

# A Study on Visual Packaging Elements as an Influencing Factor on Consumer Purchasing Decision

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## **Abstract-**

Some researchers found that the visual elements have entire influence towards the consumer purchasing decision but there has some disagreements on this statement that declares quality and performance of a product is vital than packaging. The objective of this research is to determine the relationship between the visual packaging elements and consumer purchasing decision, the four independent variables are colour, graphic, size and material while the dependent variable is consumer purchasing decision. This research is a quantitative method by collecting data through questionnaires. A sample size of 30 respondents among Kota Bharu's resident will be collected and tested the reliability by using SPSS software. After that, the six-point Likert-like scale questionnaire will be distributed to 384 respondents among Kota Bharu's resident with non-probability sampling technique, these data will be analyzed. Finally, the result shows that four variables have positive moderate relationship with the consumer purchasing decision and the material element is the most influence visual packaging element on the consumer purchasing decision which concludes that Packaging is a factor to influence consumer's purchase decision.

**Keywords Words:** Visual Packaging Elements; Packaging; Consumer; Purchasing Decision; Purchase Decision

## **1. Introduction**

Currently, consumers are overwhelmed with a lot of marketing stimuli. According to (Keller, Aperia, & Georgson, 2009), the consumers are revealed to over 20,000 product choices within a 30-minutes shopping session.

Packaging is one of the way that can be a powerful marketing tool that gain consumers attention in the crowded market place today (Ruban, 2009). Consequently the role of packaging in consumer purchasing decision increases. It must attract consumer's attention and transmit adequate value of product to consumer in the short period right in the place of sale. The consumers purchasing decision is stimulated by visual packaging elements which are colour, size, graphic, material and other elements.

Therefore, the purpose of this research is to determine the relationship between visual packaging elements and consumer purchasing decision. This research will focus on Kota Bharu's resident which is 384 respondents will be analyzed. The findings of this study can contribute the consumers, manufacturers and researchers to have better understanding on the vital of various packaging elements, strengthen their marketing strategy to compete in the competitive market and improve the relationship between consumers.

## **2. Literature Review**

Since two-thirds of stimuli reach the brain through the visual system, it is an important expression that consumers learn to communicate through packaging non-verbally (Zaltman, 1997). In this research, visual elements of packaging, namely colour, graphics, size and material are among the determining factors that are meant to affect the consumer purchasing decision.

The package design is a vital part of product strategy, the results on a research 'The verbal and visual components of package design' indicated that 73 percent of purchasing decision of products are made in the point of sale (Rettie, 2000). Consumer purchasing decision is influenced by the four prima packaging elements which can be divided into visual and informational elements (Silayoi, 2004). According to the (Olawepo, 2015), academic reviews on 'the impact of packaging on the purchasing decision, brand and also the perceptions of the product' have shown experiential proof on the following vital aspects. First is identification, the package appearance influences the consumers on identifying the brand during the consumers are unfamiliar with the brand. Second is communication, the package appearance affects the assessment of the core product with positive influence on brand beliefs and package attributes. Third is impact on attributes, package appearance influences on brands, packages attitudes and purchase intentions. Non-verbal signs such as colour and shape impact the consumers during their shopping has time-pressure.

Colour plays an important role in a potential customer's decision making process. Certain colours set different moods and help to draw attention. Colours can foster a strong association to impact on consumers' thoughts, feelings, and behaviours (Labrecque, 2013). According to (Singh, 2006), it is estimated that the persons' assessments and evaluations that based on colours alone has possess 62 to 90 percent. At the point of purchase, it is able to link the information of product to consumers which

catches their attention and influence their judgment (Kauppinen- Räisänen, 2014). The expectation of consumer to prefer certain types of colour when buying a product makes colour become an essential component in packaging (Keller et al., 2009) Consumer define colours differently according to their perception and culture. Most religions supposed to have their sacred colours and people develop colour perceptions based on their cultures (Singh, 2006). Consumers who are rush in today's chaotic lifestyle has make their purchase decision by relying on packaging colours (Kauppinen- Räisänen, 2014). In view of that, it is concluded that packaging colour is a stimulus-based information that consumers' could take advantage of it.

Graphics includes image layout, colour combinations, typography, and product photography, and the total presentation communicates an image. Pictures on packaging draws attention, communicate brand meaning, affect sensory product information, make them more attractive, and evoke an emotional response. The emotional response of consumers to pictures was elicited in form of getting attracted and impressed by the product and considering the package as brand communication vehicle (Underwood, Klein, & Burke, 2001). Graphics help consumers find the brand of their choice by cutting through clutters at retail stores and if they do not have any strong preference of a brand then graphics at least gain their attention to consider a particular product for evaluation. When consumer do not go for much consideration and decision making process for a product then graphics pushes their choice (Silayoi, 2004).

Packaging size also effects consumer purchasing decision when the quality of the product is quite difficult to determine. Based on an investigation done by (Rundh, 2013) on packaging, it shows that change in the size of household in effect changes the product size. Dependent upon research finished on the size quality for packaging by (Arun Kumar Agariya, 2012) demonstrates that different packaging size will be manner on augment a product under new market. An additional examine for packaging size reveals to that more modest or smaller packaging size need aid acknowledged by consumer of smaller family and that the extensive size for packaging communicated those waste of item to them. Size shows information about the packages in being convenient to carry and use. The size has makes the consumer to think the package that have a better volume of product and efficiency in cost (Garber, 2009). The consumer is willing to purchase a product in smaller packages when it has shorter expiry date.

Material element plays an important role in consumer purchasing decision which can affects the visual effect of packaging and perceive quality of a good. Materials that are used can affect the perceive quality of a good. Some packaging materials are important to be made in the way that it could bear the level of high temperature in oven or microwave or lower level of temperature below zero based on the consumer needs and product functionalities (P R Smith, 2004). Each company or producers need to have knowledge about the advantages and disadvantages of the particular packaging material and also understand how it can be used to differentiate the product. Material has its own quality, high quality of material protects the goods better than low quality of material (Shah, Ahmed, & Ahmad, 2013). This shows that it affect the consumer purchasing decision. Consumer will be more attracted to the high quality of packaging then low quality packaging.

### 3. Research Methodology

This research is based on quantitative method to see the relationship between visual packaging elements and consumer purchasing decision. In this research, the respondents were selected among population area who purchases the product in Kota Bharu, Kelantan. A sample size of 384 respondents among Kota Bharu' resident was selected by referring the table of Determining Sample Size for a Given Population (Krejcie, 1970) to collect the data and information intended to answer the research question. The convenience sampling method was employed on this research, it is a non-probability sampling method where subjects are selected because of their convenient accessibility and similar habits to this research.

A deductive approach was used where all the data were collected by using the questionnaires. The questionnaire uses the balanced six-point Likert-like scale questionnaire as the main research instrument to collected data from respondents in order to find out the visual packaging elements that have an impact on consumer purchasing decision. The questionnaire divided into 3 sections which is Section A, Section B and Section C. Section A consist of questions about the respondents' background information, Section B contains questions related to the independent variables namely: colour, graphic, size and material while Section C provides questions about the dependent variable, which is consumer purchasing decision. Each variable in Section B and Section C has 5 questions. A pre-testing was conducted by distributing 30 questionnaires to the resident in Kota Bharu, Kelantan.

These methods were used to achieve the objective by identifying the relationship between visual packaging elements and consumer purchasing decision among Kota Bharu's resident who has similar habit and convenient accessibility to this research. The findings indicate the vital of visual packaging elements to influence on consumer purchasing decision of Kota Bharu's resident while we have observed that they prefer more on the products' quality and performance.

### 4. Data Analysis

This section is a systematic presentation of data about pilot test and questionnaire that includes Reliability Analysis, Descriptive Analysis and Pearson's Correlations Coefficient.

#### 4.1. Reliability Analysis

Reliability Analysis is to test and check the reliability value of pilot test. The value more than or equal to 0.6 on Alpha Coefficient range shows that the data is moderate reliability and accepted.

**Table 1. Cronbach alpha coefficient for this study**

Variables	Cronbach's Alpha	Number of items	Strength of Association
Overall	0.849	25	Very Good
Colour	0.709	5	Good

Graphic	0.690	5	Moderate
Size	0.760	5	Good
Material	0.647	5	Moderate
Consumer Purchasing Decision	0.711	5	Good

Based on table 1, the value of Cronbach’s Alpha for all variables is 0.849, its reliability result is very good. Variable of colour, size and consumer purchasing decision show 0.709, 0.760 and 0.711 on Cronbach’s Alpha Coefficient in the category of “Good (0.7 <0.8)”. Meanwhile, graphic and material variables show 0.690 and 0.647 on Cronbach’s Alpha Coefficient in the category of “moderate (0.6 <0.7)”.

Since all variables have “Good” and “Moderate” value on Cronbach’s Alpha, the questionnaire for pilot test is reliable on the reliability test. Therefore, 384 sets of questionnaires with Likert scale had been distributed to the residents in Kota Bharu.

#### 4.2. Descriptive Statistics Analysis

This section discusses about the number of respondents (N), the mean and standard deviation of each variable. Mean value shows the central tendency of each variable’s value while the standard deviation shows the idea regarding the dispersion of the values of each variable from its mean value.

**Table 2. Descriptive Statistics of Independent Variables and Dependent Variable**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
Consumer Purchasing Decision	384	4.6802	0.58673
Colour	384	4.6396	0.65953
Graphic	384	4.7328	0.65848
Size	384	4.6344	0.66172
Material	384	4.7229	0.60052

Based on the table 2, the mean values of four independent variables which are colour, graphic, size and material are 4.6396, 4.7328, 4.6344 and 4.7229 respectively. All the values are between the range of Likert Scale 4 to 5, (4: slightly agree and 5: agree), so the majority is in the range of slightly agree and agree.

For standard deviation, the values of four independent variables which are colour, graphic, size and material are 0.65953, 0.65848, 0.66172 and 0.60052 respectively. This shows that all the values are not

too polarized from the mean that is slightly low and the dispersion is slightly low and slightly low variance.

### 4.3. Pearson Correlation

#### 4.3.1. Hypothesis: 1

H1: There is positive relationship between colour and consumer purchasing decision.

**Table 3. Correlation between colour and consumer purchasing decision**

	N	Consumer Purchasing Decision	Colour of Packaging
<b>Consumer Purchasing Decision</b>	Pearson Correlation	1	0.429
	Sig. (2-tailed) N	384	0.000
<b>Colour of Packaging</b>	Pearson Correlation	0.429	1
	Sig. (2-tailed) N	0.000	384

Table 3 shows the Pearson Correlation Analysis between Colour and Consumer Purchasing Decision. The p-value which is less than 0.05 is rejected. Thus, H1 is accepted because the p-value is 0.000 which is less than 0.05. The Pearson Correlation Coefficient value is 0.429. Since 0.429 is between 0.41 and 0.70, it indicates a positive moderate relationship between Colour and Consumer Purchasing Decision.

#### 4.3.2. Hypothesis: 2

H2: There is positive relationship between graphic and consumer purchasing decision.

**Table 4. Correlation between graphic and consumer purchasing decision**

	N	Consumer Purchasing Decision	Graphic of Packaging
<b>Consumer Purchasing Decision</b>	Pearson Correlation	1	0.468
	Sig. (2-tailed) N	384	0.000
<b>Graphic of</b>	Pearson	0.468	1

<b>Packaging</b>	Correlation		
	Sig. (2-tailed) N	0.000	384

Table 4 shows the Pearson Correlation Analysis between Graphic and Consumer Purchasing Decision. The p-value which is less than 0.05 is rejected. Thus, H2 is accepted because the p-value is 0.000 which is less than 0.05. The Pearson Correlation Coefficient value is 0.468. Since 0.468 is between 0.41 and 0.70, it indicates a positive moderate relationship between Graphic and Consumer Purchasing Decision.

#### 4.3.3. Hypothesis: 3

H3: There is positive relationship between size and consumer purchasing decision.

**Table 5. Correlation between size and consumer purchasing decision**

	N	Consumer Purchasing Decision	Size of Packaging
<b>Consumer Purchasing Decision</b>	Pearson Correlation	1	0.469
	Sig. (2-tailed) N	384	0.000
<b>Size of Packaging</b>	Pearson Correlation	0.469	1
	Sig. (2-tailed) N	0.000	384

Table 5 shows the Pearson Correlation Analysis between Size and Consumer Purchasing Decision. The p-value which is less than 0.05 is rejected. Thus, H3 is accepted because the p-value is 0.000 which is less than 0.05. The Pearson Correlation Coefficient value is 0.469. Since 0.469 is between 0.41 and 0.70, it indicates a positive moderate relationship between Size and Consumer Purchasing Decision.

#### 4.3.4. Hypothesis: 4

H4: There is positive relationship between material and consumer purchasing decision.

**Table 6. Correlation between material and consumer purchasing decision**

	N	Consumer Purchasing	Material of
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		Decision	Packaging
<b>Consumer Purchasing Decision</b>	Pearson Correlation	1	0.533
	Sig. (2-tailed) N	384	0.000
<b>Material of Packaging</b>	Pearson Correlation	0.533	1
	Sig. (2-tailed) N	0.000	384

Table 6 shows the Pearson Correlation Analysis between Material and Consumer Purchasing Decision. The p-value which is less than 0.05 is rejected. Thus, H4 is accepted because the p-value is 0.000 which is less than 0.05. The Pearson Correlation Coefficient value is 0.533. Since 0.533 is between 0.41 and 0.70, it indicates a positive moderate relationship between Material and Consumer Purchasing Decision.

## 5. Conclusion and Recommendation

### 5.1. Conclusion

The packaging is vital for companies to attract the consumer attention in the competitive market place by creating right packaging for their products, the companies must understand the consumer purchasing decision and the visual elements of packaging that can influence the consumer purchasing decision.

Based on the obtained result on the visual packaging elements as an influencing factor on consumer purchasing decision, the four visual packaging elements represent positive moderate relationship with Consumer Purchasing Decision. It shows a good valuable tool for today's marketing communications towards consumers since the consumers estimate the visual elements of packaging that are presented on the package.

The colour on packaging assists consumers to differentiate their preferred brand and products easily which can be an implement for companies to catch attention and interest from customers.

From the obtained result, the graphic can also facilitate the consumers to recognize a brand and product easily. For the companies, a vivid graphic can be designed to attract the attention of consumers.

Moreover, the size of packaging can create a new target markets for the products to solve the problems of cost barriers. Consumers consider to buy the suit size and reasonable price of its size during shopping.

From the result analyzing, the materials of packaging provides protection function for the products and affect the perceived quality of consumers, the consumers will make a purchasing decision by concerning the materials of packaging.



In conclusion, the material element is the most influence visual packaging element on the consumer purchasing decision and packaging is a factor to influence consumer's purchase decision among the resident of Kota Bharu while they prefer more on the quality and performance of the products.

## **5.2. Recommendation**

Firstly, the marketing and commercial unit should implement the visual packaging elements including colour, graphic, size and materials on the packaging that have influence on consumer purchasing decision in order to catch the attraction of the consumers. These companies can conduct several surveys to understand the good standard packaging from the consumers that have different requirement and different lifestyle. This will lead to boost the competitive advantages and market share for the companies.

Secondly, the marketing and commercial unit are highly recommended to learn more and pay appreciate attention for good packaging by specifying a standard packaging as a strategy to produce a better protection for the products. Better protection and special design of a packaging is vital to keep product quality. The products failure will happen when the marketing and commercial unit introduce to the poor packaging into a competitive market.

Thirdly, this is necessary for the companies to learn more on the consumer attributes that pursue to obtain their products with regular survey and suggestion since the customers have different requirement for the function of the packaging. For instance, an appropriate size can be designed to meet the consumers that require for individual size or family size and convenience matter. The size of the packaging can create a new market for the products which can attract new target market to purchase the products.

Fourthly, the packaging can be a good attention to be a promotional role of packaging to attract more consumers to purchase the products and to be a strength to differentiate their products that are special from other products. The visual elements on packaging can be a media to present the quality and attraction of a packaging, in addition the easy instruction and function on the packaging such as easy open, close and handle is vital to be presented to the consumers.

Fourthly, these are some institute of packaging in Malaysia that could be referred by the marketing and commercial units. One of an institute is SIRIM that provides facilitates and experts to give a worldwide recognized industrial standards and quality solution to the business with offering a comprehensive and varied range of measurement services on packaging design service. Furthermore, Institute of Packaging Professionals (IoPP) is one of the institute for the authoritative packaging association that help the educational essentials of the packaging community.

Final recommendation, Lembaga Kemajuan Kelantan Selatan (KESEDAR) and Pusat Pembangunan Keusahawanan & Kemahiran Kelantan (KESDEC) could conduct more campaigns and seminars in Kota Bharu area in order to advocate Kota Bharu's resident to understand more the benefits of visual elements of packaging.

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