In this review, the negative impact of acculturation in Asian immigrants in United States was evaluated to observe the effect of the staying duration on the health status of immigrants. Throughout this study, we are interested to examine (1) the emotional expression of the immigrants in Malaysia (in comparison to Malaysian - Malay and non-Malay ethnicities) towards the Malay traditional food by using visualisation approach and (2) Factors such as immigrant's age, duration of living in Malaysia and acculturation that predict their emotional expression towards Malay traditional food. It is to note that, we are expanding the scope of 'tourist' by including participants from two groups - new comers and those who have been living in Malaysia for a certain period of time. Thus, this paper is reporting and discussing the issue of tourist from the perspective of immigrants who are travelling to Malaysia.

MATERIALS AND METHODS

Participants

In the cross-sectional study, a total of 335 participants were sampled conveniently from the population in one local university. Female gender indicated the large proportion of the participants. Participants with uncorrected vision and indicated history of affective disorder were excluded from the study. Malaysian Chinese who were born in a mix-marriage family (Malay and Chinese, Malay and other ethnicity, Chinese and other ethnicity) were also excluded from the study. Similarly, immigrant participants who were born in a mix-marriage family (Malaysian and non-Malaysian) or married with Malaysian were also excluded from the study.

Procedure

The study protocol was approved by the Human Ethical Committee (Reference Number: USM/JEPeM17090391). The purpose of study was fully explained to the participants and written informed consent was provided upon agreement to participate in the study. All participants could withdraw from the study as participation was on a voluntary basis. Visualization approach was undertaken in which participants were asked to self-rate their emotional expression while viewing a series of Malay traditional food pictures (35 pictures) that were projected onto the screen, by using the Self-Assessment Manikin (SAM) (Bradley & Lang, 1994). The brightness and size of the pictures was adjusted and standardized. In addition, participants completed the socio-demographic questionnaire and the Vancouver Index of Acculturation (VIA) scale.

1. The Malay Traditional Food Images

The internal consistency of 35 Malay traditional food images was excellence with Cronbach's alpha of 0.90. A series of pictures consists different type of Malay traditional food such as nasi lemak, lemag, ketupat palas and so on. All images are in the public domain (uncopyrighted) that were taken from the internet. These pictures have been declared as the tangible cultural heritage of Malaysia (food category) by the National Heritage Department (2018). The content validity of the pictures as cultural heritage of Malay was determined and confirmed by three panels (two academicians and one cultural officer) who were expert in Malay cultural heritage. Experts viewed and rated the relevance of the presented images as a Malay cultural heritage based on 4-point scale (Davis, 1992) as follows – 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, and 4 = highly relevant. Content Validity Index (CVI) was used to determine the content validity of the images and calculated as follow:

Number of agreements for each picture from three experts / Number of experts

All images indicated the content validity index for individual items (I-CVI) of one - the required value for content validity as suggested by Polit & Beck (2006). None of images indicated the value of less than one. Thus, all 35 pictures were proceeded as a stimulus in this study.

2. The Self-Assessment Manikin (SAM):

The Self-Assessment Manikin (SAM) is a non-verbal single scale that quantifies three main domains of emotion - valence, arousal, and dominance (Bradley & Lang, 1994). Valence - the domain of emotion that is being focused in this study, is a single item scale that quantifies the state of valence as the intrinsic attractiveness (positive valence) or aversiveness (negative valence) of an event, object, or situation.

It ranges from high pleasantness (score of 9) to minimal pleasantness (score of 1). The SAM has been widely used as a cost- and time-effective measure of emotion (e.g. Bynion & Feldner, 2017; Geethanjali et al., 2017).

3. Vancouver Index of Acculturation (VIA)

The VIA is a 20 items scale that quantifies the magnitude of the acquisition of the new (host) cultural tendencies from the loss of old (heritage) cultural tendencies (Paulhus, 2013). Ten items (odd-numbered) are the question pertaining to the respondent's expression to their home cultural heritage. For example, "I often participate in my heritage cultural traditions". Meanwhile other 10 items (even-numbered items) are the questions related to their expression towards new settling cultural heritage. For example, "I often participate in mainstream [Malay] cultural traditions". Some change was made to suit this study. The "American" in the 10 original items of even-numbered questions was replaced with "Malay". For example, "I enjoy American entertainment (e.g. movies, music)" was replaced to "I enjoy Malay entertainment (e.g. movies, music)". The psychometric properties of VIA have been reported elsewhere (Ryder et al., 2000). In this study, the internal consistency of the scale is excellent with Cronbach's alpha of 0.89.

Statistical Analysis

Data was analyzed with the Statistical Package for the Social Sciences (SPSS) Version 23. Two analysis were undertaken - (1) the One-way analysis of variance to quantify the magnitude of the emotional expression of the immigrants (non-Malaysian), in comparison to Malaysian group (Malay and non-Malay ethnicities); (2) the regression model was proposed to observe whether the factor of acculturation (tendency towards own cultural heritage versus tendency towards new settling cultural heritage) in combination with other factors (age and duration of staying) would predict the emotional expression of the immigrants towards the cultural heritage of the new settlement (i.e. Malay traditional food).

RESULTS

The socio-demographic profile and related information of the participants is depicted in Table 2. Result of the One-way ANOVA indicated significant difference of the emotional expression between three groups - Malaysian Malay, Malaysian non-Malay and immigrants [$F(2, 332) = 6.86, p < 0.01$ (Table 3)]. Pairwise comparison from Bonferroni method indicated the significant difference (1) between Malaysian Malay and Immigrants (Mean difference=13.83, SE=4.57, $p < 0.001$), (2) between Malaysian Malay and Malaysian non-Malay (Mean difference=16.02, SE=4.85, $p < 0.01$). Meanwhile, no significant difference was observed between Malaysian non-Malay and immigrants (Mean difference=2.20, SE=4.87, $p > 0.05$). In the second analysis, the Pearson correlation was undertaken to determine the correlation between dependent variable (i.e. emotional expression of the immigrants) and independent variables (i.e. age, duration of staying in

Malaysia, acculturation score (tendency towards own cultural heritage) and acculturation (tendency towards Malay cultural heritage). Result indicated that only the acculturation score (own culture) correlated significantly with the emotional expression of immigrants ($r=0.24$, $p<0.001$) (Table 4). Next, these two variables were modelled in the regression analysis (stepwise method) with emotional expression of immigrants as dependent variable and acculturation (tendency towards own cultural heritage) as independent variable. Result indicated that the acculturation (tendency towards own cultural heritage) factor explained 6% of the variance of the immigrants' emotional expression towards Malay traditional food [$R^2= 0.06$; $F(1, 117) = 7.13$; $p<0.01$] (Table 5).

Table 2. Socio-demographic Profile and Related Information

	Malaysian Malay (N=121)	Malaysian non-Malay (N=95)	Immigrant (N=119)
Age (Mean±Standard Deviation)	23±2.70	22.39 ± 2.35	26.94±6.56
Female/Male	110/11	65/30	47/72
Emotional expression (SAM score)	230.14±39.72	214.12±30.28	216.32±34.55
Acculturation (Own culture tendency)	NA	72.05±10.96	65.44±15.94
Acculturation (Malay culture tendency)	NA	53.60±11.56	50.91±14.04
Duration of staying in Malaysia	NA	NA	5.43 ± 4.42 ¹ 36.81±24.67 ²
¹ Living in Malaysia for one year and less ² Living in Malaysia more than a year; NA=Not applicable			

Table 3. Difference of Emotional Expression in Malaysian and Immigrant

Race status	N	Mean±Standard Deviation	F	P-value
Malaysian-Malay	121	230.14±39.72	6.86	0.001
Malaysian-Non-Malay	95	214.12±30.28		
Immigrant	119	216.31±34.55		

Table 4. Correlation Between Emotional Expression of Immigrant and Other Associated Factors

Variables	Pearson correlation (r)
Emotional expression (Dependent variable)	-
Age	0.16
Duration of staying in Malaysia (month)	0.15
Acculturation (tendency towards own cultural heritage)	0.24*
Acculturation (tendency towards Malay culture heritage)	0.11
*Correlation is significant at the 0.01 level (2-tailed)	

Table 5. Regression Model of on Emotional Expression and Acculturation
(Tendency Towards Own Cultural Heritage) in Immigrant

Variable	Standardized Coefficients Beta	R ²	F	P-Value
<i>Dependent:</i> Emotional expression				
<i>Independent:</i> Acculturation (tendency towards own culture)	0.24	0.06	7.13	0.009

DISCUSSION

Two important findings are highlighted in this study. First, the emotional expressions of the immigrants towards the Malay traditional food visualization were significantly lower than Malaysian Malay, however indicated similarity with the Malaysian

non-Malay group. Second, the emotional expression of the immigrants towards the Malay traditional food visualization was predicted by the acculturation factor (their tendency towards home cultural heritage). The first finding that pointed out the preference of immigrants towards their home food than new home traditional food, certainly, could be expected. Food is a main element in the identity of one's ethnicity and the consumption of food is indeed an exhibition of a cultural practice (Koc & Welsh, 2017). For this reason, the cultural behaviour was maintained in immigrant to have a connection between their current life and home cultural tradition. It could also be speculated that the taste of new home food is an important matter that did not attract the immigrants.

Perhaps, immigrants need more time to familiarize themselves with the new home environment. Familiarizing to new home tradition is important to adapt with the original culture of the immigrants. Ishak et al. (2012) pointed out that the identity of ethnic food is the result from the adjustment and adaptation with other ethnic food identity - the possible phenomenon that could occur. This is also a reason in immigrants who still have a strong connection with their traditional food even though their meal pattern changed as a result of the influence of the new home recipe (Vallianatos & Raine, 2008). Another reason that need to be considered was that, immigrants prefer to prepare their traditional meal at home (rather than going out and looking for local food (new home traditional food) because they felt that their food is healthier as well as the ingredient for preparing the food is easy to get (Paxton et al., 2017). All these reasons have significant impact on immigrant's emotional expression towards the cultural heritage of the Malaysian Malay (the majority culture of Malaysia) as emotion is the influential dimension especially in the context of food (Patel & Schlundt, 2001).

The results of this study that used the visualization approach (visualization of Malay traditional food) is important as an indicator and predictive of emotional tendency (Peterson & Kimchi, 2013; Wagemans et al., 2012). In this study, the emotional tendency of immigrants towards Malay traditional food is low compared to Malaysians (Malays and Non-Malays). The emotional distinction between immigrant groups and Malaysians (Malays and Non-Malays) have resulted from the factors of different goals and concentration in visualization. In addition, visualization approach relies heavily on one's goal in viewing visuals (e.g., Desimone & Duncan, 1995; Egeth & Yantis, 1997; Posner, 1980) and are hugely influenced by one's concentration factor (e.g. Freeman et al., 2001; Han et al., 2005). Due to emotional tendency and strong connection of immigrant groups towards their traditional food, thus, this led to low concentration in visualization compared to Malaysians. This is related to the goal factor that has a link with the integration of information from environment. Due to the low attraction towards the Malay traditional food among the immigrants, therefore, the goal of the visualization process is not well-developed. Moreover, the findings from this study have been widely discussed by the Gestalt Theory – a theory that has enormous contribution and solved many questions in the field of visual science. In general, this theory coined that an image is seen through visualization and will be interpreted more in wider context.

Hence, in this present finding, it can be said that the immigration group visualization capabilities in the context of Malay traditional food are less functioning. This is because, immigrants went through a process of visualization that was out of their emotional tendencies. Weakness in emotion will impair the visualization because emotion is one of the important factors in visualization. The emotion itself is developed based on the factors such as past experiences and contextual interpretations (Posner et al., 2005; Russell, 2003). In the second finding, acculturation score (i.e. preference towards home cultural heritage) predicted the immigrant's emotional expression towards the Malay traditional food visualization. This phenomenon of 'emotional acculturation' is not

surprised as it has been discussed and reviewed intensively (e.g. De Leersnyder, 2017). This link (acculturation and emotion) increasingly supported by several studies. For example, a recent finding noted that acculturation as one of the factors that significantly affect the mental health of the immigrant (George et al., 2015) which closely explain the prediction of acculturation on emotional expression that we observed in this study.

Meanwhile, in Tami et al. (2012), the changing of behaviour (toward positive behaviour) indicated as an important consequence from acculturation. Furthermore, beside the influence of acculturation on dietary preference (Lee et al., 2013), indirect finding on the influence of acculturation among immigrants living in Malaysia pointed out the importance of gaining the cultural knowledge to eradicate the emotional defect in dealing with intercultural difficulties (Awang-Rozaimie, 2011). This study finding is supported by other studies that observed the effect of acculturation beyond the psychological pinpoint. Acculturation was reported as a sociology phenomenon that has a significant impact on immigrants' health risk through the dietary change (Vargas & Jurado, 2016, Schaefer et al., 2009). The acculturation was also observed to expand its effect on the family behaviour as well (Chen, 2009; Soto et al., 2017).

CONCLUSION

Immigrants showed less emotional expressions (than Malaysians) to Malay traditional food – a situation that probably occurs in the first phase of an immigrant life when settling in new home. In this first phase, immigrants are trying to adapt themselves with the new culture. This process of adapting has given significant impact on their emotional dimension as immigrants. Future research should clarify the adapting transition that determine the change of emotions among immigrants.

Acknowledgement

The authors wish to thank the Ministry of Education, Malaysia for the Fundamental Research Grant Scheme (Grant Number: 203.PPSP.6171204) and Universiti Sains Malaysia for research facilities.

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Submitted:
08.07.2019

Revised:
07.10.2019

Accepted and published online
09.10.2019