

1 Role of Packaging on Consumer Buying Behavior-Patan District

2 Mr. Mitul M. Deliya¹ and Dr. Bhaveshkumar Parmar²

3 ¹ Hemchandracharya North Gujarat University

4 Received: 4 May 2012 Accepted: 1 June 2012 Published: 15 June 2012

5

6 **Abstract**

7 The aim of this article is to get the A study to point towards role of packaging on consumer
8 buying behavior. The basic purpose of this it is to find out how such factors are behind the
9 success of packaging. The purpose of this research is to know the relationship between
10 independent variable and dependent variables. The research is based in Patan District of
11 Gujarat (India). The packaging is the most important factor. The consumer buying behavior
12 is dependent on the packaging and on its features. Packaging elements like Packaging color.
13 Background Image, Packaging Material, Font Style, Design of wrapper, Printed Information
14 and Innovation is taken as predictors. Due to increasing self-service and changing consumers?
15 lifestyle the interest in package as a tool of sales promotion and stimulator of impulsive buying
16 behavior is growing increasingly. So package performs an important role in marketing
17 communications, especially in the point of sale and could be treated as one of the most
18 important factors influencing consumer?s purchase decision.

19

20 **Index terms**— Consumer Behavior, Packaging.

21 **1 Introduction**

22 In nowadays competitive environment the role of package has changed due to increasing self-service and changing
23 consumers' lifestyle. Firms' interest in package as a tool of sales promotion is growing increasingly. Package
24 becomes an ultimate selling proposition stimulating impulsive buying behavior, increasing market share and
25 reducing promotional costs.

26 According to Rundh (2005) package attracts consumer's attention to particular brand, enhances its image, and
27 influences consumer's perceptions about product. Also package imparts unique value to products (Underwood,
28 Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the
29 product from wide range of similar products, stimulates customers buying behavior (Wells, Farley & Armstrong,
30 2007). Thus package performs an important role in marketing communications and could be treated as one of
31 the most important factors influencing consumer's purchase decision. In this context, seeking to maximize the
32 effectiveness of package in a buying place, the researches of package, its elements and their impact on consumer's
33 buying behavior became a relevant issue.

34 Literature analysis on question under investigation has shown that there is no agreement on classification of
35 package elements as well as on research methods of package impact on consumer's purchase decision. Some of
36 researchers try to investigate all possible elements of package and their impact on consumer's purchase decision
37 (Silayoi & Speece, 2004; Silayoi & Speece, 2007);, while others concentrates on separate elements of package
38 and their impact on consumer buying behavior (e.g., Vila & Ampuero, 2007; Madden, Hewett & Roth, 2000;
39 Underwood et al., 2001; Moreover some researchers investigate impact of package and its elements on consumer's
40 overall purchase decision (e.g., Underwood et al., 2001), while others -on every stage of consumer's decision
41 making process (e.g., . Furthermore the abundance of scientific literature on this issue do not provide unanimous
42 answer concerning impact of package elements on consumer's buying behavior: diversity of the results in this
43 area depends not only on research models constructed and methods employed, but on the context of the research
44 too. All above mentioned confirms the necessity to investigate this issue in more detail. In the light of these

6 LITERATURE REVIEW

45 problematic aspects, research problem could be formulated as following question: what elements of a package
46 have an ultimate effect on consumer purchase decision?

47 The aim of this paper basing on theoretical analysis of package elements and their impact on consumer's
48 purchase decision empirically reveal the elements having the ultimate effect on consumer choice in a case of
49 different products.

50 2 II.

51 3 Key Terms Defined a) Consumer Buying Behavior

52 Process by which individuals search for, select, purchase, use, and dispose of goods and services, in satisfaction
53 of their needs and wants.

54 4 b) Packaging

55 Packaging can be defined quite simply as an extrinsic element of the product. Packaging is the container for a
56 product.

57 5 III.

58 6 Literature Review

59 Rita ??uvykaite (2009) has descriptive research. According to Rita package attracts consumer's attention
60 to particular brand, enhances its image, and influences consumer's perceptions about product. Also package
61 imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool
62 for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates
63 customers buying behavior (Wells, Farley & Armstrong, 2007). Thus package performs an important role in
64 marketing communications and could be treated as one of the most important factors influencing consumer's
65 purchase of package, its elements and their impact on consumer's buying behavior became a relevant issue. He
66 basing on theoretical analysis of package elements and their impact on consumer's purchase decision empirically
67 reveal the elements having the ultimate effect on consumer choice. Research methods that Rita used is systematic
68 and comparative analysis of scientific literature; empirical research There are six variables that must be taken into
69 Consideration by producer and designers when creating efficient package: form, size, color, graphics, Material
70 and flavor. Similarly, Kotler (2003) distinguishes six elements that according to him must be evaluated when
71 employing packaging decisions: size, form, material, color, text and brand. The research result of Rita shows the
72 impact of package elements on consumers purchase decisions can be stronger. He conclude that Package could
73 be treated as one of most valuable tool in today's marketing communications, necessitating more detail analysis
74 of its elements and an impact of those elements on consumers buying behavior. The impact of package and its
75 elements on consumer's purchase decision can be revealed by analyzing an importance of its separate elements
76 for consumer's choice.

77 Bed Nath Sharma Dec. 2008 studied New Consumer Products Branding, Packaging and Labeling in Nepal.
78 This paper focuses on existing practice of branding, packaging and labeling of new products in consumer product
79 manufacturing units. The study method was Descriptive presentation of facts collected through questionnaire
80 survey concerned with different section of consumer new products (soap, biscuit, noodles, cigarettes and The
81 study further investigates the new consumer product packaging and labeling status in manufacturing units.
82 They are aware about the value of packaging and labeling. Majority of the consumer products 84.37% (27 out of
83 32 responses) are using product label as a simple tag attached to the product or an elaborately designed graphic
84 that is part of the package.

85 Alice Louw (2006) has studied The Power of Packaging the people belonged to Age 20-30 years old University
86 graduates were taken for research.²⁰

87 respondents were asked to rank 5 water bottles in terms of their overall appeal. Following this, they were
88 given a questionnaire and asked to rate each of the bottles on 20 statements related their packaging. For the
89 remaining 20 respondents, the order of the process was switched: they rated the bottles first and then ranked
90 them. The statements ranged from functional attributes (e.g. easy to drink from, right size) to more emotive,
91 non-functional attributes (e.g. I like the colors, high quality). For both groups there was a clear winner and a
92 clear loser in terms of the rankings. However, although the top brand chosen was consistent in both groups, the
93 worst brand differed. The group that ranked the bottles first showed more variance in terms of their responses
94 (Variance 1.33) than the second group who rated the attributes first (variance 0.89). This Packaging plays an
95 important role in the marketing context. His research results that right packaging can help a brand carve a
96 unique position in the marketplace and in the minds on consumers.

97 John Th Gersen (2000) worked on The Ethical Consumer. Moral Norms and Packaging Choice published in
98 Journal of Consumer Policy Kluwer Academic Publishers. Printed in the Netherlands. The paper presents a
99 study of a case with these two characteristics: Danish consumers' choice presents a study of a case with these
100 two characteristics: Danish consumers' choice of environment-friendly packaging. With regard to this case, the
101 evidence supports the claim. A majority of Danish consumers have developed personal norms about choosing

102 environment-friendly packaging and the personal norm is a significant predictor of their (self-reported) propensity
103 to choose environment-friendly packaging in the supermarket.

104 Renaud LUNARDO 2007 has a great research on the influence of label on wine consumption. its effects
105 on young consumers' perception of authenticity and purchasing behavior The main objective of the paper is
106 to identify the effects of authenticity on purchase behavior. They used a repertory grid (RG) approach as a
107 methodological framework in order to know which pattern of features is better at inducing purchase. All the
108 relationships between authenticity provided by the label of bottles and consumer behavior attributes (performance
109 risk, perceived price and purchase intentions) have all been tested by using linear regressions. This study was
110 intended to provide a more complete understanding of the influence of the authenticity perceive from the label of
111 bottled wine. As an attempt to extend the research on the influence label of bottled wine can have on consumers'
112 decisions of buying, the current it is clear from these findings is the major role played by labels.

113 L Renaud 2007 worked on The Influence of Eco-Labeling on Consumer Behavior. The main objective of this
114 study was to assess the relative importance of the labeling in Packaging compared to other product attributes
115 (like brand, price, etc.) for consumers' buying decisions. The methodological approach that they chose was
116 discrete choice analysis, which is particularly powerful for this kind of analysis. Further this study attempts to
117 analyze if the importance of the labeling and packaging differs between product groups. They surveyed a total of
118 302 customers; Two thirds of the interviews were conducted in the German-speaking. The Variables chose within
119 this study are , present mood, time, buying purpose With regard to sustainability marketing, Time. The most
120 important result of analysis is the significant willingness to pay for Packaging energy efficient products.

121 Adelina Broadbridge & Henry Morgan (2007), consumer buying behavior and perception toward retail and
122 brand baby products. A two-stage research methodology consisting of both qualitative and quantitative research
123 techniques was adopted. The population was defined as 'parents of children under the age of five who use baby
124 care products'.

125 Both the qualitative and quantitative research showed that respondents adopted similar risk reduction
126 strategies in their purchase of baby care products. This research investigated consumer perceptions and buying
127 behavior of baby care products. The results of the primary research indicated that consumers need to feel
128 confident with the product in terms of reliability and performance and packaging.

129 Bytyqi Hysen*, Vegara Mensur (2008) have research on analysis of consumer buying behavior in regard to
130 dairy products in kosovo. This survey was carried out by the Department of Livestock and Veterinary Sciences,
131 Agriculture Faculty of Prishtina, Kasovo during 2007. Interviews of 304 respondents were conducted in super-
132 markets (677) and minimarkets (397) and later 23 interviews were completed in green market mainly for Sharri
133 cheese and curd. To study the reasons for choosing milk products upon supply, a coding approach from 1-5 was
134 used (1 = very important; 2 = highly important; 3 = average; 4 = less important; 5 = not important). Perception
135 of consumers about dairy products was assessed using different variables i.e. habits, trust, price, quality, package,
136 age of consumer, origin of product, type of shop, brand and gender of consumer. It was conclusion after analysis
137 that the packaging has great effect on the purchase of dairy products.

138 Rita Kuvykaite1, Aist? Dovaliene2, Laura Navickiene3 (2009) worked on impact of package elements on
139 consumer purchase decision economics & management. Material are the most important visual elements for
140 purchasing both milk (size and material 3.80) and washing-powder (resp.: 3.87 and 3.41); whereas, in this case
141 form, color and graphic could be treated as unimportant elements of package. When analyzing importance
142 of verbal elements, it could be stated that product information (4.24 for milk and 4.06 for washing-powder)
143 and country-of-origin (resp.: 4.22 and 3.88) are the most important elements. Furthermore its worth to add,
144 that producer and brand couldn't be underestimated too, because the importance of both of these elements
145 is treated by customers above the average. Comparing the impact of visual and verbal elements of package
146 on consumer's purchase decision it could be stated that verbal elements are more important than visual ones,
147 when purchasing both milk and washing-powder. According to the research model developed the impact of
148 package's elements on consumer's purchase decision depending on time pressure, consumer's involvement level
149 and individual characteristics were analyzed.

150 H Ahasanul ,(K Ali 2009) measured the Factors Influencing Buying Behavior of Piracy Impact to Malaysian.
151 A structured questionnaire was used to collect data whereby it was served as primary data to answer the research
152 questions and objectives planning to find out the factors that plays a vital role about consumers perception
153 towards pirated products. It can be identified that the dependent variable is consumer perception on piracy.
154 Where else the independent variables would be divided to social influence, personality/believe, culture, and the
155 economy. These are the factors that could influence consumers' perception on piracy thereby supporting out
156 dependent variable. Social influence would include susceptibility, which means an individual might purchase a
157 pirated product merely because his/ her friend or family members bought the product and introduced it to them.

158 Ulrich R. Orth (2009) worked on Packaging Design as resource for the construction of Brand Identity.
159 A thorough review of the literature on packaging design reveals that there are no meaningful guidelines for
160 developing holistic packaging design, Shapes, Finishes, Sizes, Images, Typography, Colors, Impressions, Purchase
161 Intention, and Brand. This research was conducted by collecting information and data in four stages. First, a
162 review of the branding literature determined a list of strategically relevant brand impressions for wine. Second,
163 appropriate wine packaging design elements were identified and a sample of real and representative designs
164 was selected. Third, professionals in the design and advertising industry rated wine packaging designs on the

6 LITERATURE REVIEW

165 previously identified design elements. This research aimed at generating guidelines for managing strategic brand
166 impressions, namely brand identity created by the wine packaging design Kriti Bardhan Gupta (2009) has study
167 on Consumer Behavior for Food Products in India. primary data was collected from 326 respondents in Uttar
168 Pradesh and National Capital Region The relative importance of various food purchasing criteria was estimated
169 for four different food categories, food and vegetables; milk and milk products; food grains and pulses; and
170 processed foods on 1-5 scale, The present study explored the consumer behavior for food products in India from
171 different perspectives. People accepted the fact that their food habits get affected with the shifting to a new
172 region but many basic buying and consumption behavior do not change. Some of the changes in buying and
173 consumption behavior of relocated people, which were observed after their settlement to a new region, were not
174 significantly different from the level of changes in behavior of non-moving people. However, compared to the last
175 10 years, people have started preferring more healthy foods and are willing to try out new dishes. They tend
176 to learn cooking and eating new food items after relocation without discontinuing their traditional food items.
177 There is also influence of children on the type of food items that they eat.

178 This paper has shown that impulse buying is indeed a relevant factor in CE retailing, thus justifying the use
179 of sales packaging. However, optimization is still important. From an economical and environmental perspective
180 it is very costly to apply sales packaging (with additional material use and transport volume) to products that
181 do not need them, or to apply them in an ineffective way. Economical costs and environmental impact can be
182 expressed in a single score, indicating the packs performance. To allow proper management of the pack design
183 the sales performance should be expressed in as simple a way as possible, preferably also a single score. As
184 calculating the sales performance is impossible a test will need to be used. The pressure from time-to-market in
185 the CE industry, demands that the test be relatively simple.

186 S Nuntasaree and Dr. E Barry (2008) published a paper with subject of a model of male and consumer behavior
187 in buying skin care products in Thailand.. The conceptual model of male consumer behavior in buying skin care
188 products beliefs in product attributes Quality, Price, Brand, Packaging, Advertising, Promotion, Salesperson,
189 Distribution. This study used a quantitative research method. A convenience sample with a shopping mall-
190 intercept technique was employed for the sampling method. The closed-ended questionnaire developed from
191 standard questions of relevant literature was chosen as a research instrument. The Statistical Package for the
192 Social Sciences program (SPSS) version 15.0 was used in this study with a 0.05 level of significance for all of
193 the statistical assessments. The data set was screened and examined for incorrect data entry, missing values,
194 normality and outliers.

195 Several studies have investigated issues such as packages as a means of attracting the attention of consumers
196 ??Underwood et Pires Goncalves, Ricardo (2008) worked on Product Characteristics and Quality Perception,
197 according to him When they choose among competing products consumers are faced with quality and product
198 performance uncertainty, hence, they rely on cues as extrinsic attributes, for instance brand, price, package and
199 warranty, as signals of perceived quality. Little research has been done on packages as extrinsic attributes used by
200 consumers as signs of perceived quality, thus this study is a small contribution to that lack of scholarly research on
201 packages. Colors and shapes are important elements of marketing strategies, and they are both essential features
202 of packages, especially in product labels. Labels are one of the most important features of product packaging,
203 and they are designed to communicate a message. The model proposed in this study builds on previous models
204 of consumer quality perception and signals of quality from product cues. In this research, colors and shapes
205 combinations in labels are considered as the extrinsic attributes used as signals of quality by consumers.

206 Liang Lu (2008) worked on a paper :Packaging as a strategic tool University of Halmstad school of Business
207 and Engineering. Packaging is an important part of the product that not only serves a functional purpose, but
208 also acts as a mean of communicative information of the products and brand character. Packaging must be
209 functional; it must protect the products in good storage, in shipment and often in use. Besides, it has also the
210 function that can give customers the ease of access and use on the purpose of convenience. After looking at
211 Kolter theory about packaging, we will turn to different theory relating to packaging design and its important
212 elements in order to help us to solve the first research question.

213 Judy Rex, Stuart Wai and Antonio Lobo (2003), it is An Exploratory Study into the Impact of Color And
214 Packaging as Stimuli in the Decision Making Process for a Low Involvement Non-Durable Product The consumers
215 and the manager agreed that important factors when deciding which packet of potato crisps to purchase were the
216 quality, the brand and the price of the product, with flavor also being an important factor for the consumers. The
217 consumers used a constant sum scale (out of 100) to rate the six attributes of flavor, quality, brand, price, size and
218 shape, and the color of the packaging. Overall, the consumers indicated that the flavor of the product was easily
219 the most important stimulus when selecting potato crisps with an average rating of 38 points. This was about
220 twice as important as the quality (21 points), which was more important than the brand (14 points) and the
221 price (13 points). While brand and price were of about equal importance, P.H.K.Prathiraja and A.Ariyawardana
222 (2003) has a great study in the impact of nutritional labeling on Consumer Buying Behavior. This study shows
223 that consumers use nutritional labeling when making a purchasing decision and that it is especially because of
224 health consciousness. A majority of the respondents revealed that they are willing to pay something additional
225 for the nutritional information provided on food items. Of those who are willing to pay something additional,
226 a greater proportion was in the age category 36 to 50 years, have had tertiary education and the households
227 had less than 4 members. K Sony (2008) studied the consumer responses toward attribute framing in product

228 packaging. The main purpose of this study is to investigate the impact of message framing, level of involvement, 229 and numerical difference on consumer response. Fresh-milk product was chosen as the object for experiment. 230 This study has the following suggestion for packaging design based on the findings. Fresh milk is commonly 231 considered as health-related product. The study is advantageous in giving marketers a more thorough picture 232 of how message framing affects consumer response in various numerical alternatives and level of involvement. It 233 will also be helpful in developing successful packaging strategy. For future study, different types of products can 234 be investigated further.

235 Asso. Professor Jane (2005), Consumer Response to Sponsorship Leveraged Packaging (SLP). Structural 236 equation modeling (SEM) was used to analyses the data from the experiment. This program of research 237 aims to test a model that examines the structural relationships between SLP and consumer attitudes and 238 purchase intentions toward the sponsors' products as well as the factors that impact this relationship. Research 239 suggests sponsorship leverage packaging may act in a similarly way to celebrity endorsement on product 240 packaging, implying that FMCG brands may benefit from marketing strategies that communicate the sponsorship 241 relationship on packaging. It is critical that brand managers identify the affect SLP has on consumer behavior and 242 evaluate the degree to which it can enhance communication of the sponsorship relationship in the marketplace. 243 This paper outlines a framework of consumer response to SLP, proposing a three step process of exploratory 244 and experimental methodologies. The outcomes from the research will contribute to a better understanding 245 of sponsorship effects on consumer behavior and provide managers with the means to develop more effective 246 branding strategies and promotions.

247 IV.

248 **7 Theoretical Framework**

249 Theoretical frame-work focuses on the relationship between the dependent and independent variables. The 250 distinction between dependent and independent variables is as important in a comparative study as in a regression 251 analysis. Dependent variable in case of a comparative study is the one which we aim to predict and independent 252 variables here are the ones who are used to predict the dependent variable. a) What is packaging?

253 The definitions of 'packaging' vary and range from being simple and functionally focused to more extensive, 254 holistic interpretations. Packaging can be defined quite simply as an extrinsic element of the product (Olson and 255 Jacoby (1972)) -an attribute that is related to the product but does not form part of the physical product itself. 256 "Packaging is the container for a product -encompassing the physical appearance of the container and including 257 the design, color, shape, labeling and materials used" (Arens,1996).

258 **8 b) Objectives of packaging**

259 Packaging and package labeling have several objectives:

260 ? Physical Protection -Protection of the objects enclosed in the package from shock, vibration, compression, 261 temperature, etc. Color plays an important role in a potential customer's decision making process, certain colors 262 set different moods and can help to draw attention. One good example of successful use of color psychology is in 263 the Apple iPod advertisements; they use simple tri tone color schemes of black, white and a bright background 264 color. The bright background color is to give the advertisement a fun feel and the contrasting white on black is 265 to focus attention.

266 **9 i. Meaning of the Color Blue**

267 Blue is the most common favorite color and is liked by both genders. Blue is seen as a trustworthy, peaceful and 268 calm color and is often related to the sky or water. Blue is usually cool and quiet but more electric shades can 269 give a dynamic feel. Although blue has the benefits of gender indifference and being the most common favorite 270 color, the overuse of blue can seem cold or uncaring. Blue is often used because it is the designer's favorite color 271 but after considering the meaning of other colors, another color may be a better choice.

272 **10 ii. Meaning of the Color Green**

273 Green is related to life and nature; if you want to give your product a natural feel use green. Green is the second 274 most popular color and the most popular shades of green are the blue-greens, which should be expected when 275 blue and green are the two most popular colors. Yellow-greens should be avoided around food products as the 276 color will act as an appetite-depressant. As well as the natural feel greens have, they can also signify money, 277 health and power.

278 **11 iii. Meaning of the Color Yellow**

279 Yellow is a very useful color because it is the most easily noticed, it will grab the attention of a person so can 280 be a good choice for things such as magazine advertisements which may usually be ignored due to ad blindness. 281 Yellow signifies happiness, optimism and warmth but also caution. The main advantage of yellow is its attention 282 grabbing feature so a combination of blue and yellow can be a successful color scheme which could create a cool 283 and calm mood from the blue but still draw attention because of the yellow.

284 A sealed pack of diced pork from Tesco. It shows the cooking time, number of servings, 'display until' date,
285 'use by' date, weight in kg, price to weight ratio in both £/kg and £/lb, freezing and storage instructions. It says
286 'Less than 3% Fat' and 'No Carbs per serving' and includes a barcode. The Union Flag, British Farm Standard
287 tractor logo, and British Meat Quality Standard logo are also present.

288 12 d) Background-image

289 The background image property specifies the background image for an element. When setting a background
290 image, authors should also specify a background color property that will be used when the image is unavailable.
291 Note also that when the image is available, it is rendered on top of the background color. Thus, in any transparent
292 areas of the image, the background color will be visible.

293 13 e) Packaging Material

294 Any material used especially to protect something-packing, wadding. Consumer can change its decision regarding
295 Packaging material. High quality Packaging attract consumer then low quality Packaging. The first packages
296 used the natural materials available at the time: Baskets of reeds, wineskins (Bota bags), wooden boxes, pottery
297 vases, ceramic amphorae, wooden barrels, woven bags, etc. Processed materials were used to form packages as
298 they were developed: for example, early glass and bronze vessels. The study of old packages is an important
299 aspect of archaeology. Iron and tin plated steel were used to make cans in the early 19th century.

300 Paperboard cartons and corrugated fiberboard boxes were first introduced in the late 19th century. Packaging
301 advancements in the early 20th century included Bakelite closures on bottles, transparent cellophane over wraps
302 and panels on cartons, increased processing efficiency and improved food safety. As additional materials such
303 as aluminum and several types of plastic were developed, they were incorporated into packages to improve
304 performance and functionality. So packaging material have strong have with buying behavior.

305 14 f) Font Style

306 The font style of Packaging grabs customer attraction. The up gradation of IT technology have support this
307 feature. The successful companies have best practices of the font styles. They hire specialist in composing which
308 create mind blowing and attractive font styles. The attractive package has innovative font style. So we can
309 say that there is relation between font style and buying behavior g) Design of wrapper The overall design also
310 plays a vital role in attracting the consumer. Mostly the children of 10-18 companies try their best to create
311 attractive design of packaging h) Printed Information Container or wrapper of the product is serves a number of
312 purposes like protection and description of the contents, theft deterrence, and product promotion. The labels on
313 packages are important components of the overall marketing mix and can support advertising claims, establish
314 brand identity, enhance name recognition, and optimize shelf space allocations.

315 The consumer can change his decision on the basis of information printed on the packaging. Mostly in
316 Merchandises and daily FMCG the consumer can perform evaluation on the basis of printed information.

317 15 i) Innovation

318 Innovative packaging may actually add value to the product if it meets a consumer need such as portion
319 control, recyclability, tamper-proofing, child-proofing, easy-open, easy-store, easy-carry, and non breakability.
320 Manufacturers today strive to have packaging that maintains the key equities of the brand, has stand out appeal
321 on the retailer's shelf, and is sustainable but with lower production costs. The customer can adopt product on the
322 basis of its innovative packaging, which shows the relation between buying behavior and innovation of packaging.

323 V. Each of above mentioned variable was measure by asking the seven questions by using the 5-points itemized
324 rating type scale ranging from (1) strongly disagree to (5) strongly agree VI.

325 16 Research Methodology

326 17 Methodology

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

331 18 Descriptive analysis

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

334 19 Scattered plots

335 A scatter plot is a type of mathematical diagram using Cartesian coordinates to display values for two variables
336 for a set of data. The data is displayed as a collection of points, each having the value of one variable determining

337 the position on the horizontal axis and the value of the other variable determining the position on the vertical
338 axis. This kind of plot is also called a scatter chart, years are so sensitive to the design of wrapper. The H1: there
339 is relationship between Buying Behavior and Packing color H2: there is relationship between Buying Behavior
340 and Background of Packing. H3: there is relationship between Buying Behavior and Quality of Packing. H4:
341 there is relationship between Buying Behavior and Font Style. H5: there is relationship between Buying Behavior
342 and Wrapper Design. H6: there is relationship between Buying Behavior and Printed Information. H7: there is
343 relationship between Buying Behavior and Packing Innovation.

344 The value for a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect correlation). Other factors
345 such as group size will determine if the correlation is significant. Generally, correlations above 0.80 are considered
346 pretty high.

347 **20 Multiple regressions**

348 Linear regression analysis estimates the coefficients of a linear equation, involving one or more independent
349 variables, that best predict the value of the dependent variable.

350 **21 VII.**

351 **22 Empirical Findings a) Reliability Test i. Dependent Variable**

352 The Value of Cronbach's Alpha is bigger then 0.7 and also positive, which shows the reliability of dependent
353 variables.

354 ii. Independent Variable The data of independent variables or predictors is reliable. Because the value of
355 Cronbach's Alpha is 0.858 which is greater then 0.7. The value is also positive, so the data used for analysis is
356 reliable. In the above table 5.9 the minimum values is 1, maximum values 5, and mean value is 3.55 while the
357 values of standard deviation is 0.953. Mean value provides the idea about the central tendency of the values of
358 a variable. c) Scatter-Plot Matrix Figure : 5.9

359 Figure ???.9 shows the results of scatter plot matrix where we intend to have some idea about the relationship
360 between buying behavior and color of packaging. If we observe then the flow of line is come from right to left
361 which shows the positive relationship between buying behavior and color of packaging. This means that if the
362 attractive colors are used in packaging then consumer will purchase product and the above results have been
363 confirmed by the table of correlations. Figure ???.10 shows the results of scatter plot matrix where we intend
364 to have some idea about the relationship between buying behavior and background of packaging. If we observe
365 then the flow of line is come from right to left which shows the positive relationship between buying behavior
366 and color of packaging. This means that if the attractive background is used in packaging then consumer will
367 purchase product and the above results have been confirmed by the table of correlations. Figure ???.11 shows
368 the results of scatter plot matrix where we intend to have some idea about the relationship between buying
369 behavior and quality of packaging. If we observe then the flow of line is come from right to left which shows the
370 positive relationship between buying behavior and quality of packaging. This means that if the fine quality is
371 used in packaging material then consumer will attract and the above results have been confirmed by the table
372 of correlations. Figure ???.14 shows the results of scatter plot matrix where we intend to have some idea about
373 the relationship between buying behavior and design printed information. If we observe then the flow of line is
374 come from right to left which shows the positive relationship between buying behavior and wrapper design. This
375 means that if the printed information is used in packaging then consumer will attract and the above results have
376 been confirmed by the table of correlations. The significant level in ANOVA table shows that the combination
377 of variables significantly predicts the dependant variable.

378 **23 Model for Role of Packaging on Buying Behavior**

379 The objective of the regression in this study is to find such an equation that could be used to find the impact
380 of predictors on dependent variable. The specified regression equation takes the following form: The significant
381 levels of packing color, back ground of packing, quality of packing, font style, wrapper design, printed information
382 and innovative packing are 0.003, 0.005, 0.001, 0.004, 0.004, 0.002, and 0.003 respectively. This test shows that
383 the coefficients of the predictor are statistically significant at less than five percent level of significance. So we
384 will reject Ho and accept H1.

385 **24 VIII.**

386 **25 Conclusions**

387 Results of research on role of packaging on consumer's buying behavior stipulated following conclusions: ?
388 Package could be treated as one of most valuable tool in today's marketing communications, necessitating more
389 detail analysis of its elements and an impact of those elements on consumers buying behavior. ? Appropriate
390 and vivid picture or packaging color which delivers them a happy feeling, or an easy handle/open/dose/dispose
391 package shape. All these elements contribute each important effort to catch consumers' attention and interest.
392 Besides each element's single function, we think that a good combination of those elements may let the product

393 more eye-catching and attractive. ? The impact of package and its elements on consumer's purchase decision
394 can be revealed by analyzing an importance of its separate elements for consumer's choice. For this purpose
395 main package's elements could be identified: graphic, color, size, form, and material of packaging are considered,
396 wrapper design, printed information, innovation while product information, producer, country-of-origin and brand
397 are considered as important ones. Moreover, the impact of package elements on consumers purchase decisions
398 should be evaluated depending on the consumer's involvement level, time pressure or individual characteristics
399 of consumers. ? Empirically testing the research model proposed, package elements having the ultimate effect
400 on consumer choice in a case of different products from group of convenience goods were determined: ? It has
401 revealed that elements of package are the most important for consumer's purchase decision. For a major part of
402 consumers' a size and material are the main visual elements, while product information is also the main verbal
403 elements when purchasing milk and washing-powder.

404 ? Results of analyzing the impact of package elements on consumers purchase decisions depending on level
405 of involvement correspond with those of theoretical studies and let us stating that visual elements of package
406 have relatively stronger influence on consumer's purchasing when they are in the level of "low involvement", in
407 opposite to those who are in the level of "high involvement". ? Packaging has a better reach than advertising
408 does, and can set a brand apart from its competitors. It promotes and reinforces the purchase decision not only
409 at the point of purchase, but also every time the product is used. Packaging in different serving sizes can extend
410 a product into new target markets or help to overcome cost barriers. Packaging can even drive the brand choice
411 (especially in the context of children's products). ? Research into packaging has found that different packaging
412 cues impact how a product is perceived.

413 Often the packaging is perceived to be part of the product and it can be difficult for consumers to separate
414 the two (the concept of gestalt). Aspects such as packaging color, typography, illustrations and graphics can
415 influence how a product is perceived. ? According to my research, I found out that most consumers like the
416 product quality after they purchased their desired packaged products. Based on those facts, we can not say there
417 is a 100% equal relationship between good package and good product quality, but there is a positive thinking
418 and trend about well-designed package shows high product quality. As a matter of fact, people are becoming
419 more and more demanding; packaging has been gradually shown his important role in a way to serving consumer
420 by providing information and delivering functions. With its different functionality to ease and to communicate
421 with consumers, there is no doubt about increasingly important role of packaging as a strategic tool to attract
422 consumers' attention and their perception on the product quality.

423 26 Recommendations

424 ? Brand is important and its strategy is in consideration in the units. Product packaging is valuable for brand
425 equity, product differentiation, market segmentation, new product introduction, pricing, promotion etc. Brand
426 name using plan implementation must be effective in the units. ? All the marketing units pay attention for good
427 packaging. They accept that poor packaging is one of the causes of product failure in the market. It is necessary
428 to set the packaging standard and to implement accordingly for better protection and promotion of a product.

429 ? Consumer new product manufacturers mostly use the label in their products. Basically they describe that
430 made it, where it was made, when it was made, what it contains, how to use it etc. Further more they believe
431 that the consumers are properly guided by label to use the products. The information given in the label and its
432 value have to be highlighted while promoting the product in the market. It must also be more useful technically.
433 ? Researcher believes that culture difference does have an impact on companies' initiatives to design the product
434 package, for instance, during our research; the choices of packaging colors are quite different between the West
435 and Far East. Thus, we think that it is important for international companies to take a consideration of culture
436 differences when they design the product package.

1 2 3

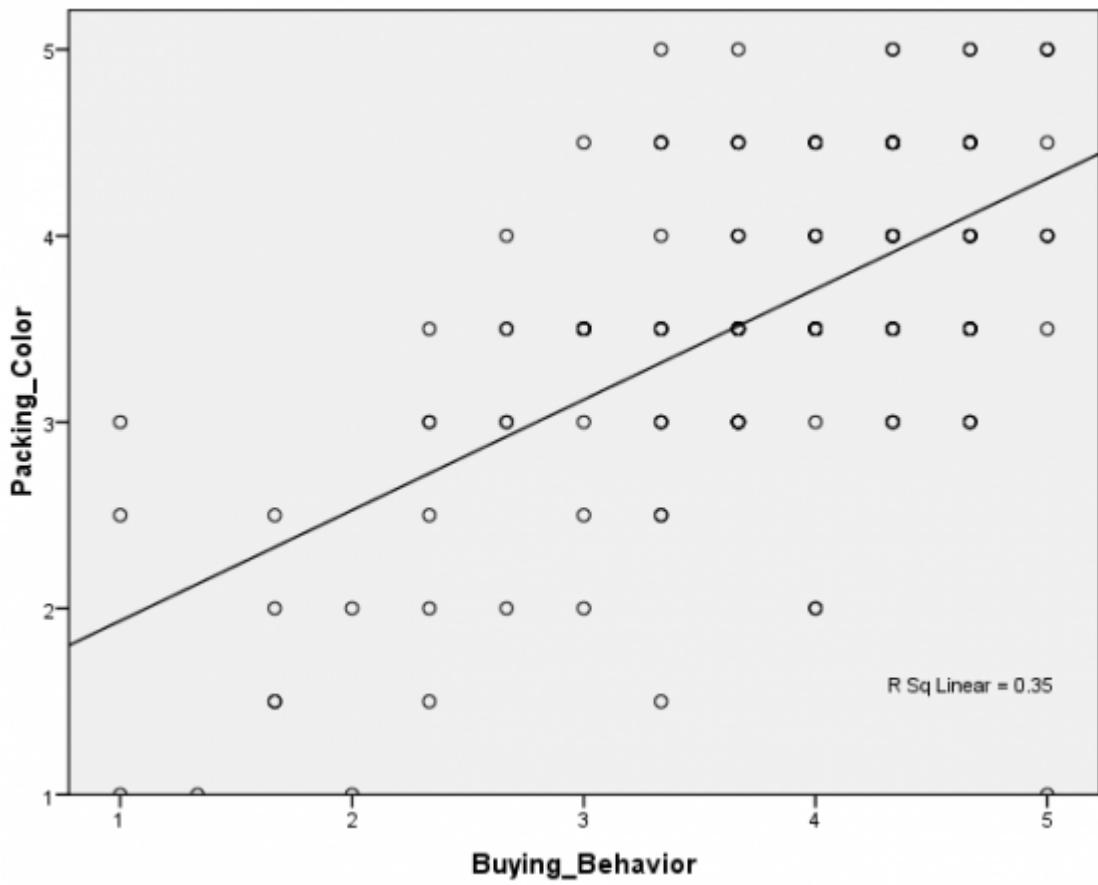
¹ June © 2012 Global Journals Inc. (US)

²Role of Packaging on Consumer Buying Behavior -Patan District

³June © 2012 Global Journals Inc. (US) IX.

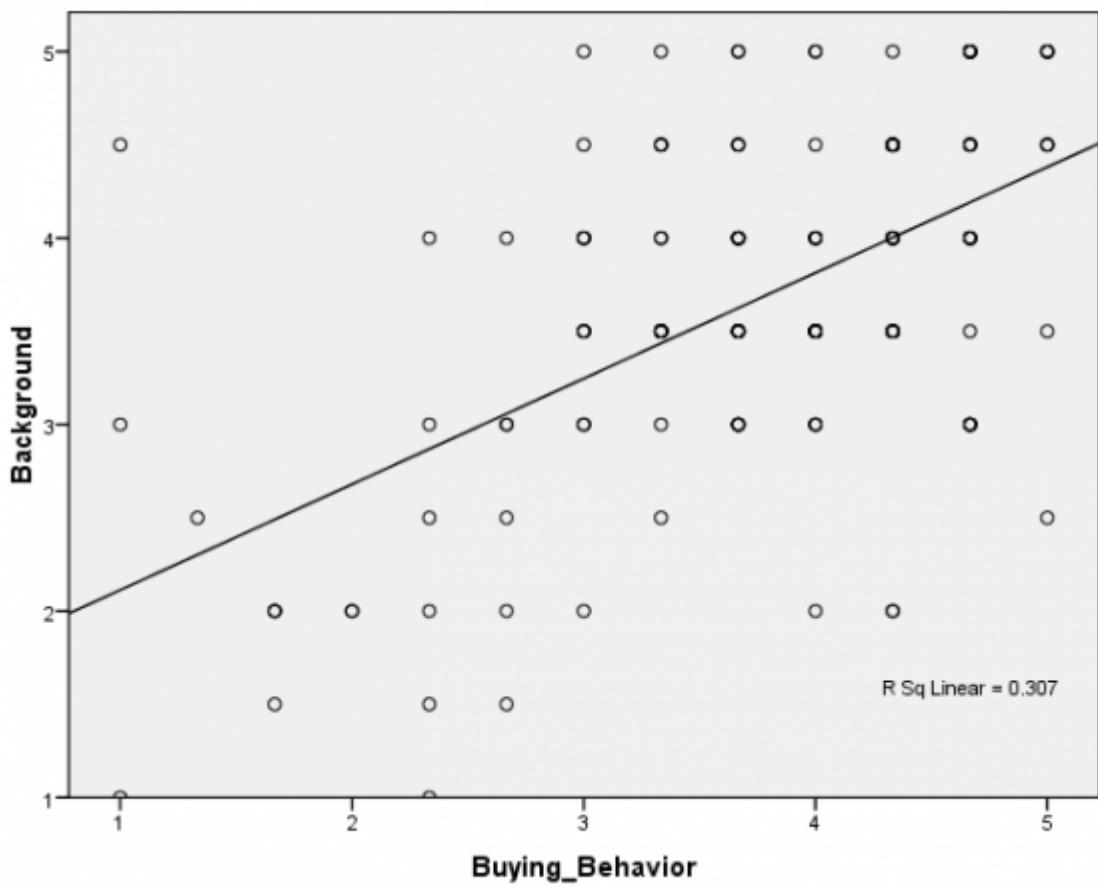


Figure 1:



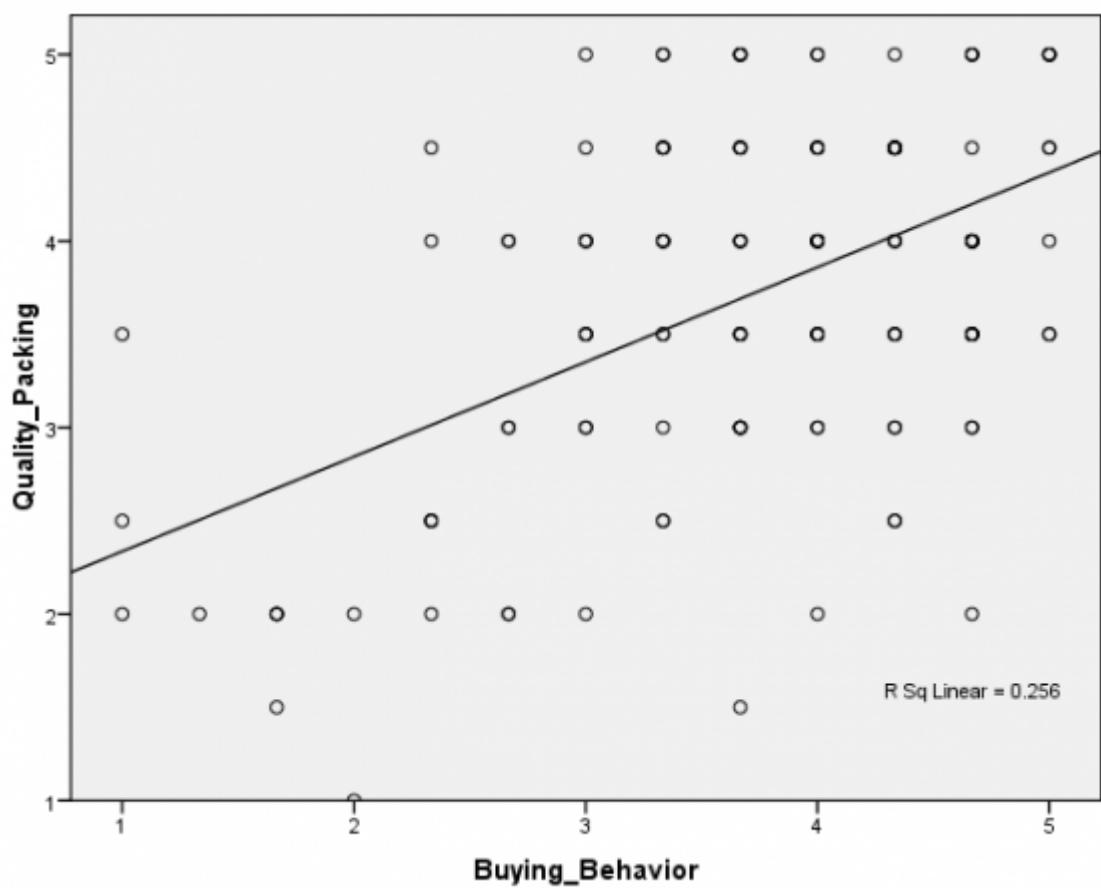
510

Figure 2: Figure : 5 . 10



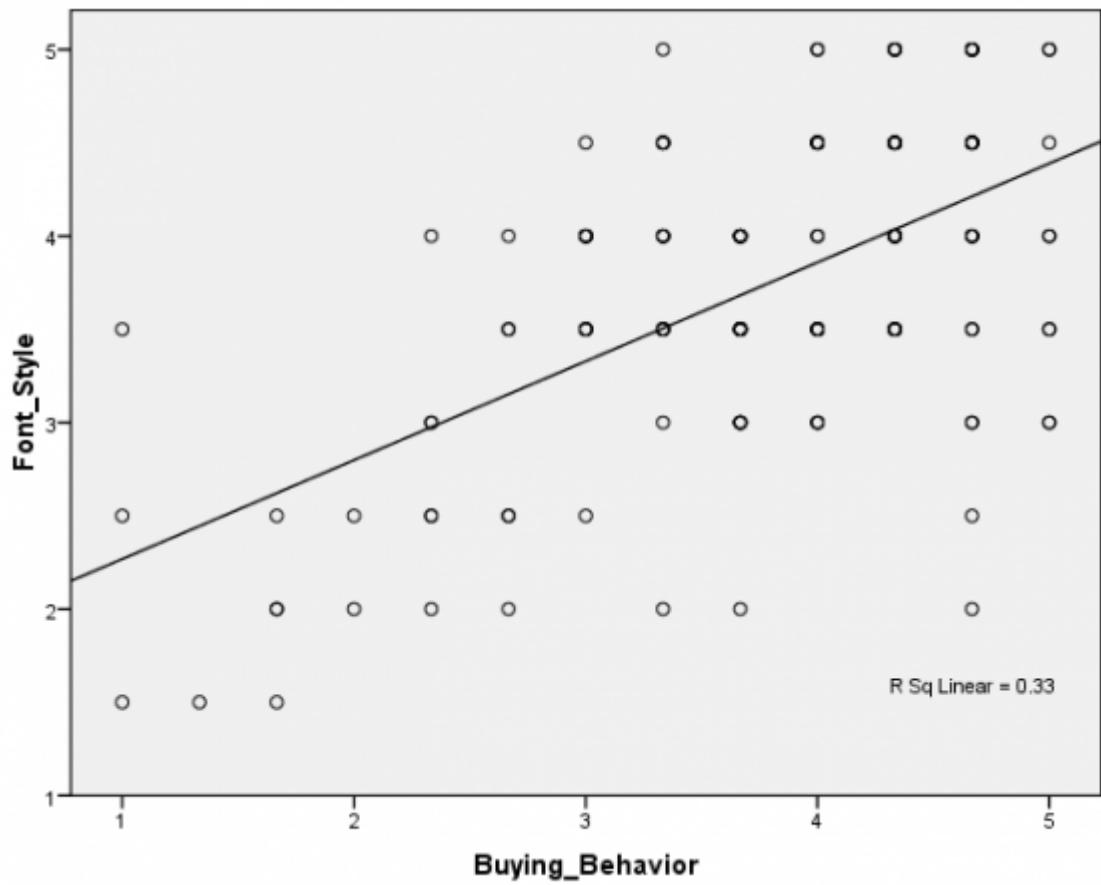
511

Figure 3: Figure : 5 . 11



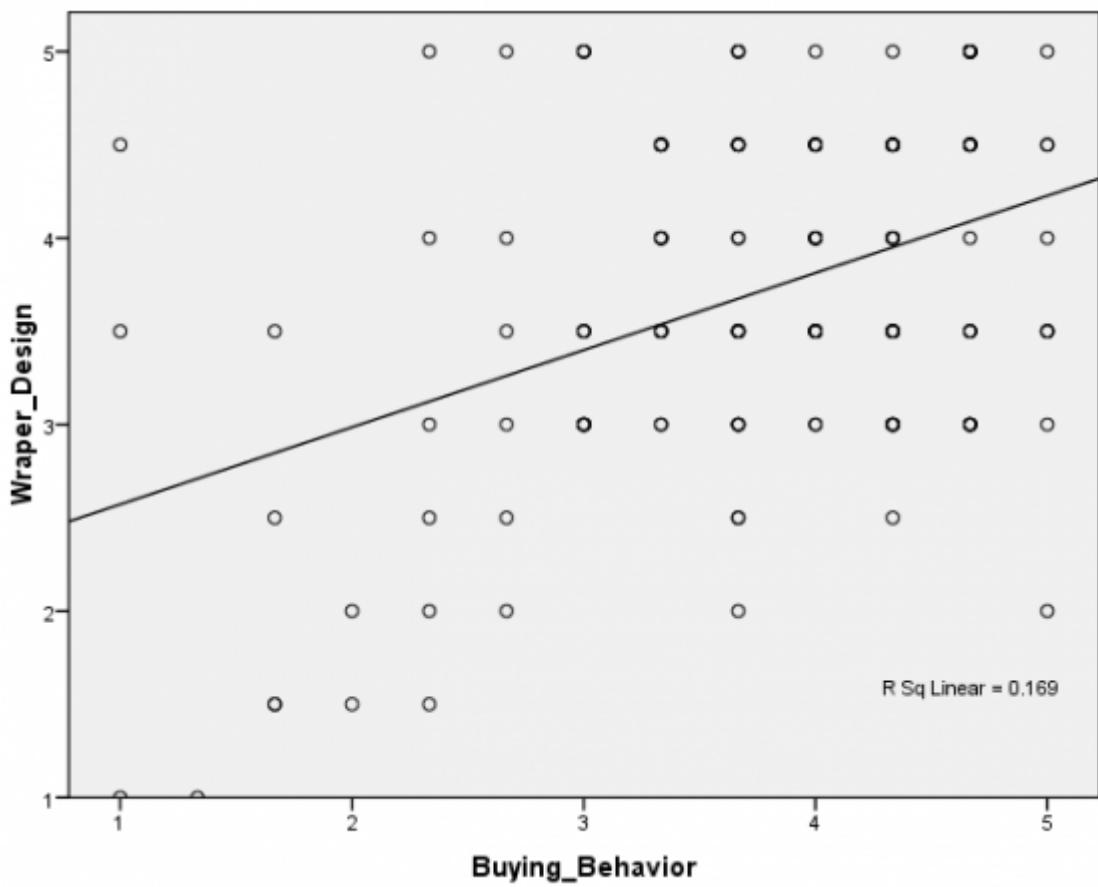
5125

Figure 4: Figure : 5 . 12 Figure 5 .



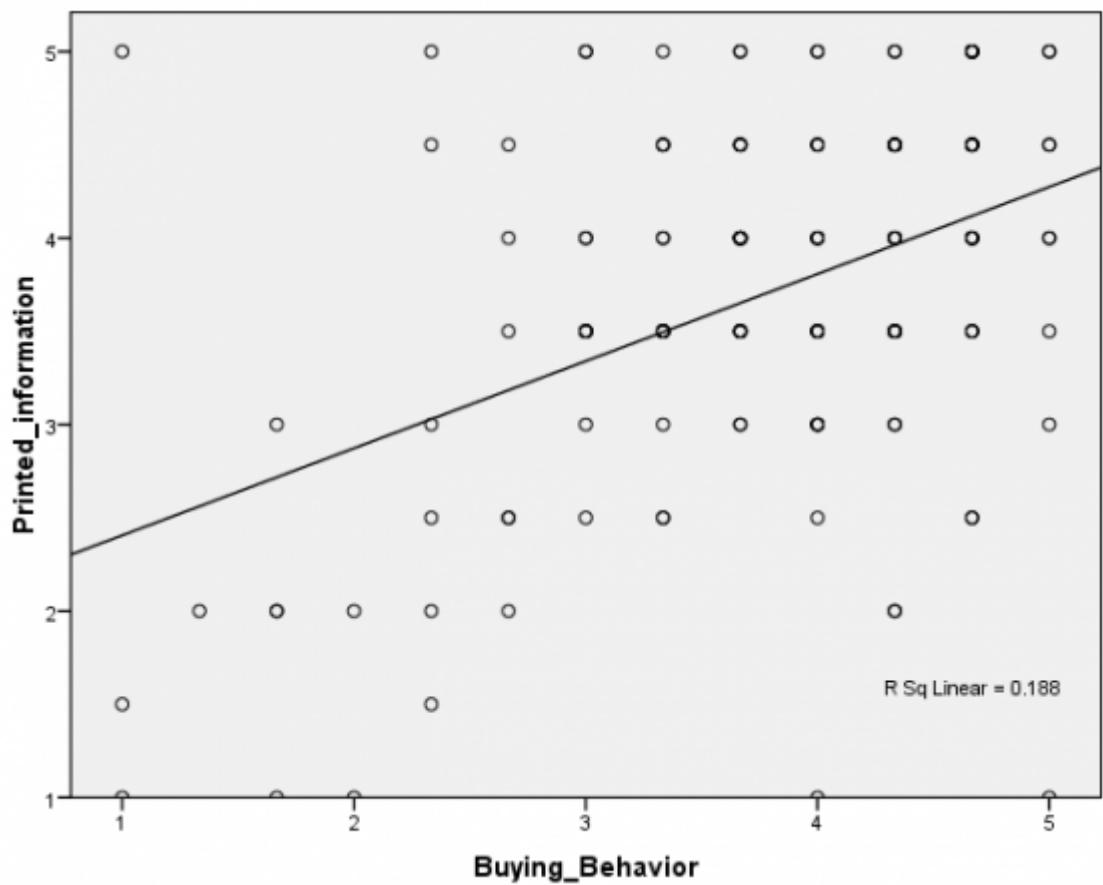
5135

Figure 5: Figure : 5 . 13 Figure 5 .



514

Figure 6: Figure : 5 . 14



5155

Figure 7: Figure : 5 . 15 Figure 5 .

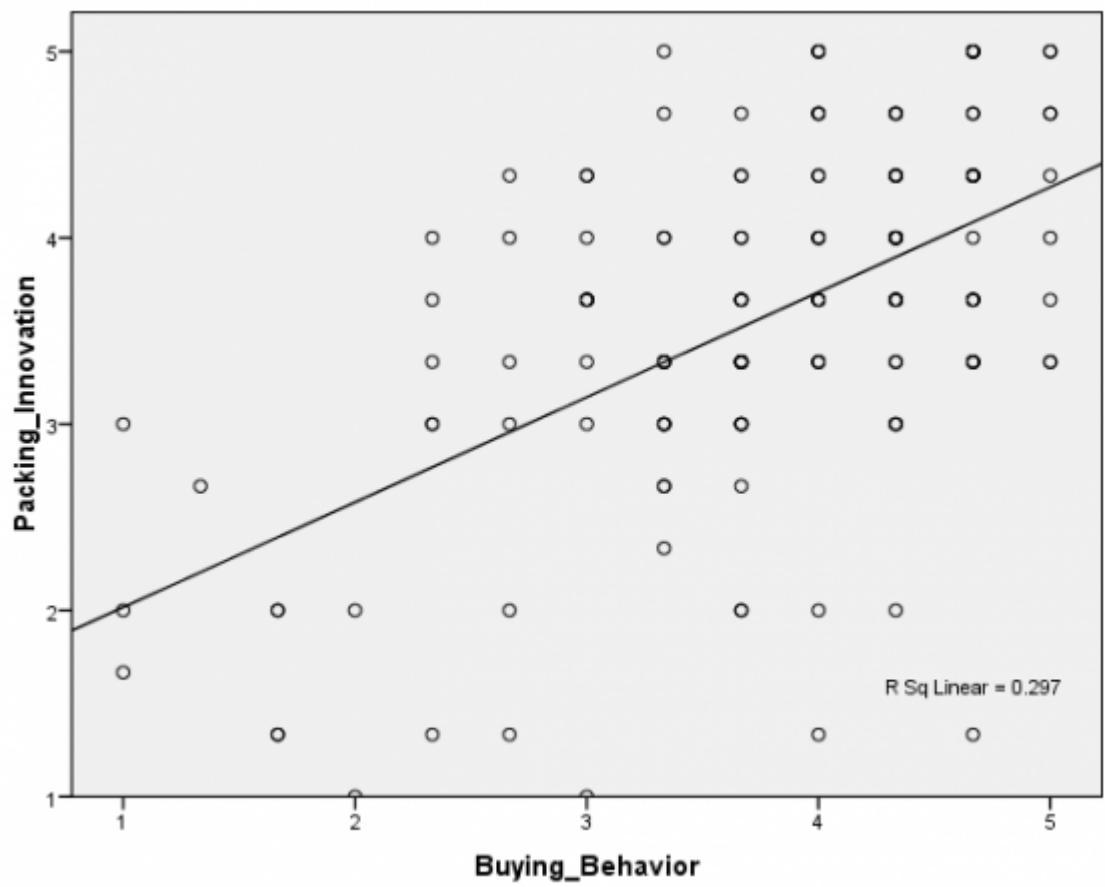


Figure 8: S

Figure 9:

26 RECOMMENDATIONS

:

3. Correlation

Table : 5.5

The Pearson's correlation is used to find a correlation between at least two continuous variables. Descriptive Statistics

N Minimum Maximum Mean

Font_Style 145	2	5	3.71
----------------	---	---	------

Valid N (listwise)	145	Descriptive Statistics
		Table : 5.2
		Std.
		N
		Minimum
		Maximum
		Mean
		Packing_Color
		Valid N
		(listwise)

Table : 5.6

Descriptive Statistics
N Minimum Maximum Mean

Wraper_Design 145	Reliability Statistics 1 5	3.70
Cronbach's Alpha 0.782	Valid N (listwise) 145	N of Items 2

Reliability Statistics	Descriptive Statistics	Background
		145
		Valid N
		(listwise)
		The above table
		5.3 the minimum value of 1 and maximum value of 5.
		The values can be deviated by

Cronbach's Alpha N Minimum Maximum Mean N of Items

5

Where two variables buying behavior and Printed Information positively correlated ($r = .545$, $p = .000$). There is moderate relation between these two variables which is significant. So there is significant relationship between Buying Behavior and Packing Innovation.

e) Regression Analysis

Model	Model Summary			Model	ANOVA b
	R	R Square	Adjusted R Square	Estimate Std.	Sum of Squares
1	.729531	.507	.646	.646	Regression 64.787 7

Figure 11: Table 5 .

In above table the R coefficient, its value is 0.729. While Adjusted R Square shows the ratio of interdependence. Value of adjusted R square is 0.507 which is multiply by 100. It the 50.7% of the variance in the dependent variable can be predicted from Independent variable.

ANOVA b	Sum of Squares	Mean Square	df	Regression	64.787	7
Residual	57.139	137				
Total	121.926	14				

437 .1 d) Correlations

438 Hypothesis : 1 H1: there is relationship between Buying Behavior and Packing color Table ???.17 represents the
439 table of correlations. Where two variables -buying behavior and Background of Packing are positively correlated
440 ($r = .554$, $p = .000$). There is moderate relation between these two variables which is significant. So H2 is
441 accepted.

442 It means that the customer can adopt product on the behalf of its packaging background. This result is also
443 useful to marketer so that they create products with best possible background image. There is moderate relation
444 between these two variables which is significant. H3 cannot reject.

445 .2 Global

446 The result is clear that the consumer also evaluates the products on the behalf of its packaging quality. The
447 better quality of package is proffered by customer.

448 Hypothesis : 4 H4: there is relationship between Buying Behavior and Font Style. Where two variables buying
449 behavior and Printed Information positively correlated ($r = .433$, $p = .000$).

450 There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

451 Hypothesis : 6 H6: there is relationship between Buying Behavior and Printed Information. Hypothesis : 7
452 H7: there is relationship between Buying Behavior and Packing Innovation.

453 -23.

454 -.

455 -.

456 [Vazquez et al. ()] 'A case study exploring the packaging design management process within a UK food retailer'.
457 D Vazquez , M Bruce , R Studd . *British Food Journal* 2003. 105 (9) p. .

458 [S Nuntasaree and Barry ()] 'a model of male consumer behavior in buying skin care products in Thailand'. Dr
459 S Nuntasaree , Barry . *ABAC Journal* 2008. 29 (1) .

460 [Ahasanul (2009)] H Ahasanul . *Factors influencing buying behavior of piracy impact to malaysian market*
461 *international review of business research Papers*, Ali 2009. March 2009. 5 p. .

462 [Veres ()] *An empirical investigation on loyalty The case of packaging industry*, Erzsebet Hetesit -Zoltan Veres .
463 2007.

464 [Rex et al. ()] *an exploratory study into the impact of color and packaging as stimuli in the decision making*
465 *process for a low involvement non-durable product, faculty of business and enterprise, swinburne university of*
466 *technology, Judy Rex , Stuart Wai , Antonio Lobo . 2003.*

467 [Bytyqi Hysen and Mensur ()] 'analysis of consumer behavior in regard to dairy products in Kosovo'. * Bytyqi
468 Hysen , Vegara Mensur . *Agric. Res* 2008. 2008. (3) p. 46.

469 [Bed ()] S Bed . *new consumer products branding, packaging and labeling in Nepal, the Journal of Nepalese*
470 *business studies*, 2008.

471 [Kriti Bardhan Gupta ()] *consumer behaviour for food products in India ,19th annual world symposium Indian*
472 *institute of management, Kriti Bardhan Gupta . 2009.*

473 [Adelina Broadbridge Henry Morgan (ed.) ()] *consumer buying behavior and perception toward retail brand baby*
474 *products, Adelina Broadbridge & Henry Morgan (ed.) 2007.*

475 [Sogn-Grundvag and Østli ()] 'Consumer evaluation of unbranded and unlabelled food products: the case of
476 bacalhau'. G Sogn-Grundvag , J Østli . *European Journal of Marketing* 2009. 43 (1/2) p. .

477 [Ampuero et al. ()] 'consumer perceptions of product packaging'. O Ampuero , N Vila , O Ampuero , N Vila .
478 *Journal of Consumer Marketing* 2006. 2006. 23 (2) p. . (Consumer perceptions of product packaging)

479 [Sony ()] 'consumer response to sponsorship leveraged packaging (SLP), school of management and marketing
480 university of Southern Queensland West Street'. K Sony . *Role of Packaging on Consumer Buying Behavior*
481 *-Patan District Global Journal of Management and Business Research* 2008. 2005. department of management
482 Airlangga University Assoc. Professor Jane (consumer responses toward attribute framing in product
483 packaging. XII Issue X Version I 66)

484 [Butkeviciene et al. ()] 'Impact of consumer package communication on consumer decision making process'. V
485 Butkeviciene , J Stravinskiene , A Rutelione . *Inzinerine Ekonomika-Engineering Economics* 2008. (1) p. .

486 [Butkeviciene et al. ()] 'Impact of consumer package communication on consumer decision making process'. V
487 Butkeviciene , J Stravinskiene , A Rutelione . *Inzinerine Ekonomika-Engineering Economics* 2008. (1) p. .

488 [Rita ()] *impact of package elements on consumer purchase, Kauno technologijos universitetas, Lietuva,*
489 *ekonomika ir vadyba, K Rita . 2009.*

490 [Rita Kuvykaite1, Aist? Dovaliene2, Laura Navickiene3 (ed.) ()] *Impact of package elements on the consumer*
491 *purchase decision economics & management, Rita Kuvykaite1, Aist? Dovaliene2, Laura Navickiene3 (ed.)*
492 2009.

493 [Katharina and Wüstenhagen ()] S Katharina , Rolf Wüstenhagen , * . *the Influence of Eco-labeling on consumer*
 494 *behavior, institute for economy and the environment (IWOe-HSG)*, (Gallen, Switzerland) Sept. 1, 2005.
 495 University of St

496 [Kuvykaite et al. ()] 'Managing images in different cultures: A cross-national study of color meanings and
 497 preferences'. R ; T J Kuvykaite , K Hewett , M S Roth . *Journal of International Marketing* June 22.
 498 2001. 2000. 8 (4) p. . (Gaminio marketingas. Kaunas: Technologija. Madden,)

499 [Maiksteniene and Auruskeviciene ()] 'Manufacturer and retailer brand acceptance under different levels of
 500 purchase involvement'. K Maiksteniene , V Auruskeviciene . *Inzinerine Ekonomika-Engineering Economics*
 501 2008. (1) p. .

502 [Kotler ()] *Marketing management*, Ph Kotler . 2003. Upper Saddle River: Prentice-Hall. (9th ed)

503 [Young ()] *Measuring success: Using consumer research to document the value of package design. Design*
 504 *management review*, S Young . 2006. 17 p. .

505 [Barber et al. ()] 'motivational factors of gender, income and age on selecting a bottle of wine'. N Barber , B A
 506 Almanza , J R Donovan . *International Journal of wine marketing* 2006. 18 (3) p. .

507 [Barber et al. ()] 'Motivational factors of gender, income and age on selecting a bottle of wine'. N Barber , B A
 508 Almanza , J R Donovan . *International Journal of Wine Marketing* 2006. 18 (3) p. .

509 [Silayoi and Speece ()] 'Packaging and purchase decisions: An exploratory study on the impact of involvement
 510 level and time pressure'. P Silayoi , M Speece . *British Food Journal* 2004. 106 (8) p. .

511 [Lu ()] *Packaging as a strategic tool*, Liang Lu . 2008. University of Halmstad school of Business and Engineering

512 [Gonzalez et al. ()] 'Packaging as a tool for product development: Communicating value to consumers'. M P
 513 Gonzalez , S Thorhsbury , D Twede . *Journal of Food Distribution Research* 2007. 38 (1) p. .

514 [Gonzalez et al. ()] *packaging as a tool for product development: Communicating value to consumers, journal of*
 515 *food distribution research*, M P Gonzalez , S Thorhsbury , D Twede . 2007. 38 p. .

516 [Underwood et al. ()] 'Packaging communication: attentional effects of product imagery'. R L Underwood , N M
 517 Klein , R R Burke . *Journal of Product & Brand Management* 2001. 10 (7) p. .

518 [Prendergast and Pitt ()] 'Packaging, marketing, logistics and the environment: are there trade-offs?'. G
 519 Prendergast , L Pitt . *International Journal of Physical Distribution & Logistics Management* 1996. 26
 520 (6) p. .

521 [Prathiraja and Ariyawardana ()] P H K Prathiraja , A Ariyawardana . *impact of nutritional labeling on*
 522 *consumer buying behavior*, 2003. 2003. 5.

523 [Goncalves ()] *product characteristics and quality perception, university at Aut'onoma de Barcelona*, Pires
 524 Goncalves , Ricardo . 2008.

525 [Wever ()] *sales performance of packaging for consumer electronics products, delft university of technology*, Renee
 526 Wever . 2006. Berny de Vries.

527 [Bloch (1995)] 'seeking the ideal form: product design and consumer Response'. P H Bloch . *journal of marketing*
 528 1995. July. 59 p. .

529 [Bloch (1995)] 'Seeking the ideal form: product design and consumer response'. P H Bloch . *Journal of Marketing*
 530 1995. July. 59 p. .

531 [Smith and Taylor ()] P Smith , J Taylor . *Marketing communications: an integrated approach*, (London) 2004.
 532 Kogan Page. (4th edition)

533 [Keller ()] *Strategic brand management: Building, measuring and managing brand equity*, K L Keller . 2003.
 534 Englewood Cliffs, NJ: Prentice-Hall. (2nd ed.)

535 [Underwood ()] 'The communicative power of product packaging: creating brand identity via lived and mediated
 536 experience'. R L Underwood . *Journal of Marketing Theory and Practice* 2003. Winter. p. .

537 [Th Gersen ()] 'The ethical consumer moral norms and packaging choice'. John Th Gersen . *Journal of consumer*
 538 *policy Kluwer Academic Publishers. Printed in the Netherlands. Journal of consumer marketing* 2000. 23/2,
 539 2006. p. .

540 [Silayoi and Speece ()] 'The importance of packaging attributes: a conjoint analysis approach'. P Silayoi , M
 541 Speece . *European Journal of Marketing* 2007. (11) p. .

542 [Wells et al. ()] 'The importance of packaging design for own-label food brands'. L E Wells , H Farley , G A
 543 Armstrong . *International Journal of Retail & Distribution Management* 2007. 35 (9) p. .

544 [Renaud ()] *The influence of label on wine consumption : its effects on young consumers' perception of*
 545 *authenticity and purchasing behavior*, L Renaud . 2007. Bologna, Italy.

546 [Rundh ()] 'The multi-faceted dimension of packaging'. B Rundh . *British Food Journal* 2005. 107 (9) p. .

547 [Alice ()] *the power of packaging, united states of america*, Alice . 2006. p. .

548 [Vila and Ampuero ()] 'The role of packaging in positioning an orange juice'. N Vila , O Ampuero . *Journal of*
549 *Food Products Marketing* 2007. 13 (3) p. .

550 [Rettie and Brewer ()] 'The verbal and visual components of package design'. R Rettie , C Brewer . *Journal of*
551 *Product Brand Management* 2000. 9 (1) p. .

552 [Grossman and Wisenblit ()] 'What we know about consumers' color choices'. R P Grossman , J Z Wisenblit .
553 *Journal of Marketing Practice: Applied Marketing Science* 1999. 5 (3) p. .

554 [Grossman and Wisenblit ()] *what we know about consumers' color choices. journal of marketing Practice: applied*
555 *marketing science*, R P Grossman , J Z Wisenblit . 1999. 5 p. .