Examining Critical Success Factors of Consumers’ Attitude towards Nutritional Labelling of SMEs Products in Malaysia

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Abstract: This paper examines the critical success factors of consumer’s attitude towards nutritional labelling of Small and Medium Industries (SME) products in Malaysia. The results will provide insights on how SMEs and possibly other organizations of similar structures could improve upon their product labelling as well as marketing strategies. This study is perhaps one of the first to investigate critical success factors of consumer’s attitude towards nutritional labelling of SMEs products in Malaysia.

Key words: Consumers’ attitudes, nutritional labelling, Small and Medium Industries products, Malaysia

INTRODUCTION

Small and medium-sized enterprises (SMEs) play a critical role in the economic development of a country, they are vital to the ability of an economy to innovate, diversify and create new jobs (Poon et al., 1994). Apart from employment creations, the SMEs also act as an economic engine driving the global quality of life, hence the major role the SMEs and entrepreneurship play in the world economy (Hill et al. 1999). In Malaysia GDP (Gross domestic Profit) SMEs has high contribution by referring to statistics provided by SMIDEC (2004), SMEs accounted for 89.3 per cent of all establishments in the manufacturing sector in the year 2000. They contributed 29.1 per cent of total manufacturing output, 26.1 per cent to value-added, 27, and 32.5 per cent of employment in 2003. In addition, value added production from SMEs is expected to be worth RM120 billion or 50 per cent of total production in the manufacturing sector by 2020.

The potential of SMEs to promote domestic-led growth in new and existing industries and to strengthen the flexibility of the economy in a competitive and challenging environment are inarguable. Economic growth in developed countries such as Japan, Korea, Taiwan and many others, were significantly generated by SME activities. The percentage contribution of SMEs to GDP/total value added range from 50 per cent in Korea, 55.3 per cent in Japan, 57.0 per cent in Germany, 60 per cent in China compared to 47.3 per cent attained by Malaysia (Normah, 2006). Malaysia has low percentage contribution of SME’s to GDP compared than others because of developmental issues currently faced by SME’s. According to Firdaus Abdullah et al. (2009), this occurs from low level of technology, innovation, low research, product development and etc. This resulted in inadequate especially for the packaging and labelling of products. At present, SMEs has produce varieties types of products particularly in food industries but lacking in labelling has reduced the demand of SMEs product.

In food industry, when making purchase decision consumer will consider the price, quality of food, packaging, and not to forget the nutrition labelling. Food contains a variety of nutrition which is important for our bodies to function effectively. Shine et al. (1997) says that nutrition is required to perform a particular role in the body including growth and repair, heat and energy and protection from diseases. It is important for consumer to consume food that provides a combination of nutrients as well as healthy for the body since majority of people is very concern about diet and healthy life.

Each product especially food product that is pack must have label on their packaging. There are variety of label consumer can find on packaging such as price, ingredient, expired date and many more. For SMEs, food products also need to have entire label but what is lacking on SMEs labelling is nutrition label. Nutrition

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Current research has demonstrated that nutrition labels can be used as a source of information to inform consumers about the nutritional content in their food. However, there is an indication that nutrition labels may not be used, even though consumers say that they do, and they may be misunderstood. Consumers seem to be able to understand certain key terms and also apply the information in simple tasks, but confusion increases with complexity of the information and the task to which it should be applied. Usually, consumers are confused between the ingredient lists and nutrition facts label. These two labels are different in describing product’s information. Meanwhile, many SMEs products only show ingredient list instead of nutrition facts label. The confusion between ingredient and nutrition facts label will be higher when the label on the packing is too small and cannot be seen by consumer. This makes consumer’s feel less motivated to read the labels and affect on buying behaviour especially for those customers that do not have enough time to shop. Consumers also faced with a problem in terms of little understanding and lack of knowledge about nutrition. There are different terms had been use on the nutrition facts label such as calories (energy), salt (sodium), calcium (nutrient) and others. Consumers that do not familiar with the nutrition terms may lead them to overlook the nutrition label.

Many researches were studied about food and nutrition labelling (e.g. Baltas, 2001; Wills et al., 2009; Singla, 2010; Koenigstorfer and Gروepel-Klein, 2010; Shine et al., 1997). But very little attention has been paid to the customer attitudes towards nutritional labelling especially for SMEs products specifically in Malaysia. Evidence indicates that nutrition labelling is indeed very useful in helping consumers choose more healthful foods (Kreuter et al., 1997; Neuhouser et al., 1999; Silverglade et al., 1998). It is also must be clearly stated on the label so that consumer can notice and read the label. With the nutrition label, it can give information about the nutrition facts especially for customer who search for healthy and safety products and also for customers who search for diet claims. Many SMEs companies produced their foods product with nice packaging and put the food label, but only few of them that concern about nutritional labelling on their packaging. They should know the important of nutrition facts label on their packaging. Thus, because of these reasons, the current study is attempt;

- To determine whether consumer motivation in nutritional labelling has relationship with consumer attitudes
- To identify consumer’s source of information has significant relationship with consumer attitudes
- To analyze whether nutrition knowledge has significant relationship with consumer attitudes
- To examine label format for nutritional labelling has influence on consumer attitudes

**Review of Literature:**

**Motivation factor and Consumer attitude:**

Motivation can be described as the driving force within individuals that account for the level, direction and persistence of effort expended at work (Schermherm et al., 2011). In order to enhance consumer awareness and to motivate adoption of dietary approaches to disease prevention, some knowledge of nutrition is needed (Almedia et al., 2006). Increased interest in nutrition has prompted consumers to evaluate their diet and lifestyles. Therefore, in order to have effective nutrition education programs, it is important that strategies should be designed flexible and varied to reflect the geographical variability of population and should focus on specific target groups in the population. Such target groups may be defined by their demographic
characteristics, their stage of readiness to change their dietary behaviours and also their perceived benefits and barriers to adopting a healthy diet (Bogue et al., 2005; Lappalainen et al., 1998). This finding shows the relationship between consumer motivations with consumer attitude. The motivation to process information has been shown to be one of the moderators of the effect of nutrition information panels. Moorman (1990), investigating the effect of enduring motivation on the use of nutritional information, found that this factor influenced not only the information processing and decision quality but also that this relationship was stronger in the post-NLEA period (Moorman, 1996). Enduring motivation has also been shown to moderate the effects of product nutrition value on consumer evaluations even though claims’ effects were not influenced by the level of motivation (Keller et al., 1997). A note should be made at this point on the measurement of motivation just to indicate the different interpretations between studies. Moorman (1990; 1996) and Keller et al. (1997) define motivation with questions relating to how often someone uses nutritional labels in general and when grocery shopping. They also depicted motivation based on one’s interest in reading nutrition and health related information. Label use was measured with questions similar to what Moorman (1990; 1996) and Keller et al. (1997) have used as a motivation variable. Therefore, caution is needed when comparing results between studies. As mention by Shine et al. (1997), such research has emphasized the relationship between diet and disease and it has caused concern among consumers, motivating them to become aware of their dietary requirements. The increased motivation and ability to use the nutrition information on the part of consumers in turn lead to healthier decisions. To test this relation, the following hypothesis is proposed:

**Hypothesis 1: Consumer motivation has relationship with consumer attitude towards nutritional labelling.**

**Source of Information and Consumer attitude:**

Nutrition labelling is one of several information channels available to consumers, including mass media, books, advertising, education programs and, of course, medical advice (Feick et al., 1986; Mueller, 1991; Caswell, 1992; Abbott, 1997). Consumers need to make use of the right communication media and the right sources of information in order to protect themselves (Koc and Ceylan, 2009). Consumers obtain information about food safety from various sources. These may be generally visual and written media, family, friends and possibly internet sources, which have recently become more widespread. As an information source, media has an important role in raising the awareness of the consumers (Avşar et al., 2006). While perceiving confidential to physicists, professional health personnel and scientists were found to be the highest, friend, family, environment and human rights protection associations were found to be the least reliable (Tucker et al., 2006). In a study done by Gulse Bal et al. (2006) it was found that, among the communication tools that the consumers used, television and radio ranked first. From the study done by Koc and Ceylan, (2009) the result shows that respondents in the group with no formal education obtained the majority of their information on food safety from their doctor or other health-professionals. In contrast, respondents in all of the groups (those with some form of formalized education) obtained their information primarily from television, followed secondly by newspapers and thirdly via family and friends. It shows that how source of information may influence and has relationship with consumer attitude. The following hypothesis thus ensues:

**Hypothesis 2: Source of information has significant relationship with consumer attitude towards nutritional labelling.**

**Nutrition Knowledge and Consumer attitude:**

Knowledge refers to human faculty resulting from interpreted information; understanding that germinates from combination of data, information, experience, and individual interpretation (BusinessDictionary.com). Nutrition education is considered to be an important tool in providing knowledge about the contents of a healthy diet and encouraging behaviour change (Unusan, 2006). Some researchers suggest that nutritional behaviour is related to nutritional knowledge and that if an individual is educated on healthy eating, they will do this in practice (Wardle et al., 2004, Pirouznia, 2001, Read et al., 1988, Saegert and Young, 1983, Cho and Fryer, 1974). With the increase in incomes and educational levels and quality of life of consumers, and with the greater tendency to pay attention to quality and to purchase from firms they trust, food health and hygiene will be given greater importance. Yet, the primary and most effective auditor is the consumer himself. Consumers with higher education perhaps believe that the food available on the market must meet some basic requirements, so it must be characterized by features that predestine it to offer to customers, and therefore they pay special attention to this particular information. It refers to relationship between nutrition knowledge and consumer attitude. Higginson et al. (2002) reported that in order for nutrition label information effectively to
facilitate healthy food choice, it would appear that considerable effort needs to be expanded by nutrition educators and health promoters on consumer education. Nutrition knowledge may facilitate label use by increasing its perceived benefits and by increasing the efficiency of label use, thereby decreasing the cost of using labels. Early studies of label use found a relationship between nutrition knowledge or self perception of knowledge and the use of specific nutrients (Bender and Derby, 1992). Moorman and Matulich (1993) showed that higher levels of health knowledge have a positive effect on information acquisition from media sources (including nutrition label reading). Later, Guthrie et al. (1995), Szykman et al. (1997), and Kim et al. (2001b) found evidence supporting a positive relationship between label use and knowledge, even though Nayga (2000) found no evidence supporting this relationship. Moorman (1998) also found that consumers with more knowledge were less sceptical toward nutritional information. In addition, Levy and Fein (1998) revealed the positive effect of knowledge on consumer’s ability to perform nutrition label use tasks. Although it is reasonable to expect that nutrition knowledge can affect nutritional label use, it is also possible that label use can affect nutrition knowledge. For example, consumers can gain more knowledge as they read more nutritional labels from the products they purchase. In fact, Drichoutis et al. (2005) found that label use in general and use of vitamins/minerals and ingredients information improve consumer’s nutrition knowledge. In line with this argument, the following hypothesis is constructed:

Hypothesis 3: There is a relationship between nutrition knowledge and customer attitude towards nutritional labelling.

Label Format and Consumer attitude:
Label refers to a simple tag attached to the product or an elaborately designed graphic that is part of the packaging (Kotler and Armstrong, 2004). An important role in communicating various attributes of food play the information provided on foodstuff packaging. As research shows, interest in packaging information is particularly strongly present among consumers with a predilection for healthy diets and prone to change their food and nutrition behaviours (Abbott, 1997; Wandel, 1997; Shine et al., 1997b; Kreuter, 1997). It is also reported that usefulness of information provided on foodstuff packaging is higher for consumers who are more careful about the food they choose (Coulson, 2000), and so they see this information as a ground for establishing benefits and losses when purchasing particular products. Results of the Institute of European Food Studies (IEFS) pan-European Union (EU) survey on consumer attitudes to food, nutrition and health showed that food labels are one of the most used and trusted sources of information by Europeans (Lappalainen et al., 1998). Singla (2010) was supported that food labels play an important role when a product is bought for the first time by a consumer. Mannell et al. (2006) in their study report that nutrition labels on food packages in Europe are often difficult to locate on the package, as well as hard to read. A food product’s nutrition information is not always distinctly different from other information on the package. On some labels it is included with the food product’s ingredient list, presented in a text format rather than in a separate table. The font size is often very small and the colour of the print is at times the same colour as the rest of the print on the food package, making the nutrition information hard to find. Another problem with current nutrition labels in Europe is that nutrition information is not presented for standard serving sizes. These discrepancies in nutrition label formats may create an obstacle to regular consumer use of nutrition labels. To substantiate this argument, the following hypothesis is proposed:

Hypothesis 4: The label format for nutritional labelling has influence on consumer attitude.

Development of current theoretical framework:
Figure 1 shows the research framework developed and the four hypotheses proposed to be tested in this study. Development of this framework is based on the existing models (e.g. Grunert and Wills, 2007; Shine et al., 1997). From these two existing framework, a new research framework relevant to this study was proposed. The comprehensive model developed in this study allows the variables to be studied in a holistic manner, which enables more meaningful results to be generated from this study (Norzaidi et al., 2007). The figure above shows four independent variables which are Motivation, Source of Information, Nutrition Knowledge and Label Format that affect the dependent variable which is Consumer Attitude towards Nutritional Labelling. There are positive and negative relationships between these four independent variables towards the dependent variable. Motivation refers to the interest in nutrition that has prompted consumers to evaluate their diet and lifestyles. This study has identified the relationship between motivation and consumer attitude towards nutritional labelling. Therefore, motivation is the independent variable in this study.
This study also indicates that different source of information may give different choice of consumer reference towards nutritional labelling. It shows that source of information has influence the consumer attitude towards nutritional labelling in SMEs product. Therefore, the source of information is second independent variable whereas the consumer attitude is the dependent variable in this study. Moreover, the third independent variable is nutrition knowledge. Nutrition knowledge is considered to be an important tool in providing knowledge about the contents of a healthy diet and encouraging behaviours change. This variable may has significant relationship on consumer attitude towards nutritional labelling which is the dependent variable. Last, the fourth variable is label format which obviously is expected to have a major impact on dependent variable which is consumer attitude towards nutritional labelling.

Fig. 1: Proposed Research Framework

Conclusion:

Nutrition is the sum total of the processes involved in the taking in and the utilization of food substances by which growth, repair and maintenance of the body are accomplished. It involves ingestion, digestion, absorption and assimilation. Nutrition labelling is intended to enable informed consumer choice, raise the demand for healthier food products, encourage competition on nutritional quality, and stimulate development and production of goods with improved nutritional properties. It is important that the nutrition information provided be appropriate and understandable to the consumer and that it impact food-choice behaviours. Potentially, nutrition labelling represents a valuable tool to help consumers make informed decisions about their diet and lifestyle. According to Sogn-Grundvag and Ostli (2009), there is typically no information about flavours, nutritional content, health benefits, or other types of more or less persuasive information that might assist consumers in making their choice. It is well known that balanced and varied nutrition and physical activity can significantly contribute to the prevention of some chronic diseases linked with obesity and excess weight (World Health Organization, 2006). To prevent such illnesses, nutrition labelling is one of the major instruments for helping consumers to choose nutritionally appropriate food. In response to the increasing health risks in the populations of developed countries, governments and international institutions have raised their concerns about unhealthy lifestyles associated with high-calorie diets and physical inactivity, and devised strategies to address this problem (EU, 2005; USDA, 2005; WHO, 2004). Thus, this current study concentrates on the critical success factors of nutritional labelling of SMEs products in Malaysia.

In short, this study is also significant to the company as they are the one who will produce the product to consumer. The company needs know the important of nutrition label for consumer and they can apply elements of nutrition on their packaging label. Besides that this study also can be used by the company to design their nutrition labelling with the suitable design that can attract consumer and give an impact on consumer attitude for SMEs products. Nutrition label also can be used as the competitive advantages for the product. Interesting design and format can make create different for the company product and others competitors. Moreover, the current study could possibly assist the government to formulate or to construct some regulations on the product packaging and labelling. It is important especially to the consumer because with the nutrition label it can help them to build healthy lifestyle. Interference of government will also create healthy nation and reduces the obesity, high blood pressure, heart attack and other critical health problem in the country. Other than that, the information from this study also can be used by the government to make sure that all food producers have followed the term and regulation before they get the certificate to market their product.
REFERENCES


