Impact of Product Packaging on Consumer’s Buying Behavior

Rizwan Raheem Ahmed¹, Vishnu Parmar² and Muhammad Ahmed Amin³
rizwanraheemahmed@gmail.com and rizwan.raheem@indus.edu.pk
Tel: +92-300-8293560 & +92-321-8400465

¹³Department of Business Administration & Commerce, NDUS UNIVERSITY, KARACHI
²Institute of Business Administration, SINDH UNIVERSITY, JAMSHORO

Abstract: The objective of this study is to determine role of packaging on consumer’s buying behavior. The purpose of this research is to examine the essential factors, which are driving the success of a brand. This research also identified the relationship between the dependent and independent variables. This is the primary research and data has been collected through questionnaire and for analysis purpose SPSS software has been used. In this study samples of 150 respondents has been collected and tested the reliability of the model. According to the finding of the research study, it has been observed that the packaging is the most important factor. It is further concluded that the packaging elements like its Colour, Packaging material, Design of Wrapper and innovation are more important factors when consumers making any buying decision. Finally it has also been concluded that the Packaging is one of the most important and powerful factor, which influences consumer’s purchase decision.

Key Words: Packaging, Buying behavior, Purchase decision, independent & dependent variables

1. INTRODUCTION

Now, packaging has become itself a sales promotion tool for the organizations. The consumer’s buying behavior also stimulated by the packaging quality, color, wrapper, and other characteristics of packaging. Packaging is a whole package that becomes an ultimate selling proposition, which stimulates impulse buying behavior. Packaging increases sales and market share and reduces market and promotional costs. According to Rundh (2005) package appeals consumer’s attentiveness towards a certain brand, increases its image, and stimulates consumer’s perceptions about product. Furthermore, packaging conveys distinctive value to products (Underwood, 2003; Silayoi, & Speece, 2007), packaging works as an instrument for
differentiation, and helps consumers to decide the product from wide range of parallel products, packaging also stimulates customer’s buying behavior (Wells, Farley & Armstrong, 2007).

Previous researches show that there is no agreement on overall classification of packaging material and package elements. There is also disagreement regarding the methods of package impact on consumer’s buying behavior decision. Several researchers attempt to examine all potential elements of packaging and their effect on consumer’s buying decision (Butkeviciene, Stravinskiene, & Rutelione, 2008), however others focus on distinct elements of packaging and their influence on consumer purchasing behavior (Ampuero & Vila, 2006; Madden, Hewett, & Roth, M, 2000; Underwood, Klein, & Burke, 2001; Bloch, 1995). Furthermore, some researchers explore the impact of packaging and its features on consumer’s whole purchase decision (Underwood, Klein, & Burke, 2001), whereas, some others – on each step of consumer’s decision making process (Butkeviciene, Stravinskiene, & Rutelione, 2008).

Brand image and advertisement have strong positive influence and significant relationship with Consumer’s buying behavior. People perceive the brand image with positive attitude. Study depicted that teenagers in Gujranwala are more conscious about their social status so they prefer branded products and advertisement affects on their Consumer Buying Behaviour positively (Malik, Ghafoor, Iqbal, Ali, Hunbal, Noman, and Ahmed, 2013).

The purpose of this research is constructed on hypothetical analysis of packaging components and their influence on consumer’s buying behavior decision. This empirical study uncovers the features, which are having the eventual influence on consumer’s choice, when multiple and different choices are available.

1.1. Objectives of the Study

• To Find Out the effect of packaging on the buying behavior decision.
• To check the effect of packaging elements on the buying behavior.
• To measure the relative impact of each packaging element on the consumer.
• To identify the elements, which should be highlighted while design the packaging.

1.2. Research Question

To identify the role of packaging on consumer buying behavior decision

2. Previous Research

Packaging acts multidimensional functions. It offers knowledge about the product and organization, a technique to communicate with consumers and safeguard to the quality of product (Silayoi & Speece, 2007). According to Rita Kuvykaite1 (2009) the study reveals the self-service and changing consumers’ lifestyle having the ultimate effect on consumer choice. Increase in impulse buying behavior labeling is also communicating to the customer.

Saeed, Lodhi, Mukhtar, Hussain, Mahmood and Ahmad (2013), integrate the brand image, brand attachment and environmental effects and their impact on consumer purchase
decision. Results elaborates that brand image don’t have a positive relation with purchase decision, brand attachment has a moderate positive relation with purchase decision and environmental effects but don’t have a positive relation with purchase decision.

The consumers purchase more quantity of the products, after looking a well-labeled product. Therefore labeling influences the consumer buying behavior, but there are some other factors also, which influence the consumer buying behavior (Saeed, Lodhi, Rauf, Rana, Mahmood & Ahmed, 2013).

In recent times, people are becoming more concerned towards green purchasing because of a grown consciousness for environmental protection. Green purchasing is essentially the act of buying environmental friendly products. The research model in this study examines the consequences of predictor variables (environmental concern, organizational green image and environmental knowledge) upon criterion variable (green purchase intention) with the moderating effect of perceived product price and quality (Underwood, 2003; Rettie & Brewer, 2000; Barber, Almanza, & Donovan, 2006). Adelina & Morgan (2007) conclude that Packaging could be treated as one of the most valuable tool in today’s marketing communications; Packaging has an important impact on consumers buying behavior. The impact of packaging and its elements can impact the consumer’s purchase decision.

According to Karbasivar & Yarahmadi (2011), more apparel impulse buying and promotional approaches (cash discount) usage between sample, as well as in-store form display (window display) has important role to encourage consumers to buying impulse. They can gift complementary products to encourage consumer to buying impulse. Also sealers can increase apparel impulse buying with decorating their stores in modern style and use attractive lights and colours. The result of the study proves that there is a pivotal relationship between window display, credit card, promotional activities (discount, free product) and consumer impulse buying behaviour (Alice, 2006).

According to Erzsebet & Zoltan (2007) both the qualitative and quantitative research showed that respondents adopted similar risk reduction strategies in their purchase of baby care products. This research investigated consumer perceptions and buying behavior of baby care products. The results of the primary research showed that consumers’ needs satisfied with the product in terms of reliability and performance and packaging.

According to Butkeviciene, Stravinskiene and A. Rutelione (2008), impulse buying is indeed a relevant factor in CE retailing, thus justifying the use of sales packaging. However, optimization is still important. From an economical and environmental perspective it is very costly to apply sales packaging (with additional material use and transport volume) to products that do not need them, or to apply them in an ineffective way.

Saeed, Lodhi, Mukhtar, Hussain, Mahmood and Ahmad (2011), integrate the brand image, brand attachment and environmental effects and their impact on consumer purchase decision. Results elaborates that brand image don’t have a positive relation with purchase decision, brand attachment has a moderate positive relation with purchase decision and environmental effects but don’t have a positive relation with purchase decision.
3. RESEARCH METHODOLOGY

3.1. Theoretical Framework

The theoretical framework between independent and dependent variables can be expressed as follows:

<table>
<thead>
<tr>
<th>Independent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Color</td>
</tr>
<tr>
<td>Packaging Material</td>
</tr>
<tr>
<td>Design of Wrapper</td>
</tr>
<tr>
<td>Innovation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer’s Buying Behavior</td>
</tr>
</tbody>
</table>

3.1.1. Independent Variable

- **Packaging color**
  Color plays an important role in a potential customer’s decision-making process, certain colors set different moods and can help to draw attention.

- **Packaging Material**
  Any material used especially to protect something- packing, wadding. Consumer can change its decision regarding Packaging material. High quality Packaging attract consumer then low quality Packaging. So packaging material has strong impact on buying behavior.

- **Design of wrapper**
  The overall design also plays a vital role in attracting the consumer. Mostly the children of 10-18 years are so sensitive to the design of wrapper. The companies try their best to create attractive design of packaging.
• **Innovation**
  Innovative packaging may actually add value to the product if it meets a consumer need such as portion control, recyclability, tamper-proofing, child-proofing, easy-open, easy-store, easy-carry, and non breakability.

3.1.2. **Dependent Variable**

Consumer Buying Behavior

3.2. **Tools of Data Collection:**

In order to find data on role of packaging on consumer buying behavior, we will collect data on four variables: The first benefit to use questionnaire technique is that result.

3.3. **Sampling Technique & Sample**

The population of my study will be students and educational institutions of Karachi in which the sample size of 150 students will be taken for conducting the study by using simple random sampling in order to generalize the finding in the particular sector.

3.4. **Measures**

There were at least 13 questions in the survey obtaining data for one variable and some questions were directly obtaining with no complications. Measure for each variable is defined below:

Each variable was measure by asking the seven questions by using the 5-points itemized rating type scale ranging from (1) strongly disagrees to (5) strongly agree.

3.5. **Methodology for Analysis of Data**

To make analysis of data it will use SPSS software in which we will make analysis in to two parts where part one will lead descriptive statistics that will be use to describe and summarize data and include measures of central tendency (average) and dispersion (the spread of data or how close each other is to the measure of central tendency).

3.5.1. **Descriptive analysis**

It is used first techniques for generating result is descriptive statistics. It shows minimum, maximum, and mean values of data.

3.5.2. **Correlation**

The Pearson's correlation is used to find a correlation between at least two continuous variables. The value for a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect
correlation). Other factors such as group size will determine if the correlation is significant. Generally, correlations above 0.80 are considered pretty high.

4. DATA ANALYSIS & FINDINGS

4.1. Descriptive Analysis

The results of descriptive analysis show as follows:

Table: 1
Descriptive Statistics (Buying Behavior)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Behavior</td>
<td>150</td>
<td>1</td>
<td>5</td>
<td>3.74</td>
<td>0.931</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the above table 1 the minimum values, maximum values, mean values and the values of standard deviation of dependent Variable have been shown. Mean value provides the idea about the central tendency of the values of a variable. Number of observations of each variable is 150. Standard deviation and the extreme values (minimum in comparison to Maximum value) give the idea about the dispersion of the values of a variable from its mean value. The Minimum value is 1 while Maximum value is 5. The Mean value is 3.74 with standard deviation of 0.931.

Table: 2
Descriptive Statistics (Packaging Color)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing Color</td>
<td>150</td>
<td>1</td>
<td>5</td>
<td>3.65</td>
<td>0.944</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the above table 2 the minimum values is 1, maximum values 5, and mean values 3.65 while the values of standard deviation is 0.944. Mean value provides the idea about the central tendency of the values of a variable. Number of observations of each variable is 150.

Table: 3
Descriptive Statistics (Quality Packing)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Packing</td>
<td>150</td>
<td>1</td>
<td>5</td>
<td>3.75</td>
<td>0.925</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table 3 the minimum value of 1 and maximum value of 5. The values can be deviated by 0.925, which means that the mean value can varied by +0.925 or - 0.925. The mean value is 3.75.
Table: 4
Descriptive Statistics (Wrapper Design)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrapper Design</td>
<td>150</td>
<td>1</td>
<td>5</td>
<td>3.69</td>
<td>0.897</td>
</tr>
</tbody>
</table>

In the above table 4 the minimum values is 1, maximum values 5, and mean value is 3.69 whereas, the values of standard deviation is 0.897. Mean value provides the idea about the central tendency of the values of a variable.

Table: 5
Descriptive Statistics (Packing Innovation)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing Innovation</td>
<td>150</td>
<td>1</td>
<td>5</td>
<td>3.65</td>
<td>0.965</td>
</tr>
</tbody>
</table>

In the above table 5 the minimum values is 1, maximum values 5, and mean value is 3.65 whereas, the values of standard deviation is 0.965. Mean value provides the idea about the central tendency of the values of a variable.

4.2. Pearson Correlation

4.2.1. Hypothesis: 1

H1: there is relationship between Buying Behavior and Packing color

Table: 6
Correlation b/w Buying Behavior & Packing Color

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Buying Behavior</th>
<th>Packing Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Behavior</td>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed) N</td>
<td>150</td>
<td>0.000149</td>
<td></td>
</tr>
<tr>
<td>Packing Color</td>
<td></td>
<td>Pearson Correlation</td>
<td>0.589</td>
</tr>
<tr>
<td>Sig. (2-tailed) N</td>
<td>0.000149</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)
Table 6 represents the table of correlations. Where two variables – buying behavior and Packing color – are positively correlated ($r= 0.589, p = 0.000149$). There is moderate relation between these two variables, which is significant. So Hypothesis is accepted. So we can say that the attractive packaging color can attract consumer. Consumer likes the colored packaging. It also implies that using attractive colors in packaging we can grab customer attention.

4.2.2. Hypothesis: 2

H2: there is relationship between Buying Behavior and Quality of Packing.

Table 7 represents the table of correlations. Where two variables buying behavior and Quality of Packing are positively correlated ($r= 0.539, p = 0.000145$). There is moderate relation between these two variables, which is significant, So, H2 cannot reject. The result is clearer that the consumer also evaluates the products on the behalf of its packaging quality. Customer proffers the better quality of package.
4.2.3. Hypothesis: 3

H3: there is relationship between Buying Behavior and Wrapper Design.

Table: 8
Correlations b/w Buying Behavior & Wrapper Design

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Buying Behavior</th>
<th>Wrapper Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Behavior</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.421</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) N</td>
<td>150</td>
<td>0.000149</td>
</tr>
<tr>
<td>Wrapper Design</td>
<td>Pearson Correlation</td>
<td>0.421</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) N</td>
<td>0.000149</td>
<td>150</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 8 represents the table of correlations. Where two variables buying behavior and Wrapper Design are positively correlated (r= 0.421, p = 0.000149). There is moderate relation between these two variables, which is significant. Therefore, Hypothesis: H3 is accepted.

4.2.4. Hypothesis: 4

H4: there is relationship between Buying Behavior and Packing Innovation.

Table: 9
Correlations b/w Buying Behavior & Packing Innovation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Buying Behavior</th>
<th>Packing Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying Behavior</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>0.554</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) N</td>
<td>150</td>
<td>0.000145</td>
</tr>
<tr>
<td>Packing Innovation</td>
<td>Pearson Correlation</td>
<td>0.554</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) N</td>
<td>0.000145</td>
<td>150</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Table 9 represents the table of correlations between two variables buying behavior and Innovation, which is positively correlated (r= 0.554, p = 0.000145). There is moderate relation between these two variables, which is significant. So, there is a significant relationship between Buying Behavior and Packing Innovation.
5. CONCLUSION & RECOMMENDATION

5.1. Conclusion

Results of research study regarding the role of packaging on consumer’s buying behavior stipulated following conclusions:

➢ Packaging could be treated as one of the most valuable tools in today’s marketing communications, necessitating more detail analysis of its elements and an impact of those elements on consumer’s buying behavior.

➢ Appropriate and vivid picture or packaging color, which delivers them a happy feeling, or an easy handle/open/dose/dispose, package shape. All these elements contribute each important effort to catch consumer’s attention and interest. Besides each element’s single function, we think that a good combination of these elements may lead the product more eye-catching and attractive.

➢ Analyzing an importance of its separate elements for consumer’s choice reveals the impact of packaging and its elements on consumer’s purchase decision. For this purpose main package’s elements has been identified: graphic, color, size, form, and material of packaging are considered, wrapper design, innovation while product information, producer, country-of-origin and brand are considered as important ones. Moreover, the impact of package elements on consumers purchase decisions has been evaluated, and it is concluded that it depends on the consumer’s involvement level, time pressure or individual characteristics of consumers.

➢ It has been Empirically tested the proposed research model, package elements, which are having the ultimate effect on consumer choice; in a case of different products from group of convenience goods were available.

➢ It has also revealed that elements of packaging are the most important for consumer’s purchase decision. For a major part of consumers’ attraction was a size of package and material are the main visual elements, whereas, product information is also the main verbal elements when purchasing milk and washing-powder.

➢ Results analyzing the impact of package elements on consumers purchase decisions, depending on level of involvement correspond with those of theoretical studies and that visual elements of package have relatively stronger influence on consumer’s purchasing behavior when they are in the level of “low involvement”, in contrary to those who are in the level of “high involvement”.

➢ Packaging has a better reach than advertising does, and can set a brand apart from its competitors. It promotes and reinforces the purchase decision not only at the point of purchase, but also every time the product is used. Packaging in different serving sizes can extend a product into new target markets or help to overcome cost barriers. Packaging can even drive the brand choice (especially in the context of children’s products).

➢ This Research has found that different packaging cues impact and how a product is perceived. Often the packaging is perceived to be part of the product and it can be difficult for consumers to separate the two (the concept of gestalt). Aspects
such as packaging color, typography, illustrations and graphics can influence how a product is perceived.

- According to this research, it is concluded that most consumers like the product quality after they purchased their desired packaged product. Based on those facts, we cannot say there is a 100% equal relationship between good package and good product quality, but there is a positive thinking and trend about well-designed package shows high product quality.

- As a matter of fact, people are becoming more and more demanding; packaging has been gradually shown its important role in a way to serve consumers by providing information and delivering functions. With its different functionality to ease and to communicate with consumers, there is no doubt about increasingly important role of packaging as a strategic tool to attract consumers’ attention and their perception on the product quality.

- New product manufacturers mostly use the labels in their products. Basically they describe that when made it, where it was made, how it was made, what it contains, how to use it etc. Furthermore, they believe that labels to use the products properly guide the consumers. The information given in the label and its value have to be highlighted while promoting the product in the market. It must also be more useful technique

### 5.2. Recommendation

- It is highly recommended to the marketing and business units that they should pay proper attention for good packaging. If they accept or introduce the poor packaging then it could be one of the causes of product failure in the market. It is necessary to set the packaging standard and to implement strategy accordingly for better protection and promotion of a product.

- Researcher believes that culture difference does have an impact on companies’ initiatives to design the product package, for instance, during our research; the choices of packaging colors are quite different between the West and Far East. Thus, it is recommended that it is important for international companies to take a consideration of culture differences when they design the product package in different parts of the World.

- It is finally recommended that the marketers of the industry should not consider the packaging is the solely factor for the success of any product, therefore, they should also take up other important factors of the marketing while they are launching new products or revitalize old products.

- It is also recommended to other researchers when they take up packaging then they should also consider other factors and dimensions of marketing as well.
References


[21]. Alice, L., 2006, the power of packaging, United States of America, pp. 186-216.


