Impact of Product Packaging on Consumer Perception and Purchase Intention

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Abstract
The purpose of this study is to evaluate the influence of packaging over consumer buying behavior (consumer perception and purchase intention), and to observe how these factors effect consumer’s decision of purchasing a product. The objective of this research is to find out those elements behind the success of product packaging. The target population for this research is the different places of the Pakistan. For getting the response 120 quantities questions were distributed and by using of the SPSS software to revile research result interpreting on the correlation ad regression analysis were made. The research finds out the intended variables and claims that it is beneficial for all type of organizations.

Keywords: Elements of Packaging, Consumer Purchase Behavior, Perception and Purchase Intentions

1. Introduction
In recent environment, there are large numbers of companies which also deliver the identical product in market. In this competitive environment packaging become effective tool to capture the consumer purchase intention (Ranjbarian, 2009). An American consumer faces experience of 20,000 products in single visit to supermarket in 30-minute shopping session (Belch & Belch, 1999). In this competitive environment packaging help to differentiate the product or achieve competitive edge (Klimchuk & Krasovec, 2007). According to (Nilsson & Ostrom) graphic includes name, typography and structure design include size of packaging or products. All packaging dimension have positive effect on consumer brand experience and purchase decision, it lead toward the brand loyalty. Packaging becomes useful tool to convenience marketers to capture the customer attraction and get competitive advantage or competitors. Color of packaging is important because of this part is differentiate to other company products. Packaging color is the more attention the customers about products. In competitive environment company used different packaging color for attractive and remind the consumers. Packaging material is also important factors because that the prevent looses, if material used sufficient then customers are attractive to the products. Font style is print on the packaging according to the customers perception, because those companies which used the best font style capture market successfully. There are three type of perception (i) Somaesthetic or Hearing visual (ii) Gustative (iii) Kinesthetic perception. (Gallen & Sirieix, 2007).

Packaging perform the important rule for the attracting the customers. The children more intention on design of wrapper, so organization design the wrapper make for the children as well as. Suggestion is that information to catch the consumers and have huge effective on young adults and buying attitude (Renaud Lunardo 2007). Printed information provide detail of the product how make it and how use it will. Due to enhancing the competition in daily life so the product packaging has come to play a more important role as a brand communication vehicle. Packaging decision is to be considered first marketing plan in total marketing strategy (Panwar, 2004)Taleghani et al(2011) introduced that service, quality, usage & storage have also impact on consumer satisfaction. When consumer is satisfied then they repurchase the product of that brand.Rentie&Brewer (2000) believe that more than 73%of purchase decision is depend on the product storage, selling
place. Mustafa (2007) says that consumer purchase of product is highly depending on the product environmental safety. The most important aspect of the product is the packaging and often to the critical factor in the success of failure of the given product (Schoell, 1985). According to the silayoi and speece (2007) following are the element of the packaging (shape, color, symbol, graphics patterns, pictures, size). Images are important since they may serve as a diagnostic piece of information in some product purchase situations (underwood et al., 2001). Color selection is also one of the most important components of the packaging and brand design that further increase the visual stimuli, also considered important tool for creating and sustaining the brand and make the corporate image in the consumer mind. And also strongly associated with the different brand (Madden et al., 2000). Packing shape and size have an impact on a consumer’s purchasing decision. Mostly consumers are attracted with that product which can use easily and carry (silayoi, speece 2004).

Research Gap:
The previous research focus only on how packaging help to save of product, handle and store of particular product. So our research will be help full for future marketing strategies related with how packaging help marketers convince the consumer to buy the products.

Research Objective:
The aim or objective of this paper is to cover the following areas.
- How packaging components (color, size, design, printed information) influence consumer perception?
- How effective packagings guide the marketers to gain the customer loyalty?
- How product packagings change the perception of consumers, which effect over purchase intention?

2. Literature Review

2.1 Purchase Intention
An attention capturing color helps to consumer to visually see and differentiate the competitive brand (Nilsson & Ostrom, 2005). Now a day, consumer is experiencing a lot of products when he visits the supermarket but he only purchases those products whose colors attract his attention. Color of packaging has different meaning such as a green color show the natural, secure relaxed or easy going. Red colors indicate the human excitement, hot, passionate and strong. Orange colors represent the power, affordable and informal. Brown colors show the informal and relaxed masculine nature whereas white color indicates goodness, purity, cleanliness, refinement and formality. Black color power authority and mystery. Consumer often perceived the quality by using or relating the color (Leichtling, 2002). Consumer take different meanings of different color and it relate the color with their beliefs and preferences (Lichtle, 2002). A color becomes cause to effect the consumer perception toward the price. For instance an orange color is perceived more incorrect twice than blue color of cloths in shop (Babin et al., 2003). Different studies by Roulet (2004) shows the effect of different color over consumer perception towards the quality, price and consumer attraction. His major studies were over medicines products, the use of brown, red or orange color require special safety guidelines on the opposite side. The former represent the treatment of sophisticated diseases, quickly in action and high price than blue, green and yellow.

A picture folder / icon, exercise lesson and symbols over the packaging which induce the appetite of food like products (Klimchuck & Krasovec, 2007). All that material which are often used in package design and structure have effect on the consumer emotions, perception to quality and buying behavior while Consumer like the material of package which is environment friendly (Smith, 1993; Shimp 2000). Information about benefits, key inputs used in product and its effects over health and environment is also printed over packaging (Shimp, 2000). It helps to create the trust and build the relationship among the consumers (Klimchuck & Krasovec, 2007). In the marketing packing is most important thing for any product because some time only packaging attract the consumer and they purchase product due to attractive packaging (Sauvage 1006) argue that packaging shape of the product make image of product Underwood et al 2001 noted that packaging picture is important as compare to the verbal communication because they provide more increasing and also attract the consumers (underwood 2003) suggest that some time consumer purchase the product due to their color because they give some meaning to the different color.

H2: purchase intentions have positive effect on consumer purchase behavior.

2.2 Element of packaging
Packaging includes the sub elements such as price, product, place and promotion which work with marketing tools (Cutler, 2011). In early days the value of packaging was10% then it reached to 50% of items. Now a day it is about 70% of items values. A good packaging material help to protect the product form external damaging factors, store, introduced and sale of new product. The color, font style on label and packaging structure enhance the user to create the positive image of brand. A study of consumer behavior become too important because social and psychological trait stimuli the person what is purchase and why (Rosta et al, 1997). A good design meets the modern requirement of customers which lead to the more satisfaction (Iran Manesh, 2008). The intention to packaging is also influenced by the other packaging related variables like color, image, designs, size
and shape (Kermainejad, 2007). The mediating role of perceived value and purchase intention is how customer perceived value of product. If a customer perceived high value then it affect purchase intention (James, 2002). Perceiving value has significant effect over consumer purchase intention (Chan, 1996). According to (Satish & Peter, 2004) a consumer know how about product lead to consumer decision (purchase intention). The packaging design customer knowledge and celebrity endorsement is also influence the purchase intention (Shafiq. R. et al 2011). In buying decision there are five step w which consumer pass away to within given product from problem recognition to after purchase behavior. At problem recognition the learned about what he really need and why good effective marketing communication channels also help. The consumer to reorganize his basic need and next steps involve information gathering to satisfy his requirement (Culter & Armstrong, 1998). The second last decision is also purchase decision or final selection of available alternative. The final stage of decision making innoess is after purchase behaviors which help the marketer to know about whether customer is satisfied or dissatisfied with product to overcome the next problems arrived in future. In past time the boxes; wrappers are used as packaging material (Kazem, 2003). Packaging is used as to increase the competitive advantage and increase the market share (Khakbaz, 2005). (Mccracken Mackln 1998) suggest that the picture on packaging must be related to the brand or product due to this we also attract the consumers. (Bone and France 2001 ) suggest that graphical component of the packaging make or change the belief of the consumer even on product label verbal information communicate more information as compare to the visual. Attractive packaging is necessarily for gaining the competitive edge on the competitors because now a day’s time is very shorter and very person is busy in their work so that the visual packaging is most important as compare to the verbal ( Rita Kuuykate 2009). Graphics and color are also very important in packaging because they build in the mind of customer (Grossman Wisenblit 1999)

Some time the consumer makes decision of purchase on the base of purchase on the base of some particular color because people or some person associated some particular color and they prefer that color (Madden et al 2000). If the packaging of product is large but in the original product that in the pack is small first time the customer purchase but next time they not purchase that product again (Raghibir Karishina 1999). (Prendergast and Marr 1997) suggest that large pack of product provide better value as compare to small pack (Vila 2006) the consumer perception regarding the color is different culture to culture so producer firstly research and then target the market. Labeling and packaging increase relationality and confidence among the user of baby product sometime verbal and visual information is sued over packaging, the consumer of milk and washing powder given the preference to verbal information (Rita Kuvykaite 2009). Consumer pay additional cost for nutritional labeling product due to health consciousness (PHK pathriaja A. Ariyawar dana 2003).

$H_c$: Element of Packaging also positively influence the consumer purchase behavior.

2.3 Consumer Perception
A consumer in American supermarket typical faces the 20,000 product choices (Belch & Belch, 1999; Keller, 2008) before to practice the final decision. So, attractive product design can also help to differentiate the competitive brand and to make final decision based on product design (Klimchuk & Krasovec, 2007). A study indicates that 60% to 70% decision of final purchase is also made on the basis of product package. Mostly consumers face the meeting point, so packaging play their role as meeting point, so packaging play their role as meeting point (Dhar, 2007). Simply packaging work as communication tool to deliver the product related message.

Product helps to make identification of brand (Klimchuk & Krasovec, 2007) and help to highlighting and promoting the products. Packaging design refers to as final advertisement tool to inform, persuade and convince the consumer before final purchase decision (Well, Moriarty & Burnett, 2006). A study indicates that 2/3 purchases are also held spontaneous (Impulsive) which is based on product design (Belch & Belch, 1999). Mostly new product is purchased based on un-planned decision (Impulsive buying). The product packaging and product design are positively correlated (Klimchuk & Krasovec, 2007). According to (Nilsson & Ostrom, 2005; Ampuero & Vila, 2006; Klimchuk & Krasovec, 2007) packaging design have three dimensions, graphic design, structure design and product information. In graphic design there are 4 sub dimensions; brand name, typography, image and color. In structure image there are three sub-dimensions; shape, size and material. Colors in the package design on products but also influence customers. Different colors have different themes. Mostly people like the products who like products with match personality.

$H_c$: There is positive relationship between consumer purchase behavior and consumer perceptions.

2.4 Theoretical framework
Framework of this research shows several factors affecting consumer perception and purchase intention for different product packaging. Such as packaging color, size, design, labeling, materials, printed information, packaging graphics.
3. Methodology
The research is focus on the different aspect of consumer buying behavior on the different place of Pakistani market. The sample size of our research paper is 140 were distributed among different people whose are student, professional, businessman and other are taken for conducting research and to getting the response, but 120 questionnaires are received for putting the response in SPSS and 120 respondent questionnaires are for the interpretation and analysis of research data and getting the reliability of the model. There were 30 different types of questionnaires in the survey on buying behavior with using of four variables for getting the response. There are the four variables in survey (consumer buying behavior, consumer perception, element of packaging, purchase intention) which one is the depended variable and three are the in-depended variable. The measurement of each variable by asking the 30 different types of question by using the 5 points itemized rating types ranging from (1) strongly agree (2) agree (3) natural (4) disagree (5) strongly disagree. The dependent variable (consumer buying behavior consisting of 7 different types of questions), independent variables (perception consists on the 7 different questions, element of packaging consists on 6 different types of questions, purchase intention consists on the 5 different types of the questions). We collect the data from the different place of the Pakistan by using of social media, spot filling, e-mail, posting, by source of friends. For the analysis of the data and the interpretation SPSS-18 software are use the descriptive frequency distribution, correlation, reliability, and regression analysis. we analysis all the data into two part where one is the descriptive statistics which is used for description and summarize data include the frequency table of gender, age, occupation and education with the mean and percentage value and the first techniques for descriptive statistics result generation. It shows the minimum, maximum, and mean value of data. Second is the correlation, regression analysis of the dependent and independent variable.

4. Result analysis
4.1 Reliability Statistics
The reliability test are describes by Cronbach’s alpha model internal consistency of the instrument. The model shows reliability statistics that 0.839 i.e. excellent. The test shows that the reliability of variables, which show the 4 variables, and numbers of questionnaires are 30, also were used in this research the CHRONBACH Alpha is 0.839, which were used in, research questionnaires. It also shows that at which hypothesis test and level regression are enough sufficient.

4.2 Frequency
Questionnaire is tool through which we collect data. For the Data collection we make questionnaire and distributed among male and female as well as different level of education source of income and age.
### Table 1: Frequency Statistics

<table>
<thead>
<tr>
<th>Measure</th>
<th>Item</th>
<th>Frequency</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>47</td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>73</td>
<td>60.8</td>
</tr>
<tr>
<td>Age</td>
<td>Under 25 year</td>
<td>43</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>25 to 40 year</td>
<td>20</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>40 to 60 year</td>
<td>57</td>
<td>47.5</td>
</tr>
<tr>
<td>Source of income</td>
<td>student</td>
<td>43</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>professional</td>
<td>28</td>
<td>23.3</td>
</tr>
<tr>
<td></td>
<td>businessman</td>
<td>12</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>37</td>
<td>30.8</td>
</tr>
<tr>
<td>Education</td>
<td>primary school only</td>
<td>24</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>up to secondary school</td>
<td>20</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>higher education</td>
<td>76</td>
<td>63.3</td>
</tr>
</tbody>
</table>

In the above table genders there are 120 respondents response in which 39% of male and 61% were female respondents. The given above table show the age of participant. The age row shows that in the age of less than 25 year there are 35.8% respondents. While 16.7% respondents in the range of 25 to 40 years and 47.5% respondents are 40 to 60 year range. According to the given above table the occupation show that 35.8% respondent are student while 23.3% respondent are the professional. In the above table 10% respondent are the businessman and the 30.8% respondent are found on the different types of activity for generating of income. The given above the table show the education level of the participant there are 20% respondent found in the primary school only while the 16.7% respondent are found up to secondary school. And the 63.3% respondents are the higher education.

### 4.3 Correlations Analysis

The values among variables for correlation analysis Consumer purchase behavior, consumer perception, Purchase intention and element of packaging are given in above mention table 1. The range of significance value from 0.05 to 0.01.

### Table 2: Correlation

<table>
<thead>
<tr>
<th></th>
<th>Consumer Purchase Behavior</th>
<th>Consumer Perception</th>
<th>Purchase Intention</th>
<th>Element of Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPB_mean Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.(2-tailed) N 120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CP_mean Pearson Correlation</td>
<td>.437**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed) N 120</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI_mean Pearson Correlation</td>
<td>.766**</td>
<td>.637**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed) N 120</td>
<td>.000</td>
<td>.000</td>
<td>.812**</td>
<td></td>
</tr>
<tr>
<td>EOP_mean Pearson Correlation</td>
<td>.643**</td>
<td>.697**</td>
<td>.812**</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed) N 120</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

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

**H1. There is positive relationship between consumer purchase behavior and consumer perceptions.**

Table 2 represent the table of correlation where two variables consumer purchase behavior and consumer perception are positively correlated i.e. \((r = .437** at p=0.000.)\) The significance level is .000 this is less then alpha level 0.01 so we can say the correlation of variable are significance. There is moderate relationship between these two variables which is significant. So hypothesis accepted. This further concluded that the attractive product can also influence on consumer purchase behavior.
**H2**: purchase intentions have positive effect on consumer purchase behavior.

The above table explains that the correlation suggested a strong relationship between purchase intention and consumer buying behavior i.e. \( r = 0.766^{**} \) at \( p = 0.000 \) which is good. According to analysis of above table H2 is accepted because their P value is less than the alpha level which is 0.01. So we can say that the purchase intentions are important for consumer buying behavior.

**H3**: Element of Packaging also positively influence the consumer purchase behavior.

The correlation value \( (r = 0.643^{**} \) at \( p = 0.000 \) in the table 1 clearly define that there is highly positive significant relationship between element of packaging and consumer purchase behavior. So the H3 hypothesis we cannot reject due to having P value which is less than the alpha level. The research result regarding the effect of packaging on consumer buying behavior satisfied hypothesis which is as confident level has a highly positive impact. Consumer prefers better quality, color, shape and design of product.

### 4.4 Regression Analysis

For finding the effect of independent variable on dependent variable the regression analysis are used. In this types of the analysis determine how much importance of independent variable in respect of dependent variable and also among them.

**Table 3: ANNOVA TEST**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3</td>
<td>4.372</td>
<td>57.177</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>116</td>
<td>.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Total</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* a. Predictors: (Constant), EOP_mean, CP_mean, PI_mean
  b. Dependent Variable: CPB_mean

The above table shows that the hypothesis has accepted by using the value of F is 57.177 according to the ANNOVA test. All the three hypothesis have been examined through regression analysis and coefficient analysis the result of the three hypothesis are given below.

### 5. Conclusion and recommendations

The finding of our research impact of packaging on consumer perception and purchase intention show that the packaging are important element for the consumer buying behavior and communication information about the product. Packaging shows all of the information about any product like where they are made, what are ingredient, who are the manufacturer, when was made, what are their weight, types etc. It also shows how to use the product. The element of the packaging like (color, design, material, size, labeling) are very important for product, keep customer delighted and for the producer who used printed information in packaging as a product promotion with the comparison of highly expensive advertisement. While the element of packaging keeps customer attraction toward the product and have direct impact on consumer buying behavior. This research has several conclusions that purchase intention and consumer perception have direct impact on the consumer purchase behavior. The quality of the packaging material can save product, attractive product, more preferable product and positive perception toward the product. Beautiful background, color, shape, proper labeling, arrows, icons, and small (smart) packaging inspire the consumer toward the product. It is also recommended that the marketing and business should be pay the proper attention toward the good packaging. If they use, accept, launch/introduce the poor packaging then they will face cause of the product failure. So it is necessary for the marketing manager that they should focus on the packaging standard and implement the strategy that product packaging are consider factors and dimensions of marketing.

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