International Conference on Business and Management (ICBM)

FOOD LABELS BASED ON THEORY OF PLANNED BEHAVIOR IN KLANG VALLEY

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ABSTRACT

The Theory of Planned Behavior (TPB) is used as a theoretical framework with an objective of explaining the consumer purchasing behavior which is affected by the uses of food labels for food products in Klang Valley, Malaysia. 300 respondents representing diverse Malaysian consumers were obtained using stratified random sampling technique. The study used primary data collected through self-constructed questionnaires. The study used descriptive analysis, reliability test and factor analysis to identify the impact of food labels on consumer purchasing behavior. The overall results which are based on the TPB model indicate that the uses food labels have positive significance towards the purchasing behavior of consumer.

Keywords:

Theory of Planned Behavior, Food Label, Consumer, Purchasing Behavior

INTRODUCTION

Recent years have shown an increasing interest of academicians and also consumers towards food labeling and consumer behavior in purchasing the food products. Food labels have become important instruments in purchasing numerous products in market by consumers. Food labels are the most important in adding value to a particular product. Consumers are more confident in buying food with labels as compared to unlabeled packaging. Food label varies from brand, logo, price, expiry date, nutritional value, ingredients to specific labels like genetically modified organism (GMO), eco-friendly and organic products.

Food labels are very useful for the consumers to make healthy choices in purchasing foods by comparing the nutritional value, preventing the high amount of fat, sugar and cholesterol in the food product and choosing food with higher in vitamins, fiber and protein (LaBarbera, 2012). Besides, the ingredient label can help the consumers to prevent any unwanted ingredients that might have allergic elements, or forbid ingredients based on religious. Aside from consumers, the food industry also gains benefits from nutrition labels as the food manufacturers and retailers are able to give an emphasis to the nutritional facts of the products to the consumer (Nutrition Society of Malaysia, 2012).

In Malaysia, the current studies on the impact of purchasing behavior of Non-Muslim consumers (Abdul Latiff et al., 2013a), the awareness of Muslim consumers on food labels (Abdul Latiff et al., 2013b), the impact of Halal brand personality towards consumers' purchase intention (Barzooei &Asgari, 2013), and the impact of Halal logo as an advertisement and a signifier of third-party certification for non-Muslims consumers (Hassan & Hamdan, 2013)

DOI:10.63646/j.ijirm.2014.020112

suggest that food labels specifically Halal label had an impact on the consumer behavior in purchasing food products.

There are many health issues related to purchasing the processed food product. According to Tao (2010), the adaptation of healthy food environment and consumers' dietary intake were caused by growing obesity problems among consumers worldwide. Thus, food labels help in choosing the right food products according to one's healthy preferences. This study will look into the impact of food labels as a whole on consumer purchasing behavior by using the Theory of Planned Behavior (TPB) as the theoretical framework to assess subjective norms, attitude, and intention of consumers in purchasing food products.

LITERATURE REVIEW

The purchasing behavior of the consumers is highly influenced by the food labels' credibility (Lee & Lee, 2004). Stuart (2010) stated that the food labels were obviously intended to influence the purchasing behavior of the consumers at point of purchase using the relevant information provided on the food packaging. Each food label plays an important role in consumers' intention towards their purchasing behavior.

Nutrition label is currently a must for any processed food products concerning healthy dietary habits among consumers. It is very important for consumers to be presented with essential nutritional information of the food products in order to make a better decision in choosing the healthiest food which influences their purchasing behavior (Mackison et al., 2008; Abdul Latiff et al., 2013b; Norazlanshah et al., 2013). Study by Norazlanshah et al. (2013) proved that the nutritional value labels on food products affect food purchasing behavior of the consumers. Tao et al. (2010) stressed out that nutrition label is very important as an education tool to promote and enhance the nutrition knowledge of consumers.

Besides, with the increase of halal products and services demand and the growing number of Muslim population worldwide, halal labels have become pertinent for global halal markets (Asmat-Nizam & Ili-Salsabila, 2013). Halal labels also caught the attention of Malaysian consumers which consist of Muslim and non-Muslim consumers. In Malaysia, halal certification is provided by Malaysia's Department of Islamic Development (JAKIM). Current studies by researchers had suggested that the halal labels are crucial in affecting the consumers' purchasing behavior for food products in Malaysia. (Abdul Latiff et al., 2013a; Abdul Latiff et al., 2013b; Barzooei & Asgari, 2013; Hassan & Hamdan, 2013).

Eco-friendly labels have also become one of the marketing sensations in promoting food products by manufacturers and retailers. Present environmental concerns towards global climate change by consumers clearly affected the consumers' purchasing intention. Based on a previous study by Nik Abdul Rashid (2009), he had concluded that eco-friendly label is essential for consumers to make a right purchasing decision when the environmental aspects are being considered. Additionally, knowledge on green products is very important in consumers' purchasing behavior for green products (Shahnaei, 2012). Eco-friendly label itself will also provide clear information about the food products and indirectly enhance the consumer knowledge on green products (Nik Abdul Rashid, 2009).

Therefore, Malaysian consumers are generally exposed to the importance of variety of food labels. According to Tee (2003), prepared cereal foods, bread, milk and powdered milk products, canned meat; canned fish, canned vegetables, canned fruit and fruit juices, soft drinks and botanical beverages are several food categories that require food labels in Malaysia. However, the consumer awareness towards the food labels needs to be assessed to ensure the

benefits of food labels is entirely practiced in the consumers' purchasing decision. The full advantage of food labels should be taken by consumers related to their purchasing behavior.

METHODOLOGY

Theoretical Framework

The TPB is an extension of the theory of reasoned action (TRA) made necessary by the original model's limitations in dealing with behaviors over which people have incomplete volitional control (Ajzen, 1991). However, TRA did not take into account the perceived behavior control as the TPB did. Theory of Planned Behavior (TPB) was used as a model to conduct this study. TPB model helps in determining the consumers' purchasing behavior by relating the existence of the food labels with their intention in purchasing the food products.

According to Alam and Sayuti (2011), the intention of buying the products was basically influenced by the subjective norms, awareness, attitude and perceived behavior control of the consumers. TPB is considered as relevant in studying consumer preferences in buying food products as it has been successfully applied by many researchers in their previous studies (Karijin et al., 2007; Alam & Sayuti, 2011; Rezai et al., 2012; Abdul Latiff et al., 2013).

Sampling Method and Procedure

Questionnaires were used as the primary data collection method in this study. The questionnaires had been constructed beforehand and distributed to the respondents in Klang Valley. The sampling was done using stratified random sampling technique which involved 300 respondents in total. The demographic information was identified. The consumers' awareness, attitude, subjective norms, perceived behavior control and purchasing intention were also identified using Likert scale in providing a quantitative measure for the constructed questions as proposed by Boone and Boone (2012). Seven Likert-type items were used which are Strongly Disagree (1), Somewhat Disagree (2), Disagree (3), Neutral (4), Somewhat Agree (5), Agree (6), and Strongly Agree (7).

Analysis Method

The analyses of the study consisted of descriptive analysis, reliability analysis and factor analysis which were carried out using SPSS software. Descriptive analysis was conducted to analyse the demographic information of this study which includes residential area, age, gender, marital status, education, race, occupation, income, and lifestyle.

Reliability analysis was done to estimate on the consistency of the data and the Cronbach's alpha was used as the index for the reliability of the data (Tavakol & Dennick, 2011). As suggested by Nunnally (1978), the Cronbach's alpha of the reliability test should have a minimum value of 0.6 for the data to be considered as consistent in the early stage of research. These data were further analysed with factor analysis to analyse the awareness, attitude towards food label, subjective norms, perceived behavior control and intention of all the respondents.

RESULTS AND DISCUSION

Demographic Information

The study covered 300 Malaysian consumers whot lived in urban areas (63.7%) and suburban areas (32.7%) in Klang Valley. The respondents consisted of 43.6 percent male and 53.7 percent female. Majority of the respondents are Malay (55.6%) which followed by Indian (30%) and Chinese (14.5%). Thus, the respondents' races were consistent with the percentages of the respondents' religion which were Islam (57.7%), Hindu (24.7%), Christian (9%), and Buddhist (8.7%). Based on the surveyed data, the respondents came from different education background where most of them having a degreel (47%) and the rest of the respondents varied ranging from primary, secondary, diploma, and postgraduate levels.

The highest contributors of the total number of respondents were married with 69.7 percent while single respondents were 30.3 percent. The occupation of the respondents were varied: public sector (46%), private sector (43.3%), self-employed (10%), retired (3%) and housewife (3%). Different respondents practiced different lifestyle environmental activities (17.0%), physical activities (23.3%), health consciousness (27.3%), and religious awareness (32.3%). Thus, understanding the socio-demographic information is important in understanding the consumers' purchasing behavior on specific group of consumers (Mackison et al., 2008).

Reliability Test

This study utilised 57 variables after factor analysis which was used to measure the attitudinal characteristics of consumers and their attitude, knowledge and awareness, subjective norms, perceived behavioral control and intention. The result of Cronbach's Alpha for this study shows a strong and positive consistency on the data collected (Table 1).

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
0.964	0.966	57

The Cronbach's Alpha value estimated was 0.964 which was higher than the index of reliability test (0.6). This shows that there is consistency among the Theory of Planned Behavioral items used in the study and it can conclude that the model is fit for this study.

Factor Analysis

Results derived from Factor Analysis (FA) provide a confirmatory test of measurement theory for the constructs and explains how the variables that are being measured logically and systematically represent the constructs that are involved in the theoretical model. The overall results of KMO and Bartlett's Test show that the model is fit with the collected data (Table 2).

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.925
Bartlett's Test of Sphericity	Approx. Chi-Square	18149.871
	df	1596
	Sig.	0.000

In this regard, the Kaiser- Meyer-Olkin Measure of Sampling Adequacy (MSA) shows a value of 0.925 which is greater than the above minimum requirement (0.50). Theoretically, the overall (MSA) result shows an evidence of strong and adequate correlation among the items used in the study. Using the FA on the responses collected from 300 respondents, the study accomplished a five-factor solution accounting for 68.557 percent of the total variance explained. In general, the homogeneity of the construct was maximal (i.e. 1.00), each generating one component with Eigen values greater than one.

CONCLUSION

The main objective of this study is to determine the impact of food labels on consumer purchasing behavior by using the theoretical framework of Theory of Planned Behavior (TPB) among Malaysian consumers in Selangor. The TPB model of the study explained 68.56 percent of variance in the consumers' intention in purchasing labeled food products. Hence, the result on the impact of food labels on the consumer purchasing behavior is positively significant. TPB can be considered as an effective model in predicting the consumer purchasing behavior. Thus, this model is recommended on studying the relationship of food label products with the consumer purchasing behavior as it helps in demonstrating the importance of food labels in consumer purchasing decision.

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