Understanding the Role of Packaging on Consumer Buying Behavior in Dhaka City:

A Study on Detergent Powder

Thesis Paper
on

Understanding the Role of Packaging on Consumer Buying Behavior in Dhaka City:

A Study on Detergent Powder

Prepared for:

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April 29 2012

April 29, 2012

Thesis Supervisor,
Mr. Md. Ashaduzzman
Faculty of Business Administration
Eastern University,
Dhanmondi, Dhaka.

Subject: Submission of the Thesis Paper.

Dear Sir:

It is my pleasure to submit the Thesis Paper on "**Understanding the Role of Packaging on Consumer Buying Behavior in Dhaka City: A Study on Detergent Powder**". The paper is submitted as part of the partial fulfillment of the BBA program.

As a part of my BBA program, I have completed my thesis in place of Internship program. While conducting this paper I got the opportunity to have a face to face discussion with my respondents who helped me to complete this paper. This paper provides a little knowledge about role of packaging on consumer buying behavior in case of detergent powder for them who live in Dhaka city. With the permission of my honorable supervisor sir, I have conducted the paper to understand some exclusive features of packaging of detergent powders which strongly affect the consumer purchasing behavior.

I believe this paper will help the manufacturing companies to have a better understanding about the consumer buying behavior for detergent powders and improve their packaging as well.

I want to have the privilege to give answers to your queries, if any.

Sincerely yours,

_____
Mohammad Shafat Mostafa
ID: 102200057
Batch Number: 22nd, Bachelor of Business Administration
Eastern University

Acknowledgement

First, I would like to express my heartiest gratitude to the Almighty Allah.

I also express my heartiest gratitude to Mr. Md. Ashaduzzman, Assistant Professor, Eastern University, Faculty of Business Administration, for his valuable guidance, scholarly direction, and unconditional support during my tenure of the study. I have learnt a great deal from him. His counseling has made me more sincere, responsible and passionate about my work.

My sincere gratitude and appreciation goes to all other faculty members and those people who helped me by providing their valuable judgment, time along with his kindness, patience and suggestions in preparing the thesis.

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Abstract

The aim of this thesis is to get a study to point towards the role of packaging on consumer buying behavior in Dhaka city while purchasing the detergent powder. The basic purpose of behind it is to find out how such factors are behind the success of packaging. According to this research I try to find the positive relationship between independent variable and dependent variables. For collecting the data I will use the questionnaire, while for analysis I will use SPSS 16. A sample of 200 consumers will be selected to test the reliability of the model. The significance of the study, its delimitation and limitations are discussed. The research is based in Dhaka, the capital city of Bangladesh. The consumer buying behavior is dependent variable. The packaging is the most important factor. Packaging elements like packaging color, background Image, packaging material, font style, design of wrapper, printed information and innovation is taken as predictors. Due to increasing self-service and changing consumers' lifestyle the interest in package as a tool of sales promotion and stimulator of impulsive buying behavior is growing increasingly. So package performs an important role in marketing communications, especially in the point of sale and could be treated as one of the most important factors influencing consumer's purchase decision in detergent industry. Literature analysis on question under investigation has shown that there is no agreement on classification of package elements as well as on research methods of package impact on consumer's purchase decision. By this thesis we seek to reveal elements of package having the ultimate effect on consumer choice. Taking into consideration that package could be treated as a set of various elements communicating different messages to a consumer; the research model was developed and tested in order to reveal impact of visual and verbal package elements on consumer's purchase decisions.

Introduction

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Introduction

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Chapter One- Introduction, Background, Objectives

1.0 Introduction

In nowadays competitive environment the role of package has changed due to increasing self-service and changing consumers' lifestyle. Firms' interest in package as a tool of sales promotion is growing increasingly. Package becomes an ultimate selling proposition stimulating impulsive buying behavior, increasing market share and reducing promotional costs in detergent powder industry .According to Rundh (2005) package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Also package imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation. Thus package performs an important role in marketing communications and could be treated as one of the most important factors influencing consumer's purchase decision in case of detergent powder. In this context, seeking to maximize the effectiveness of package in a buying place, the researches of package, its elements and their impact on consumer's buying behavior became a relevant issue. Literature analysis on question under investigation has shown that there is no agreement on classification of package elements as well as on research methods of packaging impact on consumer's purchase decision. Furthermore the abundance of scientific literature on this issue do not provide unanimous answer concerning impact of package elements on consumer's buying behavior: diversity of the results in this area depends not only on research models constructed and methods employed, but on the context of the research too. All above mentioned confirms the necessity to investigate this issue in more detail. In the light of these problematic aspects, research problem could be formulated as following question: what elements of a package have an ultimate effect on consumer purchase decision?

The aim of this paper – basing on theoretical analysis of package elements and their impact on consumer's purchase decision of empirically reveal the elements having the ultimate effect on consumer choice in a case of detergent powders.

Basic Facts of Dhaka City:

Dhaka is the capital of Bangladesh. It has a colorful history and known as the 'City of Mosques. Modern Dhaka is the center of political, cultural and economic life in Bangladesh.

Geographical Location

Dhaka is a megacity and one of the major cities of South Asia which is located on the bank of the River Buriganga. Dhaka, along with its metropolitan area, had a population of over 16 million in 2011, making it the largest city in Bangladesh. It is the 9th largest city in the world and also 28th among the most densely populated cities in the world.

Political Situation

Under Mughal rule in the 17th century, the city was also known as Jahangir Nagar, and was both a provincial capital. The development of modern city was started under British rule in the 19th century, and soon became the second-largest city in Bengal after Calcutta (presently Kolkata). After the partition of India in 1947, Dhaka became the administrative capital of East Pakistan, and later, in 1972, the capital of an independent Bangladesh. Despite the changes in the political area during last two decades, the political situation in Dhaka is not stable enough. Democracy is on the increase. (http://www.dhakacity.com.bd/)

Social structure

The city has historically attracted a large number of migrant workers. Half the workforce is employed in household and unorganized labor, while about 800,000 work in the textile industry. Even so, unemployment remains high at 19%. As of 2009, Dhaka's Gross Municipal Product (GMP) is registered at $85 billion. With an annual growth rate of 6.2%, the GMP is projected to rise to $215 billion by 2025. The annual per capita income of Dhaka is estimated at $1,350(USD), with 34% of households living below the poverty line, including a large segment of the population coming from the villages in search of employment, with most surviving on less than $5 a day. (http://en.wikipedia.org/wiki/Dhaka#Demographics)

Economy

The city has historically attracted a large number of migrant workers. Hawkers, peddlers, small shops, rickshaw transport, roadside vendors and stalls employ a large segment of the population rickshaw-drivers alone number as many as 400,000. Half the workforce is employed in household and unorganized labor, while about 800,000 work in the textile industry. Even so, unemployment remains high at 19%. As of 2009, Dhaka's Gross Municipal Product (GMP) is registered at $85 billion. With an annual growth rate of 6.2%, the GMP is projected to rise to $215 billion by 2025. The annual per capita income of Dhaka is estimated at $1,350(USD), with 34% of households living below the poverty line, including a large

segment of the population coming from the villages in search of employment, with most surviving on less than $5 a day. There are many small and medium retail stores and a few numbers of super shops in Dhaka city. (http://en.wikipedia.org/wiki/Dhaka#Economy)

1.1 Background and Motivation

We all are distinguishable. I made thesis based on some of the very unique features of the packaging of detergent powder those play a vital role affecting consumers' behavior and I believe that this is going to help me in my future career. We know every consumer is unique. So their behavior, personality, perception also differ. So it was difficult for me to make a conclusion up to a high level standard but still I have tried my level best to find the actual influential factors of packaging. It is fact that packaging has a very substantive role to affect the consumers which they display in the time of purchasing the detergent powder.

1.2 Objectives of the study

Since, the inhabitants of Dhaka City are very much engaged with different chores and one of them is to wash their cloths. So they frequently purchase the detergent powders as their washing materials. My ultimate or broad objective of this thesis paper is to **understand the role of packaging on consumer buying behavior of detergent powder** and the specific objective are as follows:

- ◆ To find out the effect of packaging on the buying behavior.

- ◆ 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.

1.3 Scope of the Study

This thesis will be conducted in Dhaka city and respondents will be chosen on the basis of their usage of detergent powder. Though I will provide my upmost attempt to bring all the necessary materials into my thesis, but some of the tentative limitations might be:

- Time Limit

- Unavailability of Data

- Inaccuracy of Data

- Lack of Data Analysis

- In cooperation of the Respondents

- Budget Limit

1.4 Overview of the Study

This study is divided into six chapters. The first chapter is the introduction of the research topic, motivation, and purposes. Chapter 2 will provide the literature review that explains the theories and the articles related to this research. The following is chapter 3 which provides the research framework, hypotheses, questionnaire design, and research methodology. Then, chapter 4 discusses the result of the study. Chapter 5 provides the conclusion, research limitation and recommendations. Finally, Chapter 6 provides the sources where essential data has been collected. In order to have a clear overview of this research, the figure 1 shows the process of this research.

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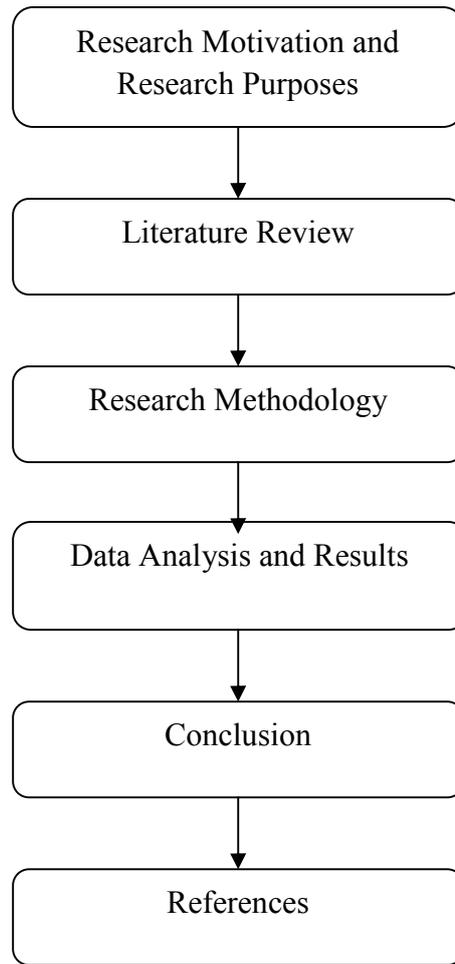
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Chapter Two- Literature Review

2.0 Literature Review

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

Bed Nath Sharma Dec. 2008 studied "New Consumer Products Branding, Packaging and labeling" in Nepal. This paper focuses on existing practice of branding, packaging and labeling of new products in consumer product manufacturing units. The study method was descriptive presentation of facts collected through questionnaire survey concerned with different section of consumer new products (soap, biscuit, noodles, cigarettes, detergent powder) and the study further investigates the new consumer product packaging and labeling status in manufacturing units. They are aware about the value of packaging and labeling.

Majority of the consumer products 84.37% (27 out of 32 responses) are using product label as a simple tag attached to the product or an elaborately designed graphic that is part of the package.

Alice Louw (2006) has studied The Power of Packaging the people belonged to Age 20-30 years old University graduates were taken for research.20 respondents were asked to rank 5 water bottles in terms of their overall appeal. Following this, they were given a questionnaire and asked to rate each of the bottles on 20 statements related their packaging. For the remaining 20 respondents, the order of the process was switched: they rated the bottles first and then ranked them. The statements ranged from functional attributes (e.g. easy to drink from, right size) to more emotive, non-functional attributes (e.g. I like the colors, high quality). For both groups there was a clear winner and a clear loser in terms of the rankings. However, although the top brand chosen was consistent in both groups, the worst brand differed. This Packaging plays an important role in the marketing context. His research results that right packaging can help a brand carve a unique position in the marketplace and in the minds on consumers.

John Th. Gersen (2000) worked on "The Ethical Consumer". Moral Norms and Packaging Choice published in Journal of Consumer Policy Kluwer Academic Publishers which was printed in the Netherlands. The paper presents a study of a case with these two characteristics and one of them was: Danish consumers' choice of environment-friendly packaging. With regard to this case, the evidence supports the claim. A majority of Danish consumers have developed personal norms about choosing environment-friendly packaging and the personal norm is a significant predictor of their (self-reported) propensity to choose environment-friendly packaging in the supermarket.

Renaud Lunardo (2007) has a great research on the influence of label on wine consumption and its effects on young consumers' perception of authenticity and purchasing behavior The main objective of the paper is to identify the effects of authenticity on purchase behavior. They used a repertory grid (RG) approach as a methodological framework in order to know which pattern of features is better at inducing purchase. All the relationships between authenticity provided by the label of bottles and consumer behavior attributes (performance risk, perceived price and purchase intentions) have all been tested by using linear regressions. This study was intended to provide a more complete understanding of the influence of the

authenticity perceive from the label of bottled wine. As an attempt to extend the research on the influence label of bottled wine can have on consumers' decisions of buying, the current it is clear from these findings is the major role played by labels.

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

Adelina Broadbridge & Henry Morgan (2007) have done a research o consumer buying behavior and perception toward retail and brand baby products. A two-stage research methodology consisting of both qualitative and quantitative research techniques was adopted. The population was defined as 'parents of children under the age of five who use baby care products'.
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 indicated that consumers need to feel confident with the product in terms of reliability and performance and packaging.

Rita Kuvykaite, Aistė Dovaliene, Laura Navickiene (2009) worked on impact of package elements on consumer purchase decision economics & management. Material are the most important visual elements for purchasing both milk and detergent powder whereas, in this case form, color and graphic could be treated as unimportant elements of package. When analyzing importance of verbal elements, it could be stated that product information for milk and detergent powder and country-of-origin are the most important elements. Furthermore its worth to add, that producer and brand couldn't be underestimated too, because the importance of both of these elements is treated by customers above the average. Comparing

the impact of visual and verbal elements of package on consumer's purchase decision it could be stated that verbal elements are more important than visual ones, when purchasing both milk and detergent powder. According to the research model developed the impact of package's elements on consumer's purchase decision depending on time pressure, consumer's involvement level and individual characteristics were analyzed.

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

Kriti Bardhan Gupta (2009) has study on Consumer Behavior for Food Products in India. Primary data was collected from 326 respondents in Uttar Pradesh and National Capital Region. The relative importance of various food purchasing criteria was estimated for four different food categories, food and vegetables; milk and milk products; food grains and pulses; and processed foods on 1-5 scale. The present study explored the consumer behavior for food products in India from different perspectives. People accepted the fact that their food habits get affected with the shifting to a new region but many basic buying and consumption behavior do not change. Some of the changes in buying and consumption behavior of relocated people, which were observed after their settlement to a new region, were not significantly different from the level of changes in behavior of non-moving people. However, compared to the last 10 years, people have started preferring more healthy foods and are willing to try out new dishes. They tend to learn cooking and eating new food items after relocation without discontinuing their traditional food items. There is also influence of children on the type of food items that they eat.

This paper has shown that 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. Economical costs and environmental impact can be expressed in a single score, indicating the packs performance. To allow proper management of the pack design the sales performance should be expressed in as simple a way as possible, preferably also a single score. As calculating the sales performance is impossible a test will need to be used. The pressure from time-to-market in the CE industry, demands that the test be relatively simple.

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

Several studies have investigated issues such as packages as a means of attracting the attention of consumers (Underwood et al., 2001; Garber et al., 2000; Goldberg et al, 1999; Schoormans & Robben, 1997). Other studies researched packages as a means of communication as well as a means of communicating brand and product meaning (Underwood & Klein, 2002; Garber et al., 2000, Schoormans & Robben, 1997; Gordonet al., 1994; Homer & Gauntt, 1992; Rigaux-Bricmont, 1981; McDaniel & Baker, 1977). Packages are found to attract attention (Underwood et al., 2001; Garber et al., 2000; Goldberg et al., 1999; Schoormans & Robben, 1997). In fact, Goldberg et al. (1999) found that by dismissing such non-verbal signs as colors, the attention to verbal signs can be increased. Pictures on packages are emphasized to attract attention, particularly when consumers are not very familiar with the brands (Underwood et al., 2001).

Furthermore, packages are claimed to attract attention when their appearances are not typical within a product class (Garber et al., 2000; Schoormans & Robben 1997). In other words,

past research has discovered that deviating packages attract attention. Other studies show that deviating package colors and shapes attract attention (Garber Etal., 2000; Schoormans & Robben 1997). Underwood (2001), on the other hand, found that pictures on packages attract attention particularly in cases when consumers are less familiar with a brand. Studies that have focused on other single signs than pictures on packages have found that such single package signs as colors (Gordon et al., 1994), brand names (Rigaux-Bricmont, 1981), and materials (McDaniel & Baker, 1977) convey brand meaning.

Pires Gon¸calves, Ricardo (2008) worked on Product Characteristics and Quality. When they choose among competing products consumers are faced with quality and product performance uncertainty, hence, they rely on cues as extrinsic attributes, for instance brand, price, package and warranty, as signals of perceived quality. Little research has been done on packages as extrinsic attributes used by consumers as signs of perceived quality, thus this study is a small contribution to that lack of scholarly research on packages. Colors and shapes are important elements of marketing strategies, and they are both essential features of packages, especially in product labels. Labels are one of the most important features of product packaging, and they are designed to communicate a message. The model proposed in this study builds on previous models of consumer quality perception and signals of quality from product cues. In this research, colors and shapes combinations in labels are considered as the extrinsic attributes used as signals of quality by consumers.

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

Judy Rex, Stuart Wai and Antonio Lobo (2003), have done an exploratory study on the "Impact of Color and Packaging as Stimuli in the Decision Making Process" for a low involvement non-durable product. The consumers and the manager agreed that important factors when deciding which packet of potato crisps to purchase were the quality, the brand

and the price of the product, with flavor also being an important factor for the consumers. The consumers used a constant sum scale to rate the six attributes of flavor, quality, brand, price, size and shape, and the color of the packaging.

K Sony (2008) studied the consumer responses toward attribute framing in product packaging. The main purpose of this study is to investigate the impact of message framing, level of involvement, and numerical difference on consumer response. Fresh-milk product was chosen as the object for experiment. This study has the following suggestion for packaging design based on the findings. Fresh milk is commonly considered as health-related product. The study is advantageous in giving marketers a more thorough picture of how message framing affects consumer response in various numerical alternatives and level of involvement. It will also be helpful in developing successful packaging strategy. For future study, different types of products can be investigated further.

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

The Current Scenario of Detergent Powder Industry in Bangladesh

Laundry detergent, or washing powder, is a type of detergent (cleaning agent) that is added for cleaning laundry. In common usage, "detergent" refers to mixtures of chemical compounds including which are similar to soap but are less affected by "hard water." In most household contexts, the term detergent refers to laundry detergent vs. hand soap or other types of cleaning agents. Most detergent is delivered in powdered form. In Bangladesh there are some famous brands of detergent powders such as Surf Excel, Chaka, Tibet, and Wheel etc.

Surf Excel
Surf Excel is a leading brand fro Unilever. Water that contains dissolved calcium and magnesium salts is called Hard Water. While it's an enriched form of drinking water that keeps you healthy and strong, clothes don't exactly feel the same way. Because of its inability to dissolve soaps and detergents, washing with hard water can be a waste of time - clothes simply refuse to clean and your frustration can grow. Only Surf excel Quick wash smartly converts hard water to soft water and the best part is this happens as soon as the soap and water mix. Surf Excel Quick wash is available in the following pack: 1000 gm, 750 gm, 500 gm, 250 gm, 100 gm and mini pack (50 gm).

Tibet

Tibet has been a traditional brand from Kohinoor Chemical which is prepared from non effective extra power whitening and brightening agents to protect delicate skins and fabric. Gentle refreshing touch of lemon or jasmine keeps a miracle satisfaction for all the day long.

Chaka

Chaka Washing Powder promises to keep the clothes clean like new even after repeated washing. Chaka Washing Powder removes tough dirt and greasy substance from cloth easily and effectively without causing harm to the fabric. Chaka takes care of the clothes just like we do. The range of products from Chaka is always gentle on skin but ruthless against the stiffest of stains. It will leave clothes looking at their happiest.

Wheel

A dominant market leader in the detergent segment, Wheel Washing Powder is known for its great cleaning ability with minimum effort. The new formulation of Wheel Washing Powder is enhanced with the fragrance of thousand flowers as well as the power of lemon, thus not only removing the tough dirt in your cloth, but also leaving clothes smelling of a thousand flowers well after washing. The convenience provided by Wheel Washing Powder has relieved many housewives from the laborious laundry process of the traditional Ball Soaps.

Theoretical Foundation

Consumer Buying Behavior

Consumer buying behavior refers to the process by which individuals search for, select, purchase, use, and dispose of goods and services, in satisfaction of their needs and wants. Purchase decision making pattern is a complex amalgam of needs and desires, and is influenced by factors such as the consumer's:

(1) Societal role (parent, spouse, worker, etc.),

 (2) Social and cultural environment and norms, and

(3) Aspirations and inhibitions

The marketing concept stresses that a firm should create a Marketing Mix (MM) that satisfies (gives utility to) customers, therefore need to analyze the what, where, when and how consumers buy. Marketers can better predict how consumers will respond to marketing strategies.

Stages of the Consumer Buying Process

There are six Stages to the Consumer Buying Decision Process (For complex decisions). Actual purchasing is only one stage of the process. Not all decision processes lead to a purchase. All consumer decisions do not always include all 6 stages, determined by the degree of complexity. The 6 stages are discussed below:

Problem Recognition

Basically it refers to the awareness of need which creates the difference between the desired state and the actual condition.

Information search

A successful information search leaves a buyer with possible alternatives, the evoked set. There are both internal and external sources of information.

Evaluation of Alternatives

This stage is all about the evaluation of the available options of the product or service. If we are not satisfied with our choice then, we return to the search phase. Information from different sources may be treated differently. Marketers try to influence by "framing" alternatives.

Purchase Decision

After the evaluation of the alternatives, we make our purchase decision and eventually purchase the product.

Post Purchase Behavior or Cognitive Dissonance

Sometimes consumers feel a bit of discomfort after purchasing a product which is referred as a cognitive dissonance.

Types of Consumer Buying Behavior

The four types of consumer buying behavior are described as follows:

Routine Response/Programmed Behavior

In that case the involvement is very low and consumers show this time of behavior while purchasing low cost items such as rice, soft drinks etc.

Limited Decision Making

For this type consumers require a moderate amount of time for information gathering and they do it when they occasionally purchase any goods such as clothes.

Extensive Decision Making

This type of behavior is shown by the customers when they purchase an expensive product such as car and it needs a sheer and high involvement. In that case the consumers have to go through all six stages of the buying process.

Impulse Buying Behavior

The purchase of the same product does not always elicit the same Buying Behavior. Product can shift from one category to the next. For example: Going out for dinner for one person may be extensive decision making (for someone that does not go out often at all), but limited decision making for someone else. The reason for the dinner, whether it is an anniversary celebration, or a meal with a couple of friends will also determine the extent of the decision making.

Categories that Affect the Consumer Buying Decision Process

A consumer, making a purchase decision will be affected by the following three factors: personal, psychological and social.

Personal

Personal factors refer to the demographic factors such as sex, race, age etc. as an example: young people purchase things for different reasons than older people.

Psychological factors

Psychological factors include:

Motives

A motive is an internal energizing force that orients a person's activities toward satisfying a need or achieving a goal. Actions are effected by a set of motives, not just one. If marketers can identify motives then they can better develop a marketing mix.

Maslow's Hierarchy of Needs

Perception

Perception is the process of selecting, organizing and interpreting information inputs to produce meaning. Information inputs are the sensations received through sight, taste, hearing, smell and touch.

<u>Ability and Knowledge</u>

Learning means the permanent changes in a person's behavior caused by information and prior experience. Therefore to change consumers' behavior about the product, we need to give them new information. When making buying decisions, buyers must process information. Knowledge is the familiarity with the product and expertise .Inexperience buyers often use prices as an indicator of quality more than those who have knowledge of a product.

<u>Attitudes</u>

Attitude is the positive and negative feelings about an object or activity-maybe tangible or intangible, living or non- living. Individual learns attitudes through experience and interaction with other people. Consumer attitudes toward a firm and its products greatly influence the success or failure of the firm's marketing strategy. Attitudes and attitude change are influenced by consumer's personality and lifestyle. Consumers screen information that conflicts with their attitudes.

<u>Personality</u>

All the internal traits and behaviors that make a person unique is called the personality. Uniqueness arrives from a person's heredity and personal experience.

<u>Competitiveness</u>

Traits affect the way people behave. Marketers try to match the store image to the perceived image of their customers .There is a weak association between personality and Buying Behavior; this may be due to unreliable measures. Consumers buy products that are consistent with their self concept.

<u>Lifestyles</u>

Lifestyles are the consistent patterns people follow in their lives.

<u>Social Factors</u>

Consumer wants, learning, motives etc. are influenced by opinion leaders, person's family, reference groups, social class and culture. As we know that detergent powder is such a product which is consumed within the family and in that case the marketers need to understand:

- Many family decisions are made by the family unit.
- Consumer behavior starts in the family unit.
- Family roles and preferences are the model for children's future family (can reject/alter/etc).

- Family buying decisions are a mixture of family interactions and individual decision making.
- Family acts an interpreter of social and cultural values for the individual.
- The Family life cycle: families go through stages; each stage creates different consumer demands.

What is packaging?

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

Types of Packaging

Packaging is basically of three types which are given below:

Primary packaging

Primary packaging is the material that first envelops the product and holds it. This usually is the smallest unit of distribution or use and is the package which is in direct contact with the contents.

Secondary packaging
Secondary packaging is outside the primary packaging, perhaps used to group primary packages together.

Shipment Packaging
Shipment Packaging (also known as Tertiary packaging) is used for bulk handling, warehouse storage and transport shipping. The most common form is a palletized unit load that packs tightly into containers.

Objectives of Packaging

Packaging has several objectives:

Physical protection
The objects enclosed in the package may require protection from, among other things, mechanical shock, vibration, electrostatic discharge, compression, temperature, etc.

Barrier protection
A barrier from oxygen, water vapor, dust, etc., is often required. Permeation is a critical factor in design. Some packages contain desiccants or Oxygen absorbers to help extend shelf life. Modified atmospheres or controlled atmospheres are also maintained in some food packages. Keeping the contents clean, fresh, sterile and safe for the intended shelf life is a primary function.

Containment or Agglomeration
Small objects are typically grouped together in one package for reasons of efficiency. For example, a single box of 1000 pencils requires less physical handling than 1000 single pencils. Liquids, powders, and granular materials need containment.

Information transmission
Packages and labels communicate how to use, transport, recycle, or dispose of the package or product. With pharmaceuticals, food, medical, and chemical products, some types of information are required by governments. Some packages and labels also are used for track and trace purposes.

Marketing
The packaging and labels can be used by marketers to encourage potential buyers to purchase the product. Package graphic design and physical design have been important and constantly evolving phenomenon for several decades. Marketing communications and graphic design are applied to the surface of the package and (in many cases) the point of sale display.

Security
Packaging can play an important role in reducing the security risks of shipment. Packages can be made with improved tamper resistance to deter tampering and also can have tamper, evident, features to help indicate tampering. Packages can be engineered to help reduce the risks of package pilferage: Some package constructions are more resistant to pilferage and some have pilfered indicating seals. Packages may include authentication seals and use security printing to help indicate that the package and contents are not counterfeit.

Convenience
Packages can have features that add convenience in distribution, handling, stacking, display, sale, opening, reclosing, use, dispensing, reuse, recycling, and ease of disposal.

Single serving or single dosage packaging has a precise amount of contents to control usage. Bulk commodities (such as salt) can be divided into packages that are a more suitable size for individual households. It is also aids the control of inventory: selling sealed one-liter-bottles of milk, rather than having people bring their own bottles to fill themselves.

Theatrical Frame work

Independent Variable

Packaging color

Background Image

Packaging Material

Font Style

Design of Wrapper

Printed Information

Innovation

Dependent Variable

Consumer Buying Behavior

Independent Variable

1. Packaging color
2. Background Image
3. Packaging Material
4. Font Style
5. Design of wrapper
6. Printed Information
7. Innovation

Dependent Variable

Consumer Buying Behavior

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. One good example of successful use of color psychology is in the Apple iPod advertisements; they use simple tri tone color schemes of black, white and a bright background color. The bright background color is to give the advertisement a fun feel and the contrasting white on black is to focus attention.

Meaning of the Color Blue

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

Meaning of the Color Green

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

<u>Meaning of the Color Yellow</u>

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

Background Image

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

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. The first packages used the natural materials available at the time: Baskets of reeds, wineskins ,wooden boxes, pottery vases, ceramic amphorae, wooden barrels, woven bags, etc. Processed materials were used to form packages as they were developed: for example, early glass and bronze vessels. The study of old packages is an important aspect of archaeology. Paperboard cartons and corrugated fiberboard boxes were first introduced in the late 19th century. Packaging advancements in the early 20th century included Bakelite closures on bottles, transparent cellophane over wraps and panels on cartons, increased processing efficiency and improved food safety. As additional materials such as aluminum and several types of plastic were developed, they were incorporated into packages to improve performance and functionality. So packaging material have strong have with buying behavior.

Font Style

The font style of packaging grabs customer attraction. The up gradation of IT technology have support this feature. The successful companies have best practices of the font styles. They hire specialist in composing which create mind blowing and attractive font styles. The attractive package has innovative font style. So we can say that there is relation between font style and 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.

Printed Information

The labels on packages are important components of the overall marketing mix and can support advertising claims, establish brand identity, enhance name recognition, and optimize shelf space allocations. The consumer can change his decision on the basis of information printed on the packaging. Mostly in Merchandises and daily FMCG the consumer can perform evaluation on the basis of printed information.

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 .Manufacturers today strive to have packaging that maintains the key equities of the brand, has stand out appeal on the retailer's shelf, and is sustainable but with lower production costs. The customer can adopt product on the basis of its innovative packaging, which shows the relation between buying behavior and innovation of packaging.

3.0 Methodology

This chapter will introduce the methodology of the study. The information from the chapter 2 will be used to form the hypothesis. In addition, this chapter will describe the questionnaire, the samples, data collection, and the statistical methods used to analyze the data. Research workers are setting module to process in order to succeed with the objectives. The method details are as follows:

```
┌─────────────────────────────┐
│   Population Collection      │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Research Instrument        │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Research Hypotheses        │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Research Design            │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Data Collection            │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Sample Selection           │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│   Data Analysis              │
└─────────────────────────────┘
```

3.1 Population and Sample Collection

This report summarizes the result of quantitative survey research. The people in Dhaka city who uses packaged detergent powders fall under the population for this research. Sample size is determined by 2% of the total households of three areas in Dhaka city comprises, Dhanmondi Residential Area, Elephant Road and Kamlapur. The total household of these areas comprises 3,646, 4587 and 3500 respectively. So 2% of these household comes at 220 (approx.) respondents from these sample. To make it round figure I have taken 200 samples as research sample.

3.2 Research Instrument

The research instrument is a questionnaire which is divided into three parts.

>Part I – Demographics

>Part II – Buying Behavior

>Part III – Hypotheses Testing

3.3 Research Design

The proposed study will use a conceptual framework to determine the role of packaging affecting consumer buying behavior. The study belongs to the area of consumer behavior regarding detergent powder. It requires an understanding of each customer's experiences and perceptions about the product. Traditional quantitative approaches to data collection using survey techniques are suitable and reliable for this study.

This study will use the questionnaire survey method for collecting data. The advantages of questionnaire survey method are providing quick, inexpensive, efficient and accurate means of assessing information about population. As we discussed above, a 20 items questionnaire was developed to obtain the responses from Bangladeshi consumers about their opinions on various research variables. The detail contents of the questionnaire, including the statement of questionnaire items and ranging or the scale were shown in Appendix.

3.4 Hypothesis

Hypothesis 1:

H1: there is a relationship between Buying Behavior and Packing color

H0: there is no relationship between Buying Behavior and Packing color

Hypothesis 2:

H1: there is a relationship between Buying Behavior and Background of Packing.

H0: there is no relationship between Buying Behavior and Background of Packing.

Hypothesis 3:

H1: there is a relationship between Buying Behavior and Quality of Packing elements.

H0: there is no relationship between Buying Behavior and Quality of Packing elements.

Hypothesis 4:

H1: there is a relationship between Buying Behavior and Font Style.

H0: there is no relationship between Buying Behavior and Font Style.

Hypothesis 5:

H1: there is a relationship between Buying Behavior and Wrapper Design.

H0: there is no relationship between Buying Behavior and Wrapper Design.

Hypothesis 6:

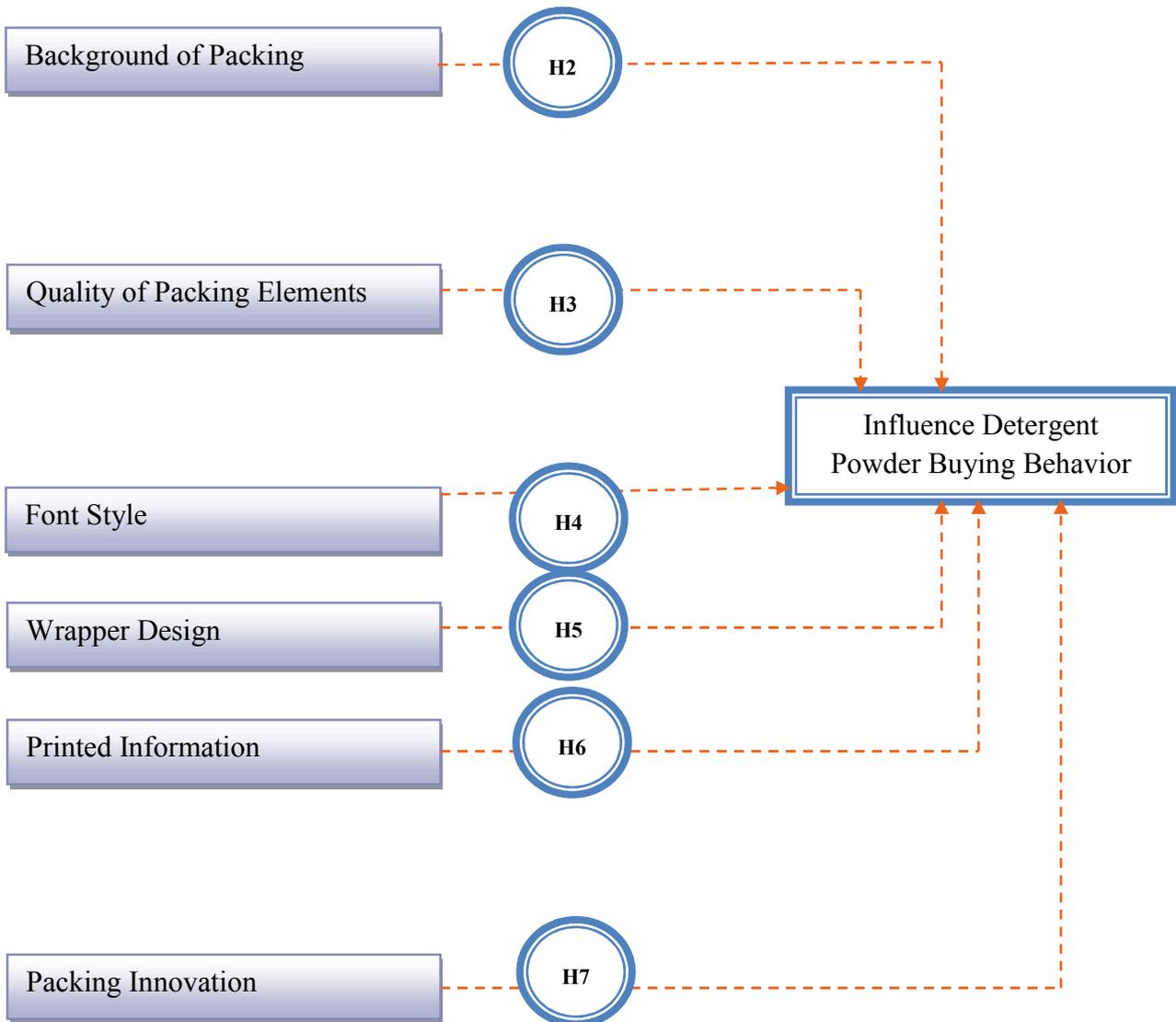H1: there is a relationship between Buying Behavior and Printed Information.

H0: there is no relationship between Buying Behavior and Printed Information.

Hypothesis 7:

H1: there is a relationship between Buying Behavior and Packing Innovation.

H0: there is no relationship between Buying Behavior and Packing Innovation.

Figure: 2

3.5 Sample

A series of questionnaire survey was conducted to identify consumer's perception on the research variables for this study. The questionnaires were written in English. The questionnaire items will be refined through a process of purification. Simple Random sampling technique was used to collect 200 samples by taking 80 respondents from different places of Dhaka City like Dhanmondi Residential Area, Elephant Road and Kamlapur. The samples were selected from different houses on door to door basis in those areas. The respondents of the sample are students, housewives, businessmen, government employees and other professionals so that the data reflects the real pictures.

3.6 Sampling Frame

As we all know that sampling frame refers to the source material from where sample is being drawn. For my thesis I have chosen those people as my sample who purchase the packaged detergent powder and respondents will be drawn from the both residential areas and our university.

3.7 Sampling Unit

The respondents are the individually sample unit for my thesis paper.

3.8 Data

In my thesis paper I will try my level best to make a proper blend of primary and secondary data.

3.8.1 Primary Data

The primary data will be collected through questionnaire filled up by the students of our students as well as some of the consumers from the residential areas.

3.8.2 Secondary Data

Apart from primary data secondary data will be collected from the literature review, internet, articles, information provided by the detergent powder manufacturing companies etc.

3.9 Budget

This thesis will be conducted as course requirement and for that I do not need any special budget.

3.10 Time

I have got a restricted time for my thesis paper which is from the beginning of the Spring Semester'2012 up to the end of the Spring Semester'2012.

3.11 Data Processing and Analysis:

The filled –in- interview schedule and field notes was carefully examined, edited and transcribed. The quantitative data was processed and analyzed by Statistical Package for Social Sciences (SPSS, version 16).

Chapter Four- Data Analysis and Results

4 Introduction

This chapter presents the data analysis of the empirical results which contain 1.Descriptive analysis of respondents including the data collection, demographic of respondents. 2. Hypothesis test.

4.1 Descriptive Analysis

To better understand the characteristic of each variable, descriptive statistic analysis has been used to illustrate the means, standard deviation of each research variables. Moreover, we also use descriptive statistic analysis in the purpose of observation of consumer behavior by looking on the frequency statistic part.

4.1.1 Data Collection

A questionnaire was used to collect the data. The initial questionnaire was revised to ensure proper wording, length and sequencing of the questions. The data was collected from different aged and professional male and female consumers from different area of Dhaka City.

Part I - Demographics

4.1.2   Demographics of the Respondents

Table 3 and 3.1 shows the basic attributes of the respondents, 2 major items were included in this study; 1.Gender, 2.Age

Table 3: Demographic Information of Respondents, Gender (N=200)

Gender of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	124	62	62	62
	Female	76	38	38	100.0
	Total	200	100.0	100.0	

Table 3.1 Demographic Information of Respondents, Age (N=200)

Age of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-25	92	46	46	46
	26-35	36	18	18	64
	36-45	35	17.5	17.5	81.5
	46-55	26	13	13	94.5
	56-55	9	4.5	4.5	100
	Total	240	100.0	100.0	

Table 3 and 3.1 illustrates that, 62% respondents were male and 38% are female where 46% are 16-25 years age group and 18% are from 26-35 years age group.

4.1.3   Descriptive Analysis of the Questionnaires

Table 4 is shown the descriptive analysis of questionnaire items, family income, factor influences purchase, social class.

Table 4: Descriptive Analysis of Questionnaires (N=200)

	N	Minimum	Maximum	Mean	Std. Deviation
Buying Behavior	200	1	5	3.73	.920
Valid N (list wise)	200				

Table: 4.1

In the above table 4.1, 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 200. 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 3.73 with standard deviation of 0.92

	N	Minimum	Maximum	Mean	Std. Deviation
Packing Color	200	1	5	3.55	.924
Valid N (list wise)	200				

Table: 4.2

In the above table 4.2 the minimum values is 1, maximum values 5, and mean values 3.55 while the values of standard deviation is 0.924. Mean value provides the idea about the central tendency of the values of a variable. Number of observations of each variable is 200.

	N	Minimum	Maximum	Mean	Std. Deviation
Background	200	1	5	3.66	.942
Valid N (list wise)	200				

Table: 4.3

The above table 4.3 the minimum value of 1 and maximum value of 5. The values can be deviated by 0.942. Which means that the mean value can varied by +0.942 or -0.942.

	N	Minimum	Maximum	Mean	Std. Deviation
Quality Packing	200	1	5	3.72	.924
Valid N (listwise)	200				

Table: 4.4

The above table 4.4 the minimum value of 1 and maximum value of 5. The values can be deviated by 0.924. Which means that the mean value can varied by +0.924 or -0.924.

	N	Minimum	Maximum	Mean	Std. Deviation
Font Style	200	2	5	3.71	.849
Valid N (list wise)	200				

Table: 4.5

In the above table 4.5 the minimum values is 1, maximum values 5, and mean value is 3.71 while the values of standard deviation is 0.849. Mean value provides the idea about the central tendency of the values of a variable. Number of observations of each variable is 200.

	N	Minimum	Maximum	Mean	Std. Deviation
Wrapper Design	200	1	5	3.70	.927
Valid N (listwise)	200				

Table: 4.6

In the above table 4.6 the minimum values is 1, maximum values 5, and mean value is 3.70 while the values of standard deviation is 0.927. Mean value provides the idea about the central tendency of the values of a variable

	N	Minimum	Maximum	Mean	Std. Deviation
Printed Information	200	1	5	3.68	.992
Valid N (listwise)	200				

Table: 4.7

In the above table 4.7 the minimum values is 1, maximum values 5, and mean value is 3.68 while the values of standard deviation is 0.992. Mean value provides the idea about the central tendency of the values of a variable

	N	Minimum	Maximum	Mean	Std. Deviation
Packing Innovation	200	1	5	3.55	.953
Valid N (list wise)	200				

Table: 4.8

In the above table 4.8 the minimum values is 1, maximum values 5, and mean value is 3.55 while the values of standard deviation is 0.953. Mean value provides the idea about the central tendency of the values of a variable.

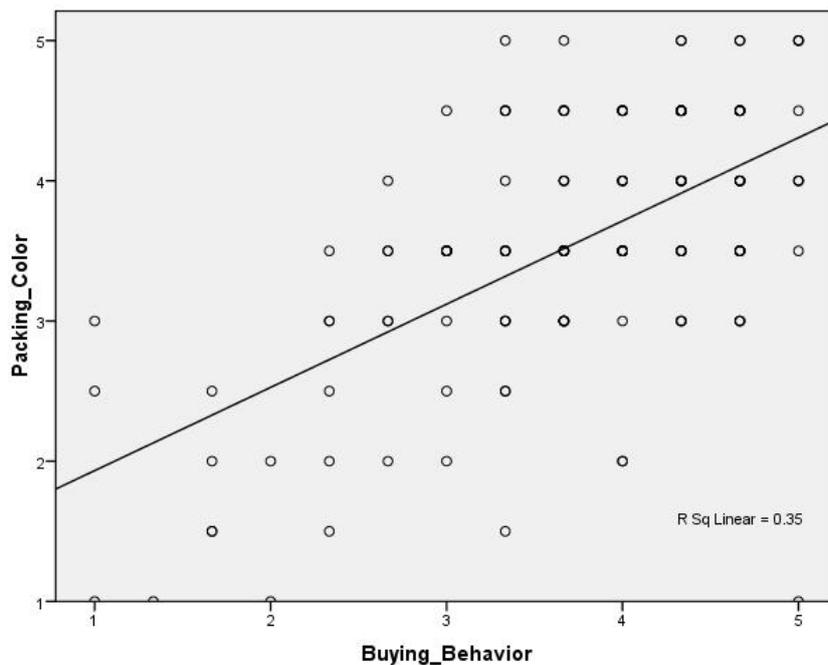## Part II – Scattered Plot Analysis

Figure: 5.1

Figure 5.1 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and color of packaging. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and color of packaging. This means that if the attractive colors are used in

packaging then consumer will purchase product and the above results have been confirmed by the table of correlations.
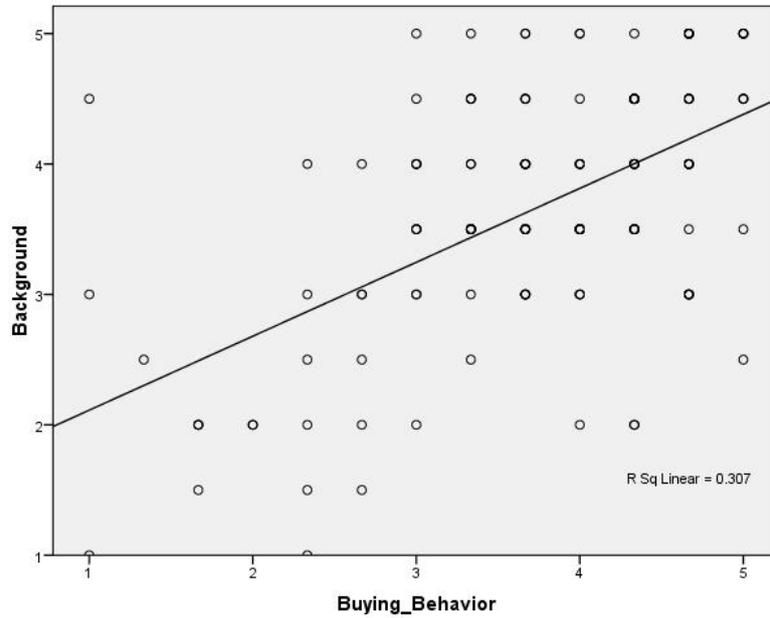

Figure: 5.2

Figure 5.2 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and background of packaging. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and color of packaging. This means that if the attractive background is used in packaging then consumer will purchase product and the above results have been confirmed by the table of correlations.

Figure: 5.3

Figure 5.3 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and quality of packaging. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and quality of packaging. This means that if the fine quality is used in packaging material then consumer will attract and the above results have been confirmed by the table of correlations.

Figure: 5.4

Figure 5.4 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and font style used in packaging. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and quality of packaging.
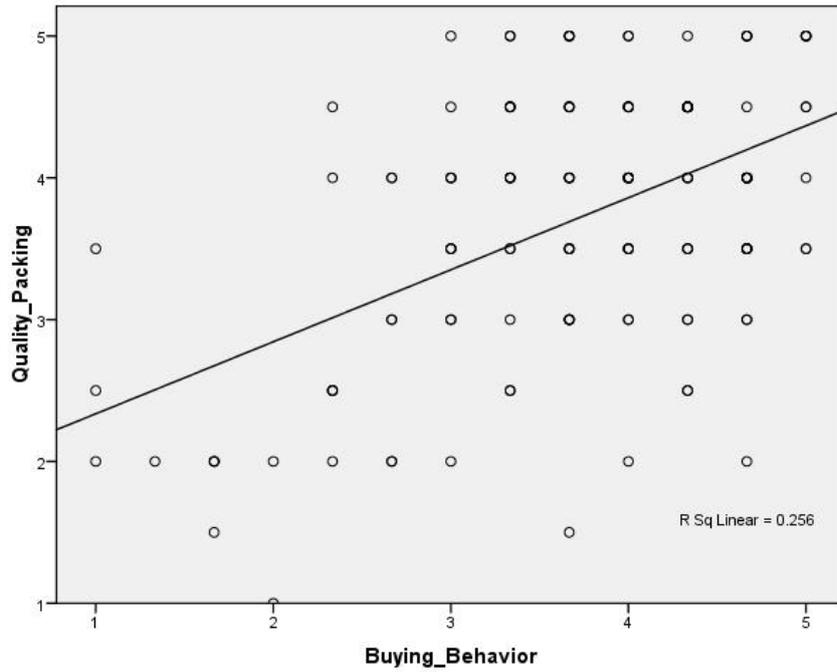
Figure: 5.5

Figure 5.5 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and design of wrapper. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and wrapper design. This means that attractive wrapper will attract consumer and the above results have been confirmed by the table of correlations.
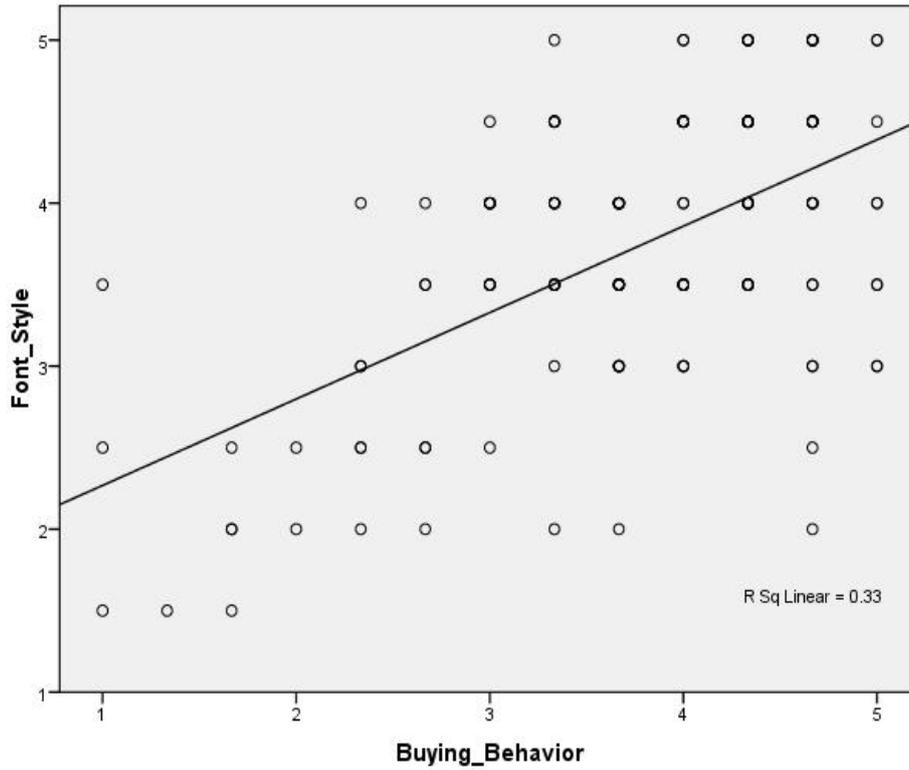
Figure: 5.6

Figure 5.6 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and design printed information. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and wrapper design. This means that if the printed information is used in packaging then consumer will attract and the above results have been confirmed by the table of correlations.
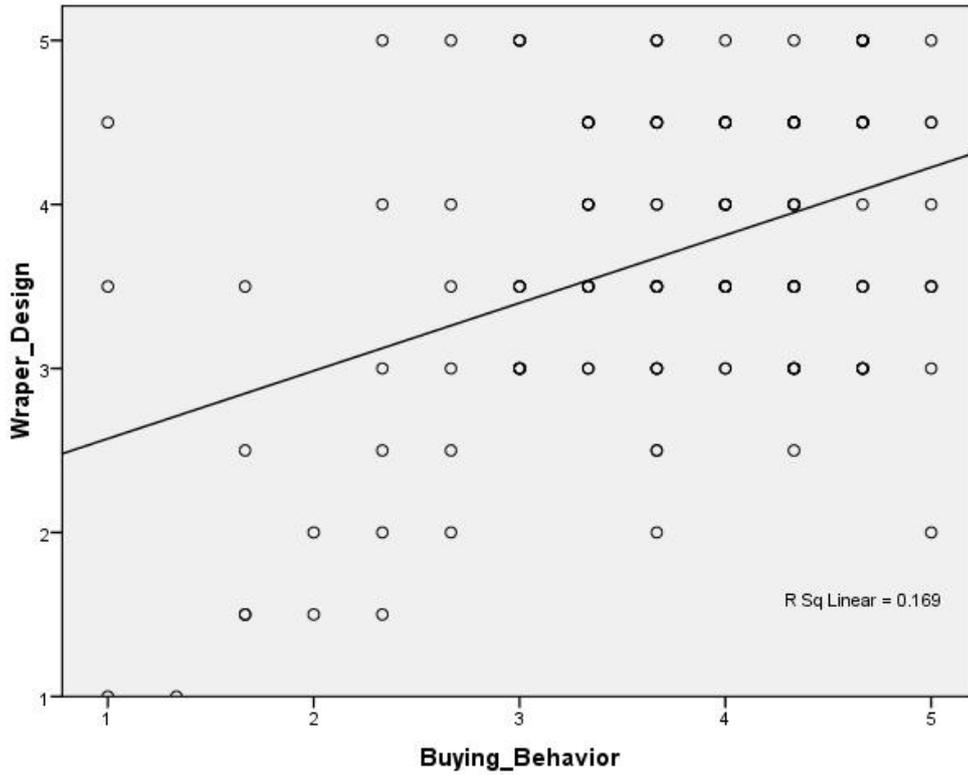
Figure: 5.7
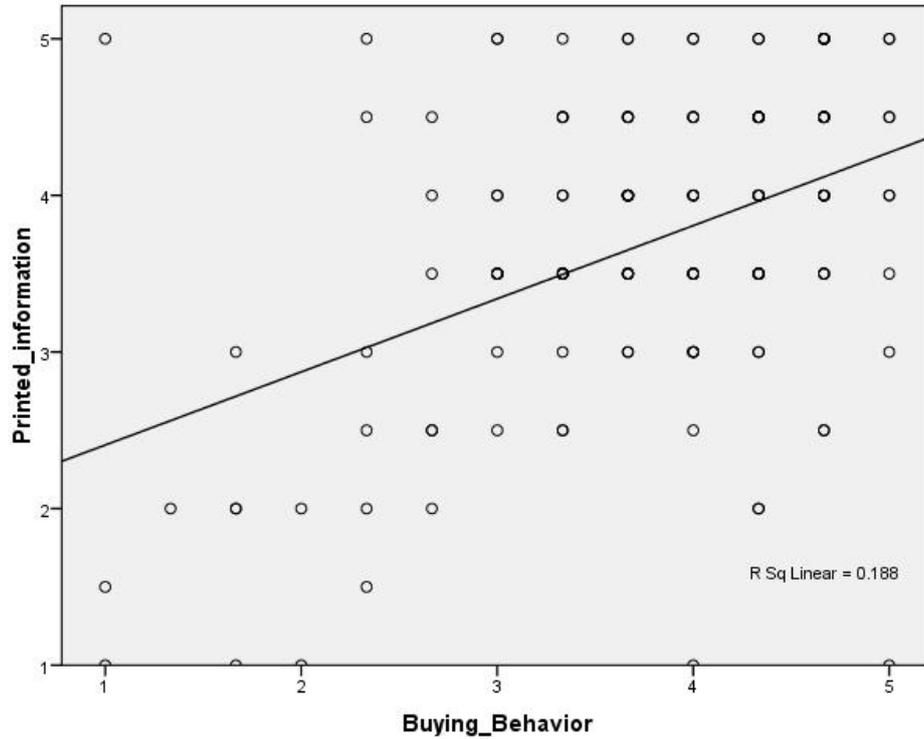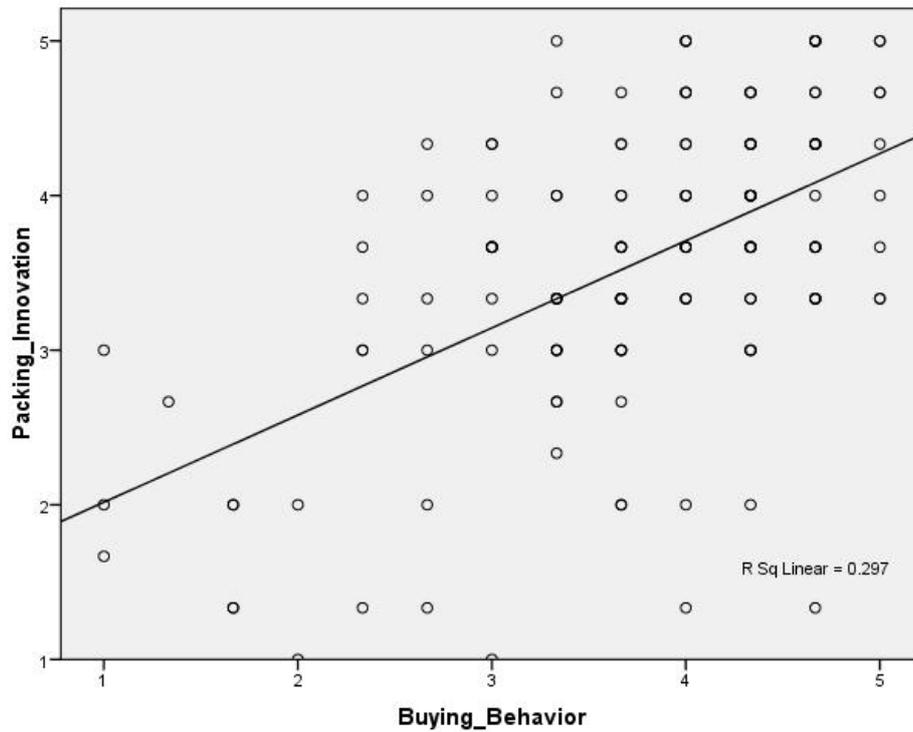
Figure 5.7 shows the results of scatter plot matrix where we intend to have some idea about the relationship between buying behavior and Packaging Innovation. If we observe then the flow of line is come from right to left which shows the positive relationship between buying behavior and wrapper design. This means that if the printed information is used in packaging then consumer will attract

Part III - Correlations

Table: 6.1

		Buying Behavior	Packing Color
Buying Behavior	Pearson Correlation	1	.591
	Sig. (2-tailed)		.000
	N	200	200
Packing Color	Pearson Correlation	.591	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 1:

H1: there is relationship between Buying Behavior and Packing color
H0: there is no relationship between Buying Behavior and Packing color

Table 5.16 represents the table of correlations. Where two variables – buying behavior and Packing color– are positively correlated (r= .591, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

 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.

Table: 6.2

		Buying Behavior	Background
Buying Behavior	Pearson Correlation	1	.554
	Sig. (2-tailed)		.000
	N	200	200
Background	Pearson Correlation	.554	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 2:

H1: there is relationship between Buying Behavior and Background of Packing.
H0: there is no relationship between Buying Behavior and Background of Packing.

Table 5.17 represents the table of correlations. Where two variables – buying behavior and Background of Packing are positively correlated (r= .554, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

It means that the customer can adopt product on the behalf of its packaging background. This result is also useful to marketer so that they create products with best possible background image.

Table: 6.3

		Buying Behavior	Quality Packing
Buying Behavior	Pearson Correlation	1	.506
	Sig. (2-tailed)		.000
	N	200	200
Quality Packing	Pearson Correlation	.506	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 3:

H1: there is relationship between Buying Behavior and Quality of Packing.
H0: there is no relationship between Buying Behavior and Quality of Packing.

Table 5.18 represents the table of correlations. Where two variables buying behavior and Quality of Packing are positively correlated (r= .506, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

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

<div align="center">**Table: 6.4**</div>

		Buying Behavior	Font Style
Buying Behavior	Pearson Correlation	1	.574
	Sig. (2-tailed)		.000
	N	200	200
Font Style	Pearson Correlation	.574	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 4:

H1: there is relationship between Buying Behavior and Font Style.
H0: there is no relationship between Buying Behavior and Font Style.

Table 5.19 represents the table of correlations. Where two variables buying behavior and Font Style are positively correlated (r= .574, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

The result identifies that the font styles are also liked by customer. Consumer wants to have new experiments with font style.

<div align="center">**Figure: 6.5**</div>

		Buying Behavior	Wrapper Design
Buying Behavior	Pearson Correlation	1	.411
	Sig. (2-tailed)		.000
	N	200	200
Wrapper Design	Pearson Correlation	.411	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 5:

H1: there is relationship between Buying Behavior and Wrapper Design.
H0: there is no relationship between Buying Behavior and Wrapper Design.

Table 5.20 represents the table of correlations. Where two variables buying behavior and Wrapper Design are positively correlated (r= .411, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

Table: 6.6

		Buying Behavior	Printed Information
Buying Behavior	Pearson Correlation	1	.433
	Sig. (2-tailed)		.000
	N	200	200
Printed Information	Pearson Correlation	.433	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 6:

H1: there is relationship between Buying Behavior and Printed Information.
H0: there is no relationship between Buying Behavior and Printed Information.

Table 5.21 represents the table of correlations. Where two variables buying behavior and Printed Information positively correlated (r= .433, p = .000). There is moderate relation between these two variables which is significant. We will accept H1 and reject H0.

Table: 6.7

		Buying Behavior	Packing Innovation
Buying Behavior	Pearson Correlation	1	.545
	Sig. (2-tailed)		.000
	N	200	200
Packing Innovation	Pearson Correlation	.545	1
	Sig. (2-tailed)	.000	
	N	200	200

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

Hypothesis 7:

H1: there is relationship between Buying Behavior and Packing Innovation.
H0: there is no relationship between Buying Behavior and Packing Innovation.

Table 5.22 represents the table of correlations. 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. We will accept H1 and reject H0.

Part IV - Regression Analysis

Table: 7.1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729[a]	.531	.507	.646

In above table the R is multiple correlation 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 that means 50.7% of the variance in the dependent variable can be predicted from Independent variable.

Table: 7.2

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.787	7	9.255	22.191	.000[a]
	Residual	57.139	137	.417		
	Total	121.926	144			

The significant level in ANOVA table shows that the combination of variables significantly predicts the dependant variable.

Table: 7.3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.274	.297		.925	.000
	Packing Color	.237	.079	.238	2.988	.003
	Background	.208	.074	.213	2.821	.004
	Quality Packing	.059	.079	.059	.748	.001
	Font Style	.247	.084	.228	2.938	.004
	Wrapper Design	.040	.076	.040	.520	.004
	Printed Information	.070	.070	.075	.993	.002
	Packing Innovation	.171	.074	.177	2.294	.003

a. Dependent Variable: Buying Behavior

Equation for Regression

The objective of the regression in this study is to find such an equation that could be used to find the impact of predictors on dependent variable. The specified regression equation takes the following form:

$$S = \alpha + \beta_1 (PC) + \beta_2 (BI) + \beta_3 (PM) + \beta_4 (FS) + \beta_5 (DOR) + \beta_6 (PI) + \beta_7 (INV)$$

Where,
Packaging color = PC
Background Image = BI
Packaging Material = PM
Font Style= FS
Design of wrapper =DOR
Printed Information = PI
Innovation = INV
Consumer Buying Behavior= S

So equation comes as,
Consumer Buying Behavior = 0.274 + 0.237(PC) + 0.208 (BI) + 0.059(RM) + 0.247(FS) + 0.040(DOR) +0.070(PI) +0.171(INV)

Hypothesis Test

Hypothesis 1:

H1: there is relationship between Buying Behavior and Packing color
H0: there is no relationship between Buying Behavior and Packing color

Hypothesis 2:

H1: there is relationship between Buying Behavior and Background of Packing.
H0: there is no relationship between Buying Behavior and Background of Packing.

Hypothesis 3:

H1: there is relationship between Buying Behavior and Quality of Packing.
H0: there is no relationship between Buying Behavior and Quality of Packing.
Hypothesis 4:

H1: there is relationship between Buying Behavior and Font Style.
H0: there is no relationship between Buying Behavior and Font Style.
Hypothesis 5:

H1: there is relationship between Buying Behavior and Wrapper Design.
H0: there is no relationship between Buying Behavior and Wrapper Design.

Hypothesis 6:

H1: there is relationship between Buying Behavior and Printed Information.
H0: there is no relationship between Buying Behavior and Printed Information.

Hypothesis 7:

H1: there is relationship between Buying Behavior and Packing Innovation.
H0: there is no relationship between Buying Behavior and Packing Innovation.

The significant levels of packing color, back ground of packing, quality of packing, font style, wrapper design, printed information and innovative packing are 0.003, 0.005, 0.001, 0.004, 0.004, 0.002, and 0.003 respectively. This test shows that the coefficients of the predictor are statistically significant at less than five percent level of significance. So we will reject Ho and accept H1.

Chapter Five- Conclusions

5.1 Discussion:

The primary purpose of the present study is to investigate the role of packaging on consumer buying behavior of Dhaka City while purchasing the detergent powder. Using a quantitative method my aim was to check the proposed model in the context of Dhaka City and to see the generalizability of the research to the large population with the sample size of 145. Past research has been focused on the impact of packaging on consumer buying behavior. (Rundh (2005) package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Also package imparts unique value to products). Through an extensive literature review on initial model is proposed which encompass that how packaging elements mediates the relationship with packaging color, background, packaging material, font style, printed information, wrapper design and innovation in packaging. The literature review has provided the basic theoretical evidence with regard to the link between packaging and buying behavior. At the later part of the literature review, there is a brief scenario of the industry of detergent powders.

Questionnaire was developed for data collection purpose on seven variables (packaging color, background, packaging material, font style, printed information, wrapper design and innovation). Descriptive analysis used to describe the data by using descriptive summary. Inferential analysis used to describe the relation between variables by checking the acceptance or rejection of hypothesis and to see the nature of relationship between variables. After observing the scatter plot matrix, descriptive analysis and the correlations and regression has been used for analysis purpose. The buying behavior has been used as dependent variable. The buying behavior is positively related to packaging color,

background, packaging material, font style, printed information, wrapper design and innovation. The regression shows the packaging has 50.7% contribution on buying behavior.

5.2 Conclusion

After conducting the thesis we have come to the end of following factors:

➢ Package could be treated as one of most valuable tool in today's marketing communications in detergent powder, necessitating more detail analysis of its elements and an impact of those elements on consumers 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 consumers' attention and interest. Besides each element's single function, we think that a good combination of those elements may let this product (detergent powder) more eye-catching and attractive.

➢ The impact of package and its elements on consumer's purchase decision can be revealed by analyzing an importance of its separate elements for consumer's choice. For this purpose main package's elements could be identified: graphic, color, size, form, and material of packaging are considered, wrapper design, printed information, and 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 should be evaluated depending on the consumer's involvement level, time pressure or individual characteristics of consumers.

➢ Empirically testing the research model proposed, package elements having the ultimate effect on consumer choice in a case of different detergent powders.

➢ It has revealed that elements of package are the most important for consumer's purchase decision. For a major part of consumers' a size and material are the main visual elements, while product information is also the main verbal elements when purchasing detergent powder.

- Results of analyzing the impact of package elements on consumers purchase decisions depending on level of involvement correspond with those of theoretical studies and let us stating that visual elements of package have relatively stronger influence on consumer's purchasing when they are in the level of "low involvement", in opposite 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 brand into new target markets or help to overcome cost barriers. Packaging can even drive the brand choice.

- Research into packaging has found that different packaging cues impact how a brand is perceived. Often the packaging is perceived to be part of the brand 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 my research, I found out that most consumers like the product quality after they purchased their desired packaged brands. 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 his important role in a way to serving consumer 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.

5.3 Recommendations

- As we all know detergent powder is one of the profitable Fast Moving Consumer Goods' (FMCG) and brand is important and its strategy is in consideration in the units. So packaging is valuable for brand equity, product differentiation, market segmentation, new product

introduction, pricing, promotion etc. Brand name using plan implementation must be effective in the units.

➢ All the marketing units pay attention for good packaging. They accept that poor packaging is one of the causes of different brands failure in the market. It is necessary to set the packaging standard and to implement accordingly for better protection and promotion of a brand.

➢ Basically with the help of packaging the manufacturers describe that made it, where it was made, when it was made, what it contains, how to use it etc. Furthermore they believe that the consumers are properly guided by label to use the brands. The information given in the label and its value have to be highlighted while promoting the brand in the market. It must also be more useful technically.

➢ I do believe that culture difference does have an impact on companies' initiatives to design the brand package, for instance, during our research; the choices of packaging colors are quite different between the West and Far East. Thus, we think that it is important for international companies to take a consideration of culture differences when they design the product package.

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Chapter Six- References

6.1 Articles and Journals

S Bed (2008), new consumer products branding, packaging and labeling in Nepal, the Journal of Nepalese business studies, Vol. V No. 1

L Alice (2006), the power of packaging, united states of America,
pp 186-216

Ampuero, O. and Vila, N. (2006), consumer perceptions of product packaging,
Journal of consumer marketing, 23/2, 2006, pp. 100-112

L Reynaud (2007), the influence of label on wine consumption: its
Effects on young consumers' perception of authenticity and purchasing behavior,   Bologna, Italy

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

John Th Gersen (2000), the ethical consumer moral norms and packaging
Choice. Journal of consumer policy Kluwer Academic Publishers, Printed in the Netherlands

Barber, N., Almanza, B.A., & Donovan, J.R. (2006), motivational factors of
Gender, income and age on selecting a bottle of wine, International Journal of wine marketing, 18 (3), 218-232

Bloch, P. H. (1995), seeking the ideal form: product design and consumer
Response, journal of marketing, 59(July), 16-29

Butkeviciene, V., J. Stravinskiene and A. Rutelione (2008), 'Impact of consumer
Package communication on consumer decision making process', Inzinerine Ekonomika-Engineering Economics (1), pp. 57-65

Gonzalez M. P., Thorhsbury S., & Twede D. (2007), packaging as a tool for
Product development: Communicating value to consumers, journal of food distribution research, 38 (1), 61-66.

Grossman, R. P., & Wisenblit, J. Z. (1999), what we know about consumers'
Color Choices. Journal of marketing Practice: applied marketing science, 5 (3), 78-88.

Adelina Broad Bridge & Henry Morgan (2007), consumer buying behavior and perception toward retail brand baby products

Bytyqi Hysen*, Vegara Mensur (2008), analysis of consumer behavior in regard to dairy Products in Kosovo, Agric. Res., 2008, 46(3)

6.2 Websites

➢ Bubley packaging research, http://www.bubley.com/t-scopes/research.html
➢ Miriam Webster dictionary,
➢ http://www.m-w.com/dictionary/gestalt
➢ Wikipedia Online Encyclopedia,
➢ http://en.wikipedia.org/wiki/Tachistoscope
➢ (http://www.dhakacity.com.bd/)

6.3 Books

➢ Keller, K. L. (2003). Strategic brand management: Building, measuring and managing Brand equity, 2nd ed., Englewood Cliffs, NJ: Prentice-Hall.

➢ Kotler, Ph. (2003) Marketing management, 9th ed. Upper Saddle River: Prentice-Hall.

➢ Leon G. Schiffman, Leslie Lazar Kanuk (2009) Consumer Behavior: Consumer Motivation, 9th ed., NJ: Prentice-Hall

7.0 Appendix

Questionnaire

Dear Participants, a warm welcome goes to you at the begining for being co operative with me. I am a student of Eastern University conducting a thesis paper amd I will be very thankful to you for this cooperation. The topic of this questionnaire is: **Understanding the Role of Packaging on Consumer Buying Behavior in Dhaka City: A Study on Detergent powder**. This questionnaire is for the thesis purpose. Its results will be used for analysis in thesis paper. Please provide information with confidence. Your information will not be disclosed.

Personal Information

Name:

Gender: a. Male   b. Female

Age (in years):   a.16-25   b.26-35   c.36-45   d. 46-55   e. 56-65

Profession: a. Student   b. Businessman   c. Service Holder d. Others

Rating of Questions

1	Strongly Disagree
2	Disagree
3	Normal
4	Agree
5	Strongly Agree

No	Questions					
1	I like the packaging of branded detergent powders	1	2	3	4	5
2	Packaging is attractive to me	1	2	3	4	5
3	I purchase detergent powder as advised by my family	1	2	3	4	5
4	I think the detergent powder offered by leading brand is always better	1	2	3	4	5
5	I like the color of packaging	1	2	3	4	5
6	Color of packaging matters to me in purchasing a particular brand	1	2	3	4	5
7	I like beautiful backgrounds	1	2	3	4	5
8	I prefer the brand's package having attractive background	1	2	3	4	5
9	I think the quality of packaging can save product better	1	2	3	4	5
10	I think the product packed in high quality material is more preferable	1	2	3	4	5
11	I prefer packaging with better handling and transportation	1	2	3	4	5
12	Font styles are attractive to me	1	2	3	4	5
13	I like creative font style in package of any brand	1	2	3	4	5
14	I think wrapper design is important in packaging	1	2	3	4	5
15	The design of product wrapper inspires me in purchasing	1	2	3	4	5
16	I read printed information on the package of the brand	1	2	3	4	5
17	I evaluate the brand according to printed information while purchasing	1	2	3	4	5
18	I think innovation is important in packaging.	1	2	3	4	5
19	The innovative package can change my decision while purchasing	1	2	3	4	5

Thank You