

## MALAY TRADITIONAL FERMENTED FOOD: WILL MILLENNIALS EAT IT?

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**Abstract:** *Globalization and modernization are dynamic factors that influenced the millennials to consume Malay traditional fermented food. Thus, this may lead to the challenge in creating awareness towards sustainability of Malay traditional fermented food and avoid the possibility of losing the value of food heritage among millennials. In addressing this issue, this study was conducted to examine the behavioral intention in consuming the Malay traditional fermented food among millennials. An extended Theory of Planned Behavior (TPB) with modification was employed in this study. A quantitative e-survey was conducted through google form platform. The collected data of 131 millennial respondents were then analyzed with a descriptive statistic followed by correlation and multi regression using SPSS 21 version. The result showed all factors including attitude ( $r=0.542$ ,  $p=0.00$ ), subjective norm ( $r=0.585$ ,  $p=0.00$ ), perceive behavior control ( $r=0.40$ ,  $p=0.651$ ) and neophobia ( $r=0.214$ ,  $p=0.014$ ) have a positive significant relationship towards intention to consume Malay traditional fermented food among millennials. However, the multiple regression result revealed only three predictors explained 37.0% of the variance ( $R^2=0.383$ ,  $F(3,127)=26.308$ ,  $p<0.0005$ ), which indicate 63% factors that influence the millennials behavioral towards the intention to consume Malay traditional fermented food were also contributed by others factors. These results are expected to highlight the significance of millennials generation's role as an agent in continuing towards sustaining the Malay traditional fermented food against the globalization and modernization. Hence, this may have a positive impact on the traditional food business and tourism food heritage industry sustainability.*

**Keywords:** *Malay traditional fermented food, Theory of Planned Behavior (TPB), Neophobia, Sustainability, Millennials*

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## Introduction

Malaysia is currently being dominant by a group of young population known as Millennials and Gen Z, known also as a technology savvy. More than 7.1 million Malaysian are Millennials that have been influenced by the changes they had in their lives from childhood to adulthood including culture and food consumed. Moreover, today's lifestyle witnesses the millennials moving toward modernization and urbanization that have led them to the ignorance on the value and importance of traditional foods particularly Malay traditional fermented food (Odhav, Beekrum, Akula & Baijnath, 2007).

Traditional food plays an important role representing culture, identity and heritage that is commonly linked with the past as it represents stability in sustainable living. Recently, modernization and globalization factors were found gradually diminishing the authenticity of the Malay traditional foods (Bowen & Devine, 2011). Moreover, changes of meal consumption meal pattern towards western food and fast food among millennials was indicated. While, Rahman, Karim, Ishak and Arshad (2018), found that eating out became the current eating behaviour of the Millennials in Malaysia that led to increase of ignorance of traditional food and change of culinary taste. The Korean wave has also become one of the factors that influenced millennials towards adopting and consuming Korea fermented food and their culture (Uyuna, Zalina & Alina., 2020). The shifted behaviour of millennials towards consumption of ready-to-eat food and convenience food also one of the globalizations arises.

Further, loss of interest, no early exposure to traditional foods and flourishing phenomena of boba trends, fast food as well as advanced in information technology becomes the reasons why youngest generation is choosing ready-to-eat food rather than preparing traditional foods which the millennials have gradually ignored the practice of the traditional foods due to the influence of information technology (Nor, Shazali, et al., 2012a).

Due to this alarming situation, the traditional Malay food or fermented food might face the possibility of losing their heritage and unique identity among millennials. Preserving the traditional food would be crucial. Therefore, this study aimed to identify factors that influence millennials towards consuming Malay traditional food fermented.

## Literature Review

### Sustainable, Globalization and Modernization

As the world evolves into globalization, the life of our people has changed in a way towards modernization which require a sustainable direction towards preserving culture, identity, heritage as a well the traditional food. In the context of acceptance, the Malay traditional fermented food among millennials, it can be seen that preserving the traditional food is crucial, but so often, the traditional food would easily be forgotten by the young generations (Saaidin et al.,2020) due to the globalization. In Malaysia, the globalization was found lead by the modernization such as the Korean wave (K-wave) phenomena, the Society of McDonalidization and Starbuckization as well as changes of eating habit among millennials. The Korean has become a Malaysian youth iconic trend to be followed which can be seen in the Malaysians' youth trend where it gradually influenced by the Korean culture and lifestyle of foods, cosmetics, entertainment, and technology. Thus, this may lead to the possibility of losing our traditional food identity and uniqueness. Moreover, it will gradually diminish the food itself

and becoming a major threat towards sustainable of the traditional food. A few globalization example is summarized in the figure 1 below:

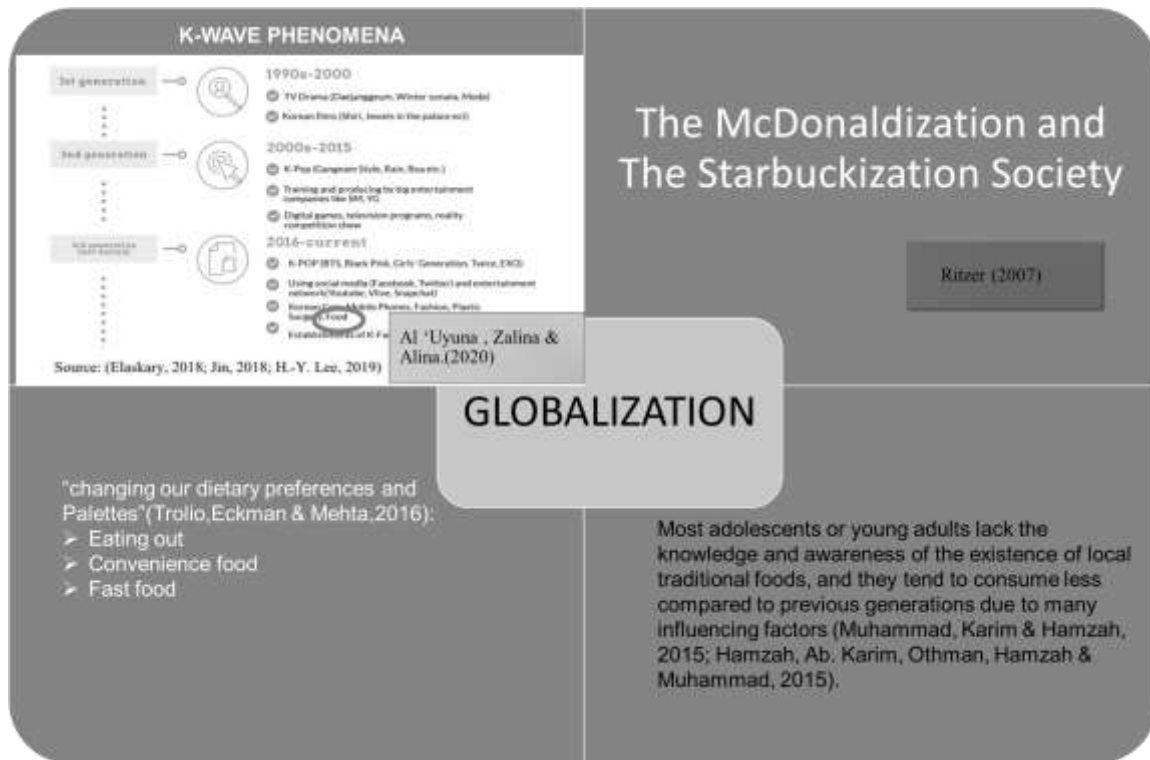


Figure 1: Summary of globalization factors that lead by the modernization

### Millennials

Millennial is defining as a generation who was born between the year of early 1980 to 2000, which reflected the era towards modernization and the expended of technology. Normally, the common behavior of millennial is they are more concern on what they want to do or what they want to be which they have their own intention in a subject including choices of food, where their preference is based on their own taste, intention and acceptance (Larson, Neumark-Sztainer, Laska & Story (2011)). The most preferred food is fast food, instant, western and mostly the food that become trendy through the process of technology.

Aniza (2019), found that the young adults are being able to consume, recognize and adapt the taste of the traditional fermented food if it had been applied by their parents since the young age. However, in other perspective, the physical and the smell of the food are the other reason why one could not accept the food without even trying. Even though Malay traditional fermented food consumed a health benefit, the perception that has been described by others will bring out the neophobia towards the person which caused them to be afraid in consuming the food.

### Malay

In Malaysia, Malay represent the majority of ethic compare to Chinese and Indian. The Malay ethnic itself comprises a mixture of several elements from Thailand, Indonesia (Sumatra and Java), Sulawesi, and Polynesia (Kamaruzaman, Ab Karim, Che Ishak & Arshad, 2020). It is

believed that Malays were among the early indigenous group of people residing in the Malay Archipelago (Embong, Jusoh, Hussein & Mohammad, 2016). A part from that, the Malay traditional foods had occurred earlier than 13th century and continuously developed during the trading years with strong influence from Thailand and Indonesia (Brissenden, 2010). One of the Malay traditional food is fermented food.

### **Malay Traditional Fermented Food**

Malays were very fond of fermented ethnic food due to longer shelf life and suitable for their long journey to work in another region (Haruminori et al., 2017). The main ingredient that have been used to be fermented were tapioca (cassava), seafood and grain (Law et al., 2011). *Tapai* is one of the Malay traditional fermented food with sweet taste and can be made either from glutinous rice (*tapai pulut*) or cassava (*tapai ubi*). Both fermented food was traditionally process, where yeast was added to steam glutinous rice or cassava then left in a container at room temperature for two to five days before it can be consumed (Law, Bakar, Hashim & Hamid., 2011). The other type of Malay traditional fermented food is the seafood based, such as *budu*, *cencaluk*, *ikan pekasam*, *tempoyak* and *belacan*.

The diversity of Malay traditional fermented food may vary in different region in Malaysia, whether it is in the Northern region (Perlis, Kedah, and Perak) or the East Coast region (Kelantan and Terengganu), each region has its own unique identity of traditional food (Norazmir et al., 2012) and based on their local preference.

*Budu* is a fermented anchovies extract sauce and it's represented the symbolize of Kelantan state (Huda, 2016). Meanwhile *cencaluk*, is the Malacca signature dips that made from shrimps preserved with salt water.

*Ikan pekasam* refers to a freshwater raw fish preserved with salt, roasted rice grain and also *asam keping*. The the fermentation process takes five days before it can be consumed (Huda, 2016). *Ikan pekasam* will be fried and served with freshly cooked rice.

### **Theory of Planned Behavior (TPB) and Theory of Food Choice**

An extended theory of Theory of Planned Behavior (TPB) and Theory of Food Choice was employed in this study to measure the attitude, subjective norms, perceived behavioural control, neophobia and intention to consume Malay traditional fermented food among millennials. Each variable is explained below.

Attitude are mainly influenced by behavior of belief, which is a critical factor that contribute to the intention to consumed Malay traditional fermented food among the millennial. The intake of Malay traditional fermented food is based on knowledge and food habit that will form a behavior either positive or negative attitude.

Ajzen, (1991b) and Pudun, Nor and Chung ( 2016) stated, the subjective norms is a social sentiment or pressure based on the influence or beliefs of the group of people. People could have consumed the food based on a culture tradition but they might not have consumed when it comes from a negative perception from people of the surrounding.

Perceive behavioral control is a short term of the perception and the action of a person based on the information or the outcome that are based on the experience or information that has been

received (Ajzen, 1991a). Through the perceive behavioral control, the intention to consume a food among the millennial is based on the information that they could perceive about the food (Pudun et al., 2016). The perception that contribute to the intention for millennial to consume this food can be positive where the food is good to consume for health beneficial.

While, neophobia is lifestyle illness about eating behavior when a person afraid to consumed the food that they are not familiar with. They are afraid to consume because of the taste and the smell of the food based on the perception that being describe by the other people (Gallagher et al., 2000; Ting et al., 2016). Some of the millennial does not have the intention to consume Malay traditional fermented food because they have neophobia.

## Methodology

### Research Design

A cross-sectional study approach was carried out based on purposive sampling, which screening question provided to only millennials age of group. The sample size for this study was determined using the G\*power software. At the power of 95 percent, an effect size of 0.15 and with four predictors, the required sample size is 129. All instruments used were adopted from previous study based on five Likert scale. A total of 131 valid respondents were received which then analyze using SPSS 21.

### Data Analysis

Statistical analysis technique was used to analyzed data collected using the Statistic Package for Social Science (SPSS) version 21.0 software. The reliability analysis was carried out followed by descriptive and multi regression analysis was utilized to analyse and generate the findings.

## Result and Discussion

### Respondent Profile

Table 1: Respondent's profile

		Percentage (%)
Gender	Male	19.8
	Female	80.2
Age	20-24 years old	73.3
	25-29 years old	14.5
	30-34 years old	5.3
	35-39 years old	6.9
Education Level	SPM	6.1
	STPM	0.8
	Diploma	28.2
	Bachelor degree	60.3
	Master's or Doctoral degree	4.6

Table 1 above, showed the respondent's profile; gender, age and education level. Female respondents were found majority (80.15%) group as compared to the male respondents (19.85%). Most of the respondent were in the age range of 20 to 24 years' old (73.3%) with more than 60% were degree holders.

### Reliability Analysis

The reliability test was carried out to measure the internal consistency of items based on the Cronbach's alpha value (Nunnally,1978). Nunnally (1978) suggested that a minimum alpha of 0.6 sufficed for early stages of research. All the value of the Cronbach's alpha in this study were found higher than 0.6 which indicated all the items are reliable and can be used further to test the hypotheses.

### Experience on Consuming Fermented food among millennials

The survey of experience on consuming fermented food among millennials showed that 98% of the millennials experienced in the consumption of Malay traditional fermented food. While only 2% was found to not have experience consuming any of Malay traditional food. Thus, this result indicates that majority of the respondent are knowledgeable about the Malay traditional fermented food and this result shows consumers' potential interest in traditional products. Moreover, the Malay traditional food products that are eaten every day or quite frequently, that area part of daily life, and commonly used.

### Multiple Regression

Table 2: Pearson's Correlation of the research (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.585 <sup>a</sup>	.343	.338	.67068	.343	67.255	1	129	.000
2	.608 <sup>b</sup>	.370	.360	.65936	.027	5.466	1	128	.021
3	.619 <sup>c</sup>	.383	.369	.65475	.014	2.812	1	127	.096
4	.620 <sup>d</sup>	.385	.365	.65644	.002	.344	1	126	.558

a. Predictors: (Constant), SN

b. Predictors: (Constant), SN, ATT

c. Predictors: (Constant), SN, ATT, PBC

d. Predictors: (Constant), SN, ATT, PBC, Neophobia

e. Dependent Variable: ITC

A multiple regression (Table 2) was carried out to investigate whether Attitude, Subjective Norms, Perceive Behaviour Control and Neophobia could significantly predict intention to consume traditional fermented food among millennials. The results of the regression indicate that Model 3 (Subjective Norm (SN), Attitude (ATT) and PBC) explained only 37% of the variance and the model was the most significant predictors compare to others model,  $F(3,127)=26.308, p<0.0005$ . Thus another 63% may be contributed by other factors.

Therefore, in this research subjective norm become the most important factor that influence intention to consume Malay traditional food among the millennial and this result is in line with study by Shen (2010) that stated, attitude may influence by social pressure from parents or friends. Seo (2014) stated this circle of people will lead the person to adapt the lifestyle of the culture and thought. Neophobia was found not significance with intention to consume because most of the people today has gain interest to try something new and different especially the young generation.

### Conclusion

Finding of this research explicit that Malay traditional fermented food is still acceptable by the taste bud of millennials despite the occurrence of globalization and modernization. However, continuous and proactive efforts need to be taken by parents, academia, government as well as food industry to ensure the sustainability of Malay traditional fermented food continuously be part as food heritage, culture and ethnic identity.

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