DOES BRAND IMAGE IMPACT ON CONSUMERS’ BUYING BEHAVIOUR? SPECIAL REFERENCE TO FERMENTED DAIRY PRODUCTS

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Abstract

Dairy sector is one of the most important of all livestock sub-sectors in Sri Lanka with a great potentiality to contribute economic development. Categories of fermented dairy products are usually high energy yielding food products as well as popular among consumers. The research question has been developed as whether the brand image effects on consumers’ buying behaviour of Fermented dairy products and the main research objective developed to determine the impact of brand image toward consumers’ buying behaviour of Fermented dairy products. Both primary and secondary data had been collected and proportionately chosen 200 respondents as the sample. Structured questionnaire has been used as the survey instrument to primary data collection. Brand image dimensions; brand attitude, brand attribute and perceive benefits were considered as the independent variables and consumers’ buying behaviour was considered as dependent variable and the SPSS 16 package has been used to analyze. Results indicated that there is positive relationship between the brand images on consumers’ buying behaviour as brand attitude, brand attribute and perceive benefits. The study concluded that brand attribute and perceive benefits significantly impact on consumers’ buying behaviour of fermented dairy product brands rather than brand attitude. Recommendations provided as to focus on marketing strategies towards brand attributes of price, shelf life, quality and color as well as the perceive benefits of health and safety of the product, need satisfaction through the product, taste, smell, feel, delight, and frequency of use. Further establishing a cost based advertising strategy to be positioned the brand in the consumer’s mind has been proposed.

Keywords: Brand attribute, Brand attitude, Consumers’ buying behaviour, Perceive benefits

1. INTRODUCTION

The agricultural sector recorded a growth of 4.7% in 2013 and its share of GDP contribution was 10.8% in 2013. The livestock sector is one of the major parts of the agricultural sector. The livestock sector contributed to 0.8% of the GDP in 2013 (CBSL, 2013). Dairy sector is the most important in livestock sub sectors as the milk production is an integral part of the food consumption. Dairy products have contained with an excellent source of nutrients. According to the Miller et al. (2000), the recommended daily dairy product consumption is about 200-400 ml for adults and 600-800 ml for children and pregnant women. Brand image can be defined as the perception of a brand through brand association in the minds of customers (Sondohet al., 2007). It is about the perception of consumers that having regarding a particular brand. According to Department of Census and Statistics from the Ministry of Livestock and Rural community development, the domestic milk production only contributes about 17% of the requirement and the rest is imported. When comparing the imports of milk and domestic milk production in 2000 to 2012 shows a significant increase in the dairy sector. Due to above situation government is focused on the dairy Subsector to this sector into a local
industry by increasing the domestic production. Poor marketing has been identified as a primary issue for the development of the livestock sector. Brand image long has been recognized as an important concept in marketing (Gardner, Burleigh, and Sidney, 1955). According to the Richards (2009), the Customer purchase behaviour is what influences consumers to purchase products or services hence the brand image can create a significant impact on consumer buying behaviour. Therefore, it is critical to enhance the marketing strategies towards dairy products in Sri Lanka as the intent of achieving successful local dairy industry. Fermented dairy product has been given more importance in present context as to the improvement of nutrients and it has been providing vital importance in the human diet. According to the International Dairy Federation, Fermented dairy products are defined as the milk products prepared from skimmed milk or not with a specific culture. The most important factor of this product category is that micro flora kept alive until sale to the consumer. Fermented dairy products categorize under three types. They are moderately sour type with a pleasant aroma, Sour and very high sour type and Acid-cum alcohol in addition to lactic acid (Marwaha and Arora, 2000). This paper focuses on sour and very highly sour types fermented milk products, curd and yogurt brands. This attempt is a significant endeavor in promoting local dairy industry through identifying the consumer buying behaviour.

**Problem statement**

There has been limited research in the area of dairy industry and consumer buying behaviour in Sri Lanka. Research on consumer behaviour has not been investigated properly, thus, many scientists hold on to different assumptions about stimuli and factors influencing consumer behaviour (Bray, 2013). A positive brand image will enable marketing program can be liked and be able to produce unique associations to the brand that always exist in customer retention (Schiffman and Kanuk, 2010). Thus, it is important to see whether the brand image impact towards consumer buying behaviour. Hence this research is focusing the impact of brand image on consumers’ buying behaviour towards fermented milk product brands which is a special range under milk and milk products.

**Hence the primary research questions has been developed as;**

1. Whether the brand image effects on consumers’ buying behaviour of Fermented dairy products?

The secondary research questions have been developed as;

i. What is the relationship between the brand image and consumer buying behaviour of Fermented dairy product?

ii. What is the most influencing factor in consumers’ buying behaviour of fermented dairy products?

**The research objective has been developed to answer the identified research gaps, Primary research objective has been developed as;**

- To determine the impact of brand image towards the consumers’ buying behaviour of Fermented dairy products.
To identify the relationship between the brand image and consumers’ buying behaviour of Fermented dairy products.

To recognize the most influencing factor that has an effect on consumers’ buying behaviour of fermented dairy products.

2. LITERATURE REVIEW

Brand image and attitude as vital factors

Customer based brand equity occurs when the consumer has a high level of awareness and familiarity with the brand and holds some strong, favorable and unique brand association in memory. A brand occupies a very important place in the mind of modern customers (Sawant, 2012). Branding is not just creating a name but it includes many contributions. The American Marketing Association (1994) defines that brand as a “name, term, sign, symbol or a combination of them intended to encourage prospective customers to differentiate a producer’s product from those of competitors”. According to the most of researchers, brand is defined as a name, sign, symbol or design, or a combination of all these indicators and its differentiated product or service from its competitors (Aaker, 1997, Kotler, 2005). Kotler (2000) stated that a good brand will come to boost the firm’s image and it is a promise (Morel, 2003) and also, it is a kind of relationship that involves trust (McNally and Speak, 2004). Once the sufficient level of brand awareness is created, marketers can put more emphasis on crafting a brand image. Brand image is the current opinion of the customers about a brand. According to the Vineath (2007), brand image is a unique set of associations in the mind of the customer concerning what a brand stands for and the implied promise the brand makes. Keller, (1993) defined that it is a perception about a brand as reflected by the brand associations held in consumer memory and brand image assumed as a set of brand associations that collected in the minds of consumers (Mowen and Minor, 2001). Simply it means a mental picture in the consumer’s mind of the offering and he stated that the brand in customer’s mind is linked to an offering (Dobni and Zinkhan, 1990). Brand image is a unique bundle of associations within the minds of target customers (Dwayne, 2005). In other words, brand image is a form or a particular description of trace of meaning left in the minds of the consumer audience (Wijaya, 2011). Sherry (2005) emphasises the source that provides the brand to accomplish and remain resonant and adequate in consumers’ minds. It is regarded as a consumer constructed concept due to consumers creating a personal or image related to the brand with regard to their knowledge and perceptions (Nandan, 2005). However, most scholars have described that brand image as the perceptions and beliefs held by the consumer, as reflected in the association held in consumer memory.

Scholars have identified the roles and functions of brand image in various ways. The central aspect of a brand is its image (deChenatony and Riley, 1998) and brand image holds the customers for a specific an offering and its influence them to act toward a specific product or service (Keller, 1993). Aaker (1991) stated that consumers over again tend to buy products that have famous brand for the reason that they feel more comfortable with things that are already known. According to the Hung (2008), perceptions about brand differ among consumer to consumer and it helps marketers’ to differentiate products, position and extend brands (Low and Lamb, 2000). Furthermore, Danesi (2006) proposed that the use of brand name enables consumers not only to recognize certain goods and distinguish them from others, but also to associate connotative meanings to them and it allows them to decode brand image. According to the Kahle and Kim (2006), revealed that brand image has multiple
functions as market entry, source of added value of products; value stored in the company and can be a force in the distribution of products. Brand image helps to create a pioneer product and that will lead to make benefit of market entry. Through brand extension it could be able to develop a strong brand of a product from one market to another market segment (Aaker and Keller, 1990; Boush and Loken, 1991) and it will help to reduce the cost of introducing new product. Brand image can add value to a product by changing the experience and perception towards the product (Aaker and Stayman, 1992; Puto and Well, 1984). The strong brand image can create a powerful distribution channel. According to Aaker (1991), the brand does not only play an important role horizontally, in forcing their competitors, but also vertically, in the acquisition of distribution channels, to have more control and bargaining power on the requirements made distributor. Strong brand image can satisfy its customers and strong brand image will make customers loyal (Davies et al., 2003, Earls et al., 2004). Brand image characterized based on different ways by the most of the researchers. According to Keller, (2006) major categories of brand image are attributes, benefits and attitudes were identified. Hence brand attributes, perceiving benefits and brand attitudes can identify as one of the common way to categorize the brand image. Brand attributes are those descriptive features that characterize a product (Keller, 2013) and also product can be viewed as a bundle of intrinsic and extrinsic attributes, or as a bundle of perceived attributes (Stockmans, 1999). It gives information related to the brand name (Keller, 1993) and the brand attributes is unique to the specific brand and also specific to the consumers (Meyers-Levy, 1989). Attributes can be further divided into two main categories which are product related attributes and non product related attributes (Myers, James, & Allan, 1981).

Accordingly product related attributes are defined as the ingredients necessary for performing the product or service function sought by consumers and non product related attributes are defined as an external aspect of the product or service that relate to it purchase. Brand benefit refers what consumers think the product can do for them (Keller, 2006) and what consumers seek when purchasing a product/brand (Kotler,1999). Benefits can be further distinguished into three categories; they are functional benefits, experiential benefits and symbolic benefits (Park, Jaworski, & MacInnse, 1986). Functional benefits are the more intrinsic advantage of product or services. And also these functional benefits linked with the physiological needs and safety needs. Experiential benefits refer what it feels like to use the product or service. Symbolic benefits are the more extrinsic advantage of the product or service consumption. Brand attitude defined as covert behaviour of consumers; they are not overt behaviours (Kim 2002). Attitude is an internal reaction of a person and it’s difficult to observe. According to the Gilbert (1995), it is a pervasive feeling and according to the Wallendorf (1979), response towards the brand may favourable or unfavourable due to their brand attitude.

Consumer’s Buying Behaviour

Consumer purchase behaviour is what influences consumers to purchase product or services (Kotller,2000) and customer purchase behaviour is what influences consumers to purchase (Richards,2009). Final consumers, both individual and households, whom buy goods and services for personal consumption is referred as consumer buying behaviour (Kumar, 2010) and further refers as the activities in which people acquire, consume and dispose products and services (Blackwell et al., 2001). Also, it is a complex and dynamic issue and according to the author it cannot be defined commonly (Blackwell et al., 2006). It is defined as a set of activities which involves the purchase of goods and services (Stallworth, 2008). Schiffman and Kanul (2000) defined consumer buying behaviour as to select and purchase products or
services to satisfy their needs. Better awareness of consumer buying behaviour is a positive contribution to the country’s economic state and quality of goods, (Egen, 2007). Further, high quality of domestic products and services lead to sophisticated domestic customer base (Blackwell et al., 2006). As most of researchers have identified the relationship between brand image and consumers’ buying behaviour, they have investigated the how customer purchase behaviour affected by the brand image. Thakor and Katsanis (1997) pointed out a positive brand image may make up for an inferior image of the origin country and raise the possibility of the product being selected. Blackwell et al., (2001) stated that consumer behaviour is based on the activities which are included in a product or service consumption or deposition. Alexander (2008) pointed out engaging in price wars and building brand images as a way of influencing customers purchase behaviour. Pitta and Franzak (2008) argued the brand heavily influences on food products buying behaviour and product brand emphasizes the quality of the food product and it creates an image in the consumer’s mind. Ultimately, that brand image becomes the basic motive for the consumers’ choice of particular product brand (Vranesevic and Stancec, 2003). According to the arguments, identifying consumer needs and wants leads to long term benefits to the business. Consumers are able to recognize a product, evaluate the quality, lower the purchase risk and obtain certain experience through brand image.

3. CONCEPTUAL FRAMEWORK

Conceptual framework displays the relationship between brand image dimensions and consumers’ buying behaviour. The conceptual framework has been derived according to Keller, (1993) and the Brand image dimensions have been considered as independent variables whereas consumers’ buying behaviour is a dependent variable.

![Figure 01: Conceptual Framework](Source: (Keller, 1993))

4. HYPOTHESIS DEVELOPMENT

Hypotheses will be tested according to study to achieve objectives of the research. Hypotheses were developed to derive the relationship between brand image dimensions and consumers’ buying behaviour.
Hypothesis 1

H0: There is no positive relationship between brand attitude and consumers’ buying behaviour of Fermented dairy products
H1: There is a positive relationship between brand attitude and consumers’ buying behaviour of Fermented dairy products

Hypothesis 2

H0: There is no positive relationship between product attributes and consumers’ buying behaviour of Fermented dairy products
H2: There is a positive relationship between product attributes and consumers’ buying behaviour of Fermented dairy products

Hypothesis 3

H0: There is no positive relationship between perceiving benefits and consumers’ buying behaviour of Fermented dairy products
H3: There is a positive relationship between perceiving benefits and consumers’ buying behaviour of Fermented dairy products

5. METHODS

Sampling procedure

Sample size is 200 fermented dairy product consumers who live in Western province based on three districts of Colombo, Kalutara and Gampaha. Those three districts were selected as they represent the highest average monthly household expenditure on Milk and milk food, by districts and sample has been proportionately selected. Systematic sampling technique has been adopted and the sample unit of consumers selected from retail shops and supermarkets to explore the unbiased perceptions about the questions in the questionnaire.

Data Collection and Analysis

Primary data were collected through a structured questionnaire and data analysis has been carried out to achieve the objectives of the study. Statistical Packages for Social Science (SPSS) version 16.0 software is used for analysis of data.

6. FINDINGS AND DISCUSSION

Cronbach’s Alpha Reliability Analysis

Cronbach’s Alpha was used to measure the reliability and the questionnaires’ validity and the analysis has been proven the reliability as the alpha values are greater than the acceptable level of 0.7 alpha value.

Most Purchasing Fermented Dairy Product Category

Regarding which most purchasing fermented dairy product category among the yoghurt and curd were shown by the figure 2. Most customers’ preference was yoghurt which is amounted 87% and 13% of curd.
Figure 2: Distribution of most purchasing fermented dairy product category

![Pie chart showing distribution of most purchasing fermented dairy product category](image)

**Frequency of Purchase**

Consumers are tending to purchase their preferred fermented dairy brand two to six times per week (41.5%) which represents the highest consuming percentage. Further 36.5 percent preference purchases by once per week and 19.5 for once a month.

**Figure 3: Frequency of Purchase**

![Bar chart showing frequency of purchase](image)

**Correlation Coefficient Analysis**

**Table 1: Correlation between Brand Image and Consumers’ Buying Behaviour**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Pearson Correlation</th>
<th>P – Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image</td>
<td>0.714</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: SPSS output from field information

According to the table 2, correlation between overall brand image and consumers’ buying behavior is 0.714. It denoted that there is a strong positive relationship between independent and dependent variable. P-value is 0.000; hence it has been supported for the relationship.
Table 2: Correlation between Brand Image and Consumers’ Buying Behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Pearson Correlation</th>
<th>P – Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Attitude</td>
<td>0.526</td>
<td>0.000</td>
</tr>
<tr>
<td>Brand Attribute</td>
<td>0.622</td>
<td>0.000</td>
</tr>
<tr>
<td>Perceive Benefits</td>
<td>0.628</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: SPSS output from field information

Brand attitude and consumers’ buying behaviour has a strong positive relationship because the correlation coefficient between brand attitude and consumers’ buying behavior in fermented dairy products was 0.526. Correlation coefficient of brand attribute also implies a strong positive relationship of 0.622 and Perceive benefits and consumers’ buying behaviour has a strong positive relationship as 0.628. According to the significance of all three independent variables as of P-value 0.000, it implied that the test is highly significant and rejects the null hypothesis (H0) and accepts the alternative hypothesis. Hence there is a positive relationship between brand attitude, brand attributes, perceiving benefits and consumers’ buying behaviour in fermented dairy products at the 95% confidence level.

Table 3: Summary of Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Pearson correlation</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Attitude</td>
<td>0.526</td>
<td>Strong positive</td>
</tr>
<tr>
<td>Brand Attribute</td>
<td>0.622</td>
<td>Strong positive</td>
</tr>
<tr>
<td>Perceive Benefit</td>
<td>0.628</td>
<td>Strong positive</td>
</tr>
</tbody>
</table>

Source: SPSS output from field information
Multiple Regression Analysis

The multiple linear regression model below shows the predictive potential of brand attitude, brand attribute and perceive benefits on consumer buying behaviour of fermented dairy products.

Table 4: Model Summary of Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Figure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.714</td>
</tr>
<tr>
<td>R Square</td>
<td>0.516</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.509</td>
</tr>
<tr>
<td>Standard error of the Estimate</td>
<td>0.26039</td>
</tr>
<tr>
<td>Significance F Change</td>
<td>0.000</td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>2.247</td>
</tr>
</tbody>
</table>

Source: SPSS output from field information

It is evident from the results that, brand image dimensions of brand attitude, brand attribute and perceive benefits have explained 51.6% of the variance in the consumers’ purchase behaviour of the dependent variable. Therefore, it defined that there is 48.4% of unexplained variation in this model. The explained variance of 0.516 is substantially higher value and therefore it is significant. Standard error of estimation is 0.26039. It represents that model is fitted well as mean value of dependent variable 4.145 greater than standard error of estimation.

Table 5: Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β Coefficients</th>
<th>Standard Error</th>
<th>t-Value</th>
<th>P-Value Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.611</td>
<td>0.177</td>
<td>9.101</td>
<td>0.000</td>
</tr>
<tr>
<td>Brand Attitude</td>
<td>0.149</td>
<td>0.042</td>
<td>3.532</td>
<td>0.001</td>
</tr>
<tr>
<td>Brand Attribute</td>
<td>0.242</td>
<td>0.048</td>
<td>5.034</td>
<td>0.000</td>
</tr>
<tr>
<td>Perceive Benefits</td>
<td>0.232</td>
<td>0.047</td>
<td>4.902</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: SPSS output from field information

In according to the results given in table 4.13, constant (β₀) was implied that while all three brand image dimensions remain zero, consumers’ buying behaviour is 1.611. The P-value of the constant is 0.000 and it denotes that statistically significant at 0.05 levels of significance. There is a positive relationship between brand image and consumers’ buying behaviour as beta coefficient represents positive value (1.611).

Accordingly multiple linear regression model can be expressed as follows.

\[
\text{CBB} = 1.611 + 0.149 \text{ BA} + 0.242 \text{ BAT} + 0.232 \text{ PB} + \varepsilon
\]
Where,
\[
\begin{align*}
CBB &= \text{Consumers’ Buying Behaviour} \\
\beta_0 &= \text{Intercept Parameter} \\
\beta_1 &= \text{Slope Parameter} \\
BA &= \text{Brand Attitude} \\
BAT &= \text{Brand Attribute} \\
PB &= \text{Perceive Benefit} \\
\epsilon &= \text{Standard Error}
\end{align*}
\]

The $\beta$ coefficient of brand attitude indicated 0.149 when brand attitude was increased by one unit while other variables remain constant; the consumers’ buying behaviour is increasing by 0.149 units. Additionally, brand attitude contributed significantly to the model since the P-value of 0.001 which was less than 0.05 levels of significance. Therefore null hypothesis $H_0$ was rejected and the alternative hypothesis $H_1$ was accepted. Hence, there was a significant relationship between brand attitude and consumers’ buying behaviour.

Coefficient of brand attributes, one unit of increase in brand attributes while other variables remain constant, and consumers’ buying behaviour is increasing by 0.242. Moreover, brand attributes predictor was significant at P-value of 0.000 is less than the 0.05 level of significance. Therefore null hypothesis $H_0$ was rejected and the alternative hypothesis $H_2$ was accepted. Hence, there was a significant relationship between brand attributes and consumers’ buying behaviour.

According to the coefficient of perceive benefits, one unit of increase in perceive benefits while other variables remain constant, consumers’ buying behaviour is increasing by 0.232. Furthermore, perceive benefits predictor was significant as P-value of 0.000 is less than the 0.05 level of significance. Therefore null hypothesis $H_0$ was rejected and the alternative hypothesis $H_3$ was accepted. Hence, there was a significant relationship between perceive benefits and consumers’ buying behaviour.

7. CONCLUSIONS AND IMPLICATIONS

According to the Pearson correlation analysis, there is a strong positive relationship between brand image and consumers’ buying behaviour. It was identified that Pearson correlation is 0.714 and P-value of 0.000. Further, there was a strong positive relationship between brand attitude, brand attributes, perceive benefits and consumers’ buying behaviour. It can be clearly stated that the consumers’ buying behaviour was increased when these three dimensions of brand image got increased. According to the multiple linear regression analysis, all three brand image dimensions have influenced on consumers’ buying behaviour.

Brand attributes had highest impact on consumers’ buying behaviour of fermented dairy products as regression output represent the highest beta coefficient. Hence, non-product related attribute such as price and shelf life and also product related attributes of quality and color have highly considered by the consumers. Perceive benefits were the second highest influencing factor in consumers’ buying behaviour. Consumers were secondly considered functional benefits such as health safety of the product and need satisfaction through the product and also experiential benefits such as taste, smell, feel, delight, and frequency of use. Brand attitude had the least impact on consumers’ buying behaviour of fermented dairy products than the other two variables. Hence an attitude towards advertisements, brand
awareness, and brand recognition were concern lower than the other factors when purchasing fermented dairy product.

Managerial Implication

The paper reveals yoghurt as the most preferred fermented dairy product and the majority of consumers are tend to purchase two to six times for a week. It is recommended that developing a yoghurt brand is most profitable for the manufacturers as it easy to develop marketing strategy based on brand image. The brands attribute and perceive benefits are the key influencing factors for consumers’ buying behaviour of fermented dairy products. Hence it is recommended that,

- when marketing a fermented dairy product manufacturer or marketers need to highly aware of brand attributes of price, shelf life, quality and color as well as the perceive benefits of health safety of the product, need satisfaction through the product, taste, smell, feel, delight, and frequency of use.

Brand attitude towards dairy product brands has a lower impact on consumers buying behaviour relative to the other two factors.

- Marketers need to consider more on advertisements to attract more consumers towards the brand. They need to establish the cost based advertising strategy to be positioned the brand in the consumer’s mind. As well as needing to create a clear awareness of the brand in the consumer’s mind and have to have the best way of recognizing the brand separately from substitute brands.

REFERENCES


