Impact of Packaging Design on Perceived Quality, Perceived Value, Brand Preference, and Repurchase Intention of Candy Products in Jakarta

Rini Setiowati* and Yunior Liem

*Management Department, BINUS Business School, Undergraduate Program,
Bina Nusantara University, Senayan, 10270 Jakarta, Indonesia*

ABSTRACT

This research aims to examine the influence of packaging design on perceived product quality, value, brand preference and repurchase intention of candy products in Indonesia. A survey was conducted to collect data from 201 respondents. This study employed Cronbach Alpha to test the reliability and Confirmatory Factor Analysis (CFA) to test the validity of the measurement items. Additionally, Structural Equation Modelling (SEM) was used to test the hypotheses. The results indicate that attitude towards packaging design has a significant and positive relationship toward perceived quality; perceived quality in turn has a significant and positive relationship with perceived value. Additionally, brand preference significantly and positively influence repurchases intention. However, attitude toward visual packaging design does not show any significant relationship toward brand preference and perceived value. Furthermore, perceived quality is found to insignificantly influence brand preference and repurchase intention.

Keywords: Attitude, brand preference, candy products, perceived quality, perceived value, repurchase intention, visual packaging

INTRODUCTION

According to Silayoi and Speece (2007), packaging was a marketing and communication tool. It represents a chain of production, handling, and transportation (Panwar, Mao, Ryoo, & Li, 2004). It is also an essential part in branding process, where it communicates brand identity of a firm (Abdalkrim & Al-Hrezat, 2013). Nowadays, packaging has become important

both in modern life and business (Silayoi & Speece, 2007) as it plays a role in attracting the consumer and influence product selection and decision making. Packaging also influences consumers at the point of purchase.

The packaged food and beverage industry (including candies) in some developed countries is considered a mature market. However, Euromonitor International (2014) stated that companies could still strengthen their market position and growth through several innovations including innovation through packaging design, alternative channels of distribution, and lifestyle products (including foods). Hence, a company can create excitement through packaging design to overcome competition with a wide range of products and brands displayed at the supermarkets.

In 2014, Indonesia emerged as the fourth most populous nation in the world with a population of 252.8 million people (World Population Review, 2015). With its huge population, Indonesia offers a huge market for various products and brands. Indonesians spend up to 33% of their income on food and majority of its population is young. It is also rapidly urbanising and has one of the fastest growing consumer markets in the world. Indonesian consumers are seen to have an optimistic view about their futures and are more willing to try new products (Nevid, Rathus, & Greene, 2005). However, the growth of Fast Moving Consumer Goods sector has been stagnant in recent years. This has posed a big challenge to companies to grow their businesses.

Also, a healthy lifestyle trend may also influence consumption specifically food products, such as candy, since they may prefer to choose healthier alternatives. Intense competition has forced companies to be more innovative in order to grab more market share.

Previous studies have shown the significant influence of perceived value toward purchase intention of food products (Zukri, Naing, Hamzah, & Hazlina, 2009) and consumer brand preference directs purchasing behaviour (Mallinckrodt & Mizerski, 2007). In addition, earlier research suggested that product packaging is an important marketing instrument that can influence consumer's perception of product quality (Venter, van der Merwe, de Beer, Kempen, & Bosman, 2011; Horsky & Honea, 2009). An empirical study by Wang (2013), showed that visual packaging directly impacted on consumer perception of product quality and brand preference in food product category. However, there is still a theoretical and empirical gap on how the design of packaging can impact purchase intention. Therefore, this study aims to identify packaging attributes, and to examine whether packaging design impacts on consumer perception of quality, value, brand preference, and repurchase intention.

LITERATURE REVIEW

Packaging

Packaging was previously believed only to have the function of protecting a product or an item or a physical object that was being sold in the market. Nevertheless,

packaging can be used as an effective communication tool to attract consumer attention thus, persuading them to purchase the product (Underwood & Ozanne, 1998). Furthermore, packaging serves as a 'protector' to 'information provider' and 'persuader' (Agariya, Johari, Sharma, Chandraul, & Singh, 2012). Nowadays, packaging attributes, such as size, shape, text colour, material, and graphics, are often used as an important marketing tool to achieve marketing objectives to ensure customer satisfaction (Rundh, 2013). Moreover, it plays an essential part in the branding process to communicate company's image and identity thus differentiating the company from its competitors. Also, packaging is an effective sales promotion tool that stimulates impulse-buying behaviour.

Based on its cognitive processing, packaging has two attributes: (1) verbal cues; and (2) visual cues (Gedara, Kauppinen, & Louarn, 2015). In the verbal cues, a cognitive process needs a certain intentional effort, whereas in visual cues the cognitive process is conducted unconsciously and unintentionally (Muller et al. 2010). Moreover, visual cues require a product to have certain physical and psychological benefits in order to attract consumer attention. According to Adam and Ali (2014), these packaging visual elements could be classified into size, graphics, colour, and design.

Perceived Quality

According to Zeithaml (1988), perceived quality is consumer evaluation about a product's superiority. Also, perceived quality is seen as: (1) the variance of objective or actual quality; (2) a higher level construct rather than a particular attribute of a product; (3) a global evaluation of a product; and (4) a judgment driven consumer's evoked set.

Perceived Value

According to Holbrook (2001), value was defined as the outcome of an evaluation and refers to standards, or rules, or criteria, or norms, or goals, or ideals that served as the basis for such product evaluation (Sanchez-Fernandez & Iniesta-Bonillo, 2007). According to Bolton and Drew (1991), "value" and "quality" were different concepts, although the two share certain characteristics (Sanchez-Fernandez & Iniesta-Bonillo, 2007). Both value and quality are considered as individual, and "context-dependent". In addition, perceived value is seen an essential element in the consumer's decision making process. Thus, a consumer would tend to purchase a product that gives them higher perceived value in a sense that the product would give them relatively more benefits than the cost/price the customer has to pay (Kotler & Keller, 2006).

Brand Preference

Previous studies define 'preference' as the desirability of alternative. However, according to the literature on marketing, there is no single definition of the word 'preference'. Customer preference is seen as unstable and can also be classified as either endogenous or exogenous variable.

Meanwhile, brand preference is described as brand choice that assists consumer's purchase decision thus, influencing the customer to buy a particular brand. In addition, according to Ebrahim (2011), brand preference was largely related to "consumer's predispositions" towards a brand based on the consumer's salient belief at a given period of time.

Repurchase Intention

Fornell (1992) defined repurchase intention as a possibility of a customer using a particular brand consistently (Sahin, Zehir, & Kitapci, 2012). Repurchase intention is an individual's evaluation of a chosen product or service from the same brand or company (Ahmed, 2014). The concept of 'behavioural intention' can better described repurchase intention as it not only means repurchase intention, but also word-of-mouth intentions, and complaint intentions. Previous studies have stated several important antecedents that influence a customer's intention to repurchase, such as product/service quality, past behaviour, customer satisfaction, brand loyalty, (Petrick & Backman, 2002). Fullerton (2005), and Johnson, Herrmann and Huber (2006) included service quality, brand experience, brand satisfaction, brand trust, and brand commitment as indicators to measure repurchase intention (Sahin, Zehir, & Kitapci, 2012).

Hypotheses Development

Packaging is described in the literature as measuring quality of a product which include variables known as visual packaging design, namely colour, material, shape, size, and graphics. These variables have been generally used to measure visual packaging design for food product context. According to Wang (2013), when consumers were exposed to packaging, they would have a perception of the product. This is becoming very relevant in food category where information is difficult to obtain and therefore, visual cues serve as indicators of the quality of products. Thus, the following hypothesis is proposed:

> H1: Attitude towards packaging design positively impacts on perceived quality of candy products.

Brand preference refers to a customer tendency to choose a particular product compared with the others. Therefore, as stated previously, packaging design can give company an important tool to form brand identity and belief. In this case, manufacturers who sell candy products can use packaging to inform, persuade, as well as to remind consumers. A positive visual attribute is important to develop a brand preference (Wang, 2013). Therefore:

> H2: Attitudes toward visual packaging design positively impacts brand preference

Perceived quality creates additional value for consumers. According to an empirical study by Herman, Widiasari, Lasmy and Hartono (2016), product quality positively correlated with consumer purchase decision. In addition, according to Choi and Kim (2013), the perception of

consumer on product and service quality directly impacted on value and positive perception (Choi & Kim, 2013). Therefore:

H3: Perceived candy product quality positively impacts on perceived candy product value.

Product quality perception is considered as one of the most important factors that impact purchase intentions. Previous studies have suggested a significant positive relationship between brand preference and the product quality perception (Chomvilailuk & Butcher, 2010). Therefore, the following hypothesis is developed:

H4: Perceived quality of candy products positively impacts brand preference.

Literature have suggested a significant and direct positive relationship between perceived value and brand preference (Wang, 2013). Hellier, Geursen, Carr and Rickard (2003) showed a positive relationship between purchase intention and consumers perceived benefits (Dickson & Sawyer, 1990). Finally, perceived value is seen as an important antecedent that impacts on consumer purchase intention due to its transaction and acquisition utilities (Werner, De Bondt, & Thaler, 1985). Thus, the following hypothesis is proposed:

H5: Perceived value of candy product positively impacts brand preference.

Earlier studies have suggested brand identification is an antecedent of brand loyalty. Brand identification also plays a critical role in customer brand choice and buying behaviour (Ahmed, 2014). Hossain (2006) suggested a causal association between customer's disposition of a product from particular supplier as a form of brand preference and the willingness of customer to purchase the product again. This indicates that the strength of a brand preference directly and positively impacts customer's purchase intention.
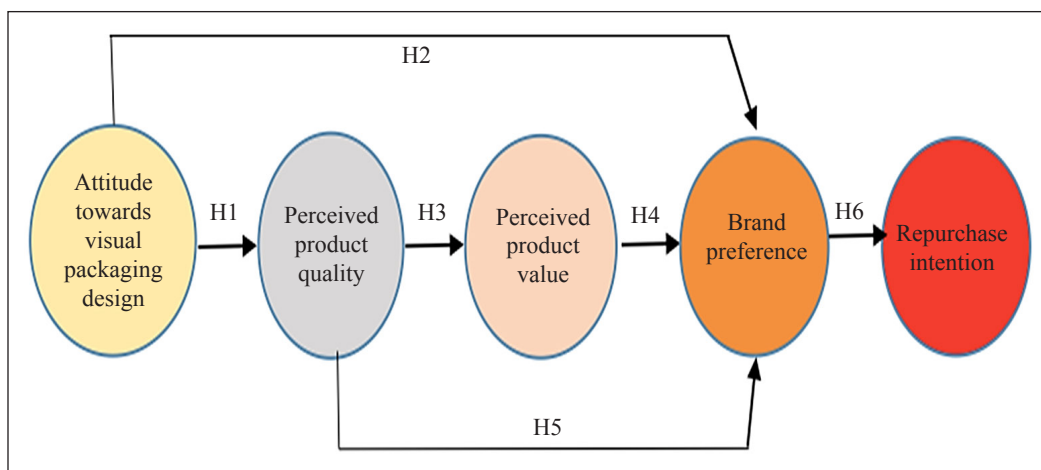

Figure 1. Framework research

MATERIALS AND METHODS

Research and Sampling Procedures

A descriptive quantitative analysis was employed in this study where six hypotheses were developed from literature and empirical studies. A non-probability and convenience sampling were employed in this research. This study explored the responses from candy consumers aged between 13 and 50 years old in Jakarta and their evaluations of the impact of visual packaging design on their brand preferences and repurchase intentions. The researchers targeted a specific age range to get objective insights from respondents about their selection motives. Children aged below 13 years old were not considered as respondents although they are consumers of chocolate and candy products as they may not have a level of understanding of the research questions. Those above the age of 50 were also excluded from the sample because many already have health concerns (Global Consumer Trends Age Demographics, 2012).

Prior to conducting a survey, the authors distributed a pre-test survey to 30 individuals to determine whether the items for each construct were reliable and valid. Finally, a full-scale survey was conducted and questionnaire was distributed online through surveymonkey.net. The authors obtained 201 valid responses.

Measurements and Data Analysis

Data was generated from questionnaires and this were designed, based on and modified from previous studies as stated previously. Attitudes toward the visual packaging construct were measured using five items (Underwood & Ozzane, 2003). Perceived product quality construct was tested using three items (Chandrashekaran, 2004). Perceived product value was tested using three items (Chandrashekaran, 2004). Brand preference was tested using three items (Davis & Newsroom, 2006). Finally, repurchase intention was measured using five items (Johnson et al., 2006). This study measured all questions using a six-point Likert scale, where: 1 = strongly disagree; 2 = somewhat disagree; 3 = disagree; 4 = agree; 5 = somewhat agree; and 6 = strongly agree. Lastly, in order to analyse respondent's profiles, this study included several demographic questions such as age, gender, education, and occupation.

Using the survey data, descriptive statistics procedure in SPSS 22 was employed in order to validate data gathered from the questionnaires. Moreover, to validate the consistency of the measurements, Cronbach Alpha was then used. Meanwhile, a validity test was conducted using Pearson Product Moment. The reliability and validity test results of the pilot-test samples indicated that the variables and indicators could be used to conduct a full-scale survey. Finally, structural equation modelling was tested using AMOS 21.

RESULTS AND DISCUSSION

The data set gathered form pre-test was further analysed using SPSS 22 to validate the results of the questionnaire. A Cronbach's Alpha test was used to validate whether the measurements were consistent. The results showed the reliability test for all variables were reliable with Cronbach's Alpha values greater than 0.6 ($\alpha > 0.6$). Additionally, all the variables used in this study had a satisfactory internal-consistency reliability. The results showed all the indicators were valid with a significance level ≤ 0.05. This indicated a relationship between the concept and the indicators used to measure the concept. Moreover, the result of both validity tests indicated the variables and indicators were valid with a significance level of ≤ 0.05.

Analysis of measurement model showed all the 19 indicators have a standardised loading factor ≥ 0.5, with Construct Validity (CV) ≥ 0.7 (ranging between 0.82 and 0.91), and Variance Extracted (VE) ≥ 0.5 (ranging between 0.55 and 0.83). Therefore, each construct and each indicator is statistically significant and sufficiently high to demonstrate they are acceptable.

The conceptual structural equation model was tested using IBM AMOS 21, also the chi-square (x^2) equals to 313.317 with norm chi-square equals to 2.123. The model shows a good fit between the conceptual model and the data with GFI = 0.855, RMSEA = 0.075, TLI = 0.904, IFI = 0.919, CFI = 0.90, AGFI = 0.811, PGFI = 0.657 (Designed cut-offs: GFI ≥ 0.9, RMSEA ≤ 0.08, TLI ≥ 0.9, IFI ≥ 0.9, CFI ≥ 0.9, AGFI ≥ 0.9, PGFI ≥ 0.5 Hair et al., 2010). As shown in Table 1 and Table 2, three hypotheses were supported (H1, H3, and H6), while the other three hypotheses were rejected (H2, H4, and H5).

The findings showed visual packaging design affected the level of product quality and product value, but not brand preference and repurchase intention. Therefore, a company can use packaging as a marketing tool to influence customers since consumers would have better perceptions of products with attractive visual design. Since graphic design is the most important attribute in packaging design for consumers, managers should put more efforts into making a design better, use a suitable packaging size and make good use of colour.

Table 1
Result p value

	Path		Estimate	Standardised estimate	S.E.	C.R.	P
PQ	<---	AD	0.48	0.528	0.08	6.009	0.000
PV	<---	PQ	0.609	0.78	0.092	6.629	0.000
BP	<---	AD	0.112	0.113	0.082	1.357	0.175
BP	<---	PQ	0.322	0.297	0.177	1.818	0.069
BP	<---	PV	0.436	0.314	0.237	1.836	0.066
PI	<---	BP	1.192	0.842	0.126	9.459	0.000

Table 2
Hypothesis result

Hypothesis	Path	P	Remarks
H1	Attitude toward visual packaging design → perceived quality	0.000	Data supports the hypothesis, thus H1 is accepted
H2	Attitude toward visual packaging design → brand preference	0.175	Data does not support the hypothesis, thus H2 is rejected
H3	Perceived quality → perceived value	0.000	Data supports the hypothesis, thus H3 is accepted
H4	Perceived value → brand preference	0.066	Data does not support the hypothesis, thus H4 is rejected
H5	Perceived quality → brand preference	0.069	Data does not support the hypothesis, thus H5 is rejected
H6	Brand preference → repurchase intention	0.000	Data supports the hypothesis, thus H6 is accepted

CONCLUSION

This study analysed the impact of visual packaging design on perceived quality, value, brand preference and repurchase intention of candy products in Jakarta. Five variables, namely attitude toward visual packaging design, perceived product quality, perceived product value, brand preference, and repurchase intention were used in this study. The findings showed packaging design has a significant impact on perceived product quality. Perceived product quality significantly and positively influenced perceived product value. These findings support those of previous research (Wang, 2013). The results of this research revealed that brand preference has a significant and positive influence on repurchase intention. This finding supports that of Hossain (2006) which revealed a causal effect between customer of product (brand preference) and the customer's willingness to purchase that product again. Additionally, brand preference has a significant positive direct impact on repurchase intention. However, this study fails to confirm the relationship between packaging design and brand preference, perceived food product value, brand preference, and perceived food product quality and brand preference. Furthermore, this research confirms that visual packaging design impacts on product quality and product value. However, this study fails to support the relationship between brand preference and repurchase intention.

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