

**"A Study on Brand Loyalty of Consumer products in
Kathmandu Valley"
(A Thesis)**

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RECOMMENDATION

This is to certify that Miss Deepika Chitrakar has prepared the thesis entitled "**A study on Brand Loyalty of Consumer Products in Kathmandu Valley**" under our Supervision.

This thesis has been prepared in the form as partial fulfillment of the requirement for the Master's of Business studies (M.B.S.) of the faculty of Management, Tribhuvan University. Thus it is forwarded for examination. We recommend this thesis for acceptance.

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DECLARATION

I hereby declare that the work reported in this thesis entitled "**A Study on Brand Loyalty of Consumer products in Kathmandu Valley**" Submitted to office of the Dean, Faculty of Management, Tribhuvan University is my original work done in the form of partial Fulfillment of the requirement of the master of Business Studies (MBS) under the Supervision of Mr. Yam Bdr Silwal (Lecturer) of Makawanpur Multiple Campus, Tribhuvan University.

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The present study "**A study on Brand Loyalty of Consumer products in Kathmandu Valley**" has been prepared for the partial fulfillment of the requirement for Master Degree in Business Studies.

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ABBREVIATION

χ^2	=	Chi-Square
E	=	Expected Frequency
et.al	=	and other
H ₁	=	Alternative Hypothesis
H ₀	=	Null Hypothesis
Ibid	=	The same author, book/articles and page
O	=	Observed Frequency
P	=	Page number

Chapter-1

INTRODUCTION

1.1) General Background of the Study

Marketing has been developing together with development in human civilization. Marketing which covers the very wide circumstance now has not been developed at one. If we go several centuries back to the history of human civilization, we find the contemporary marketing uncultured. They didn't have any mechanism, tools or techniques of marketing as used today. But the situation has been changed orderly and it has brought a wide change in human needs. Human aspiration for excellence and better status have given birth thousand of discoveries, inventions, innovation and established much more different industries to fulfill that aspiration. These changes have invented not only different sophisticated tools and techniques, and effective strategies for successful marketing but also the marketing a most competitive field.

In general sense marketing is selling through advertising. However selling and advertising are only a small part of whole marketing. Marketing helps organization to find out what customers want and also helps to decide what products to make.

Today the concept of marketing has changed drastically. Today marketing must be understood not in the old sense of marketing but in the new sense of satisfying consumer's needs (**Kotler and Armstrong 1997: P15**) if the marketer does a good job of understanding customer's needs, develops products that provides superior value and price distributes and promotes them effectively, he/she will easily sell the products otherwise it is difficult to stay in market.

Globalization, technological changes and intense completion are today's environment. Marketing success belongs to those who can deliver what customers are willint to purchase. An organization must determine their vision to satisfy customer's needs and wants through successful

marketing. Prof. Philip Kotler says-Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services of value with others(**Kotler 2000:P8**)

Marketing is a total system of business activities designed to plan price, promote and distribute want satisfying products to target market to achieve organizational objectives(**Stanton, 1978:p21**)

Generally speaking, marketing adds value to goods by changing their ownership and by changing their time and place of consumption (**Candiff and Still, 1972: P7**)

Above definition give the importance on product. Product is an element of marketing mix. People generally associate a product with goods and services, but the concept of product is not only good and services. People are involved in marketing 10 types of entities: goods, services, experiences, events, persons, places, properties, organization, information and ideas(**Kotler, 2000: P3**) According to Prof. Philip Kotler and Gray Armstrong a product is

"Anything that can be offered to a market for attention, acquisition, use of consumption that might satisfy a want or need. It includes physical objects, services, persons, places, organization and ideas." (**Kotler and Armstrong, 1997:P274**).

After producing the product must be identified with a definite brand. To building a brand a number of requirements are demanded like a great deal of time, money, efforts and packaging. Again Phillip Kotler says-

" A brand is name, term sign, symbol or design of combination of them intended to identify the goods or services of ones seller or group of sellers and differentiate them from those of competitors"(**Kotler, 2000: P404**)

Brand encourages customers for repeat purchase of same product and promotes brand loyalty among costumers.

Brand loyalty is temporal aspects of consumer behavior, which analyst a consumers whether are loyal or not to specific brand or set of brands in a certain time period.

1.2) Focus of the Study

Industrialization and overall development of a country are considered as two coincidences that because industrialization is the impetus of Development. It is not coincidence that industrialized countries are development too, but it true that the countries like United Status, England, France and Japan etc are developed because they are highly industrialized,. But on the other hand most of the countries in the world are undeveloped and developed and developing because Industrialization is creeping slowly in these countries. Even developing countries like Nepal are moving toward the industrialization slowly by establishing different industries.

Basically Nepal is an agricultural country. Most of the people in Nepal depend upon the agricultural products. Only a few people engaged in industry. But now Industrialization is being adopted with the establishment of various types of industries and some people are shifting from agriculture to industrial sector in a developing stage (**Agrawal, 1994 : P.43**) Being an agriculture country Nepal cannot bring significant positive changes in its economy depending solely on agriculture .So Nepal also has been increasing different types of industries for last few decades and producing different products and launching them to the market , which has made the market more competitive.

Industry and products are never separable terms. Production is the main activity of each every industry and successful marketing of the products in ultimate goal. But any production of product is not sufficient for a successful marketing; it requires proper branding,. labeling and packaging. Branding is most essential to the successful modern marketing. It has become so strong that any product hardly goes unbranded. A brand is name, term, sign, symbol or design or combination of them which is

intended to identify the goods or services of one seller or group of seller and differentiate them from those of competitors, **(Kotler, 2000, P.404)**. Thus brand is not only a name given to a product but also a technique by which differentiate the products from previous ones. Every producer or marketer seeks to get positive attitudes toward the brand of his product. Every manufacturer wants and tries his/her best to make the consumer loyal to the brand of his/her product.

The term loyalty stands for the quality of being true and faithful in one's support of something/somebody. And the term brand loyalty is a combination of the term brand and loyalty. Brand loyalty is a temporal aspect of consumer behavior, which indicates the faithfulness of a consumer to the specific brand and makes him/her a repeated purchaser of the products. According to John. C. Mowen brand loyalty is .

"The biased-behavioral response, expressed over time by some decision making unit to one or more alternative, brands out of a set of such brands that results from the psychological (decision making) process" **(Mowen, 1990: P776)**

But quite naturally all the consumers do not deal or behave with the brands exactly in the way that marketers want. There are some consumers who keep on sticking to a particular brand, those types of consumers are loyal to brand and they never switch off their brand whatever the condition is. On the other hand some consumers are indifferent in selection of brand, they shift or change their brand because they are easily influenced by special deals like free samples, discounts, attractive gift offers, advertisements and price activities. Similarly there are some others who are frequently shifting from one brand to another, such consumers are non-loyal consumers to the brand or may ignore the brand. They buy just asking price and quality to seller.

George Brown classified the consumer in four groups' according to brand loyalty status as,"

- Hardcore loyal- Consumers who buy one brand all the time.

- Split loyal- Consumers who are loyal to two or three brands.
- Shifting loyal- Consumers who shift from one brand to another.
- Switchers – Consumers who show no loyalty to any brand"(**Kotler, 2000, O. 269**)

Every brand has certain image in the market. Every brand is known by its own appearance and quality. Consumers choose their brand according to their faith to trust or experience of the same product. If they think a brand is good in terms of quality, price, social status and their needs, they develop a positive attitude toward the brand and make repeat purchase, which is a valuable asset of the manufacturer and this state, is known as their loyalty on brand. In the simple way, those who have the positive attitude toward the particular brand, those consumers are said to be loyal to the brand, so that they buy the same brand continuously.

But repeat purchase of the brand does not necessarily mean brand loyalty. A consumer may purchase repeatedly a brand due to unavailability of alternative brand or ignorance about the alternatives. One of the attractive displays of a brand then others' alternative brands and other many factors may affect their repeat purchase. So, those who are truly faithful to the brand only such customers are said to be loyal to the brand.

Competition is the main characteristic of modern marketing which is increasing day by day in the Nepalese market. Industries producing many different types of products and also a large number of products are being imported from other countries. So that competition is very tough in the Nepalese market. Every producer launches their product as the excellent form using different promotional tools like TV commercials, radio, newspapers, poster, hoarding boards, pamphlets, cinemas and other electronic and non-electronic media tools offering to their products. Each and every producer and marketer want to capture high loyal market share and develop a loyalty on their product brand.

Above-mentioned circumstances are wide spread in the Nepalese market, which shows the necessity of understanding the consumer behavior

on branding. In Nepal industrial establishments has been increasing and entering the Industrialization revolution era. So behavior of a consumer has the important role to develop successful marketing strategy.

No more research has been carried out so far in Nepal to find out the consumer behavior on branding. Therefore this study conducted mainly to measure the loyal consumers on brand. So this study focuses mainly on the brand and brand loyalty on consumers. For this purpose five different types of low involvement products have selected. The productes selected for the study are described below.

1. Instant Noodles: Very common snacks in Nepal, Packed in plastic wrapper with special flavored soup, can be eaten anytime in a day with bowling water and sometime directly from packet.
2. Tea : Worldwide common soft drink available everywhere, every time and everyone can make and drink easily, made of green young tealeaf and packed in plastic packets, jar etc.
3. Soap : Soaps used for bathing which will keep us fresh and tidy.
4. Toothpaste: It is used to make our teeth clean, healthy and shine which protects our teeth from germs, every person use it every day.
5. Hair Shampoo : Different types of shampoo are available in market for washing hair, persons preferred it for healthily and strong hair.

Above- mentioned products, selected for the study have a common characteristic, that they all are low involvement products. Low involvement situation occur when the consumer perceives little personal importance to a purchase. In such cases the purchase is likely to be making on the basis of existing levels of information and with only least amount of deliberation. Low involvement purchase decisions are relatively unimportance to the buyer because they involve,

- a. Low financial risk.
- b. Low special risk.
- c. Low personal risk and

- d. Low physical interest.

All the products we selected for this study is low involvement and no one high involvement products are selected because high involvement products are very important to the consumer because they involve.

- a. High social risk
- b. High physical risk
- c. High financial risk and
- d. Simply high personal interest

While making these types of high involvement purchases decision buyer need to follow a more structured decision process. High involvement products includes the products such as car, TB, jewelry etc. There is a very long time gap between two purchases of high products. In our country where people have low per capita income, such products are bought one in the whole life of a person. So, in such cases it is very difficult and also incorrect conclusion to find out about brand loyalty. So, high involvement products have not been selected for this study. Some of the products we selected for the study are produced in the country. Like instant noodles is available in market are indigenous brand and tea, hair shampoo, soap and toothpaste are available both the indigenous and foreign brand. So many alternative brands of such products are available in market. Consumer response, reactions and attitudes in relation to the brand of these products and their purchasing pattern of the same are studies and examined whether or not the consumers are loyal on branding.

1.3) Statement of the problem

Due to increment of population and improvement of economic condition arising the demand and production up. Highly developed technology has make the world narrow and people can order their requirements from a distant place without leaving their room. Television casting and internet shopping have revolutionized the marketing. This

development in the industrial sector and technology has provided various types of products and brand to consumers.

Development in both National and International perspectives have increased so many alternate products and brands in Nepalese market. Today on can use the products produced in any corner of the world sitting home and consumers have chance more freedom to choose the brands, they have the change to choose brand that they think the best. In spite of availability of alternate brands in the market, do the consumers stick up to any particular brand or do they repeatedly purchase the same brand? This is the burning question of Nepalese consumer market.

So the basic problem of this study is it measure loyal consumer on branding in entire Nepalese market. Marketers are always concerned with real number of consumer and their beliefs and opinions concerning there brand and competing brand. On the basis of this problem are the problems of this study are presented below:

1. What is the brand awareness of consumers in Kathmandu, Valley?
2. Are the consumers of Nepal brand loyal? If they are loyal what is the state of loyalty?
3. What is the correlation between person's personal characteristics, societal and economic perspectives of person with brand loyalty?
4. What are the causes of brand switching in consumers of Kathmandu, Valley?
5. What is the purchase preference of consumers of Kathmandu, Valley?

1.4) Objectives of the study

Study on brand loyalty is a temporal aspect of the consumer behavior, it facilitate understanding consumer behavior. Loyalty on branding is a valuable property of the manufacturer or producer. Success of their product on market means increasing of brand loyal consumers: hence

study on brand loyalty focuses not only the image of brand but also highlights the image of producer., Realizing this value of brand loyalty marketers in the other countries, mostly in the developed countries has been continuously condition researches on brand loyalty. But on researcher in Nepal has pain attention so far in the subject. Therefore this study is conducted mainly to find out whether or not loyal on branding exists in the Nepalese consumers market. The objectives of this study can be listed as follows:

- a. To find out brand consciousness of the Nepalese consumer.
- b. To find out the number of brand loyal consumers or percentage of brand loyal consumer and analyses its impact on purchase decision.
- c. To identify and examine the relationship of brand loyalty with demographic variables like age, sex, income and marital status.
- d. To recommend measures helpful or important for developing marketing strategies and for conducting further research on loyalty in brand.

1.5) Importance of the study

Economic condition of country is directly related with the success and failure of the existing units of the different types of industry. Success of the industry will carry the country toward development. Success of their industry is the main function of successful marketing of its products. In the era of cutthroat competition, successful marketing demands and understanding of consumer's taste, choice, performance, and loyalty. As the focus of the study,' brand loyalty' the temporal aspect of the consumer behavior. The manufacturers or marketers of the country will be highly benefited by this study. They may use the findings of this study as the guideline for making strategies for their products, so that they can achieve success.

Study of loyalty on branding or brand loyalty helps to know the consumer behaviour on that product. Knowing the attitude about products manufacturer can decide the advertisement policy, consumer's response to the price and availability of the product and consumer perception. It can help in the segmentation of the market. If the consumers are identified as loyal and non loyal, market may according be segmented as loyal an non loyal consumer market and the study of loyalty on branding gives control in planning marketing mix. Besides this implication of study or brand loyalty no research study has been carried out so far to find out the number of loyal consumer on branding in the Nepalese market.

Increment of population and demand helps to increase the industries. So this Study ' brand loyalty" is an important study. This study will of course be a valuable guideline to the industrialists, manufactures or marketers of the country. Similarly it would be a valuable reference to the scholars or researcher who is interested in conduction further research about 'brand loyalty'

1.6) Limitation of the study

The limitation of this study is as follows:

- a. The products included in study are based on five low involvement products (i.e. instant noodles, tea, toothpaste, and hair shampoo) this study will not necessarily be applicable to other product.
- b. Sample size is very small in comparison to the population of the study
- c. This study is entirely based on the views and responses of the consumers.
- d. It is almost impossible to include the whole population in the study. So out of this population 100 consumers are surveyed in Kathmandu, valley.

- e. Study of loyalty requires a repeat purchase pattern. But in high involvement products have high financial risk, high personal risk and physical; interest, so large number of the items bought is only low involvement products, which are the reason for selecting low involvement products.

1.7) Organization of the study

This study is divided into five chapters, which are as follows :

Chapter 1: Includes the introduction and general background, focus of the study, and statement of the problem importance of the study, objectives of the study, hypothesis and limitation of the study.

Chapter 2 : Include review of literature in this chapter the review from books, journals, thesis and independent studies are taken into account.

Chapter 3 : In research methodology : It includes the research design, data collection procedure, sample plan, method to analysis and presentation.

Chapter 4 : In data presentation and analysis : It is the main body of our research. It includes data presentation interpretation and analysis. In this chapter brand loyalty of different consumer level is analysis.

Chapter 5 : Includes the summary and conclusions of the research. And finally suggestion and recommendation are given.

Chapter 2

REVIEW OF LITERATURE

2.1 Introduction

The concept of marketing has changed drastically now. This change is not only invented different sophisticated tools and techniques and effective strategies for successful marketing but also made the marketing a most competitive field.

Today firms are changing them as the transnational corporation and their strategies are also changing. Stages of development of the transnational corporation is presented by Warren J. Keegan as, **(Keegan 2000: P 43-47)**

A. Domestic

In this stage company is domestic in focus, vision and operation. This company focuses upon domestic markets, domestic suppliers and domestic competitors.

B. International

In this stage company extends marketing manufacturing and other activity outside the home country.

C. Multinational

When a company decides to respond to market differences it evolves into a stage three multinational that pursues a multi domestic strategy

D. Global

The global company will have a global marketing strategy or a global sourcing strategy, but not both. It will either focus on global markets and source from the have or single country to supply these markets, or it will focus on the domestic market and source form the world to supply its domestic channels.

E. Transnational

A transnational corporation is much more than a company with sales, investments and operations in many countries. This company, which is increasingly dominating markets and industries around the world, is an integrated world enterprise that links global resources with global market at a profit.

Now marketing emphasis in society's and ultimately consumer's interest rather than selling. Marketers or producers have shifted their emphasis from production to product, product to selling, selling to consumer and consumer to society respectively. Today the marketing philosophy of all the organization is the societal marketing concept. The societal marketing concept holds that the organization task is to determine the needs, wants and interest of target markets and to deliver the desired satisfaction more effectively and efficiently than competitors in a way that preserves or enhances the consumer's and society's well being **(Kotler, 200: P25)**

Today all the marketing activities revalue in the consumer and various advancements made in marketing has established the consumer as the sovereign power in the marketing world. So in order to be successful accordance with marketing products must be produced according to the need of the consumers and interest of the society. " The firm's ultimate success depends primarily on how well it performs in the market place" **(Terpstra and Sarathy 1994:P3)**. In the modern business world understanding of consumer choice, purchase decision-marketing process etc. or understanding of consumer behavior is most necessary to become a successful marketer.

Study on consumer behavior has prevailed as an effective measure, helping to develop the successful marketing strategy. This growing need and important part of the behavioral study of consumer gave birth to "Study on brand loyalty behavior of consumer" as a separate subject of study.

2.2) Brand

Brand involves using identification feature on the product so that buyers can recognize the product and its manufacturer. Brand identifies the seller or marketer, which can be name, trademark, logo, or other symbol. A brand is essentially a seller's promise to deliver a specific set of features, benefits and services consistently to the buyer. A best brand conveys a warranty of quality.

" The American Marketing Association defines a brand as – "A brand is a name term sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or groups of seller and to differentiate them from those of competitor" **(Kotler, 2000: P404)**

According to Prof. Phillip Kotler brand can convey up to six levels of meaning:

- a. Attributes: A brand brings to mind certain attributes.
- b. Benefits: Attributes must be translated into functional and emotional benefits.
- c. Values: The brand also says something about the producer's values.
- d. Culture: The brand may represent a certain culture.
- e. Personality: The brand can project a certain personality.
- f. User : The suggests the kind of consumer who buys or use the product **(Kotler, 2000: PP 404-405)**

Branding means the use of a name, term, symbol or design- or a combination of these-to identify a product. It includes the use of brand names, trademarks, and practically all other mean of product identification **(MC Carthy and Pereult Jr. 1990: P 235)**

The term brand is broadly applied to all identifying marks, such as trade names, trade marks, trade symbols, picture and design of the package distinctive coloring or lettering with or without some attractive slogan **(Sherlekar, 1993: P 215)**

So the brand is important to the marketer as well as buyers and society. It is important to the marketer in terms of promotion, value building, product image product attributes and benefits; buyers pay the price for the product in order to obtain these values." On the other hand buyer also highly benefited by the brand because brand gives the identification of product so that they can freely choose the desired product. Marketers of branded products normally provide assurances to buyer that their products are consistent in quality and price. Branded products can get quality certification from national and international certification agencies. Buyers can confidently exercise their choice among the various brands on the basis of quality certifications, warranties and guarantees.

2.2.1) Brand name/ Brand mark/Trade mark

A brand has several; components. Out of them above terms brand name, brand mark and trademark may make some confusion because they seem similar in terms. A brand name is that part of the brand that can be vocalized and includes letters, words, and numbers (**Koirala, 1997P166**). Wai Wai, Close Up and Sunsilk are the brand names. A brand name consists of words, letters and/or numbers which are vocalized (**Stanton, 1978: P 215**)

A brand mark is the part of the brand which appears in the form of a symbol, design, or distinctive coloring or letter in (**et.al: P 215**) Brand mark is the element of the brand that cannot be pronounced but they are equally useful in identification of the product. Brand marks often appear in terms or a sign, symbol or design (Koirala et.Al: P 166) Unique letter style of Wai Wai is a brand mark.

On the other hand Trademark is a legal designation indicating that the owner of has exclusive right to use brand name and the brand mark and others are prohibited by law from using it (**Koirala et.al:P 166**) A brand name or a brand mark can be converted into a trademark by registering concerned department of government.

2.3) Brand of loyalty

'Brand loyalty' is a temporal aspect of consumer behavior. Loyalty on branding analyzes whether or not a consumer is loyal to a specific brand or set of brands over a certain period.

Studies on brand loyalty began when researches on consumer's behavior became popular. Today we find most of the products are sold by brand even the vegetable products are sold by brand in developed countries. This increasing use of brand has significantly increased the necessity to understand the brand loyalty behavior of consumer.

Brand loyalty has been defined in different ways by different scholars, experts, behavioral scientists and researchers. They have used different approaches and criteria to measure brand loyalty behavior. Some used consumer attitude and some measure brand loyalty behavior approach and some used consumer attitude some used both the consumer behavior and consumer attitude.

So many researches have been carried out on brand loyalty in developed and industrialized countries. Different researcher efforts on different bases and have used different measures of brand loyalty. Hence it seems very necessary to pay particular attention on definition of the term and approaches to measure while reviewing the literature.

One of the earliest definitions on brand loyalty has been given by James F. Engel and Roger D. Blackwell, who emphasize the sequences of purchasing of a specific brand. The key of this definition is that the purchasing pattern of a specific brand determines loyalty to the brand. This definition classifies brand loyalty in four categories.

- a. Undivided loyalty
- b. Divided
- c. Unstable loyalty, and
- d. No loyalty on branding (**Engel and Blackwell, 1982: P 566**)

For example if A,B,C,D,E, and F are various brands in a particular product category. The consumer of the product could be classified as having following types of loyalty.

- a. Undivided loyalty : If the purchase sequences is AAAAAA
- b. Divided loyalty : IF the purchase sequences IS ABABAB
- c. Unstable loyalty : if the purchase sequence is AAABBB and
- d. No loyalty : IF the purchase sequence in ABCDEF

In place of brand choice sequence leaster Guest used preference statement over time as a measurer of brand loyalty. In that year he collected data about the awareness and preference of students. In following studies of these same person 12 and 20 years later he found suggestive evidence of high degree of loyalty toward brand names.(although not to any specific brand) **(Shiffman and Kanuk, 1990: P 260)**

From the study of leaster Guest it can be conducted that brand loyalty exists even when it is defined as preference statement over time. Guest' findings of suggestive evidence of high degree of loyalty toward brand names give moreweith to the need of underrating brand loyalty behavior. According to preference statement approach, loyalty on branding is measure on the basic of preference expressed by the consumers to a particular brand over a certain time. But preference statement alone is not real representative of loyalty on branding because what the consumers do in the actual purchase is of equal importance together with what they prefer.

Brand loyalty is the proportion of total purchase within a given product category devoted to the most frequently purchased brand **(Engle and. Blackwell et.al. : P567)** This definition employs proportion of purchase as the measure of loyalty on branding we can say loyalty on branding is measured on the basis of the proportion of total purchase within a given product category to the most frequently purchase brand or set of brands, The greater the proportion of purchase of a brand or set of brands the higher the loyalty one brand.

All the definition of brand loyalty stated in the previous pages and the researches based of that definition have focused mainly on the consumer behavior or consumer purchase. There are three approaches to loyalty on branding used by the researchers. brand choice sequence approach as used by George Brown, preference over time as used by Leaster Guest and proportion of purchase as used by Blastberg and Sen. Blastberg and Sen have extend the proportion of purchase approach to segment that are loyal to nation or private brands as a category as well as specific brands within each of those categories **(Engel and Blackwell, et.al.: P. 568)** They found one segment of the population to be high national brand loyal' and found that the proportion of purchase devoted to the favorite brand ranged from about to 100 percent within this segment.

But none of these approaches is enough to clear the concept of brand loyalty. Shiffman and Kanuk comment these definition as from the view point of distinguish between the real brand loyal buyer who is intentionally faithful and the spurious brand loyal buyer who repeats a brand purchase because it is displayed more prominently than others, or who flies a specific airline because its telephone number comes most easily to mind **(Shiffman and Kanuk, et.al: P 259)** Brand loyalty must be defined in the way that it could distinguish between a loyal buyer and a spurious loyal buyer. The Spurious loyal buyer's lack and attachment to brand attributes and they can be immediately capture by another brand display is other devices **(Engel and Blackwell, et.al. P 569)**

The definitions of brand loyalty based on the brand choice sequence, approach And preference over the time period or proportion of purchase approach are the operational definitions. They do not make any differentiation between spurious loyal buyer and a true loyal buyer. Similarly according to this definition it is difficult to compare the findings. For example even in the same study result many very according to the approach used. They define brand loyalty in terms of consigners behavior of

consumer purchase only. In this sense, they are based on repeat purchase behavior rather than brand loyalty behavior.

Jacobson and Chestnut defines brand loyalty as-

- a. The biased (i.e. non-random)
- b. Behavioral response (i.e. purchase)
- c. Expressed over time.
- d. By some decision-making unit
- e. With respect to one or more alternative brands out of a set of brands, and
- f. Function of psychological (i.e. decision making evaluative process' (Engel and Blackwell, et. al : P. 571)

The theme of Jacobson's definition is loyalty on branding should be measured in terms of the both consumer purchase and consumer preference. Loyalty on branding is purchase behavior of decision making unit. Such behavior is based on psychological process and is biased for one or more brand for a specific time period. Jacobson's definition is quite able to distinguish between a true loyal buyer and spurious loyal buyer. Consumer preference approach awareness he/she purchase the same brand repeatedly. He/she may buy same brands due to many factors such as psychological commitment, ignorance of other alternative brands, and unavailability of other alternative brand or many other factors. Any way it is necessary to know which factors are contributing to loyalty. Another important aspect of Jacobson's definition is that it recognizes that existence of multi-brand. When we think about brand loyalty, we concentrate our mind especially on a specific brand, but reality is rather different that loyalty on branding means loyalty on one or more brands that the consumers repeatedly purchased the given product category.

Since reference purchase definition of brand loyalty includes with the consumer preference and the consumer purchase and put forward a clear concept of brand loyalty. Brand loyalty, as a concept is both input and output variables. As an input variable it is the cause of the consumer decision and

as an output variable it is the result of the consumer decision. So researcher have not only define what brand loyalty is but have also endeavored to find out how it develops.

Behavioral scientist believes that brand loyalty initiate from trial purchase product. According to them consumers purchase a particular brand as trial and if this trial satisfied his/her needs and requirements then he/she purchase the brand repeatedly. On the other hand cognitive researcher emphases the role of mental process in building grand loyalty. They believe that consumers engage in extensive problem solving behavior brands and attribute and brand loyalty is an outcome of mental process of the consumer. The consumer are not loyal to a brand simply because they have developed a positive attitude toward that brand and such an attitude in developed through a decision making process.

But the involvement theories do not agree with cognitive theories and behavioral scientists. Involvement theorists believe that frequent exposure to T.V. commercials, which are rich in visual clues, and symbolism and short in duration, buttressed by, strong in store displays, create type of brand loyalty for low involvement purchase.

The researcher reveal that the loyalty on branding develops early in the life of a person and such loyalty has long lasting effects on the whole life of the person. However this way is not true for all the persons. The modern world is characterized by fast changes. Most of the persons who are keeping pace with this world are supposed to change their behavior time by time. The different factors in the environment in which they live have an inexorable impact on their behavior. Hence it is not hundred percent true that impact of loyalty on branding developed at a certain stage of life can be seen even throughout the rest of the life.

Thus the studies of loyalty on branding have analyzed what, how and when of loyalty and have presented it as a special phenomenon for scientific analysis and prediction.

Brand loyalty is the result of good brand image and grand preferences and choice. Brand loyalty has many marketing implications.

Consumers who are loyal to the certain brand are available assets and the agency for finance to the manufacture. Brand loyal consumer also performs the faction advertising and sales promotion. Once brand loyalty is established threat from other brands is considerable less than ego involving products. Thus loyalty to the certain brand means assurance of market universe, decreasing burden of sales promotion and assurance from the fear of competitive brands.

An existing base of loyal customers provides enormous sustainable competitive advantage-first, it reduce the marketing costs of doing business since existence customers usually are relatively easy to hold the familiar is comfortable and reassuring-second the reality of existence customers represents a sentential entry barrier to competitive..... Third, brand loyalty provides trade leverage..... Fourth, a relatively large. Satisfied customers base provides an image of a brand as an accepted, successful, enduring product that will include service backup and product improvement..... . Finally, brand loyalty provides time to respond to competitive moves- it gives a firm some berating room **(Asker, 2000, P.177-178)**

If the consumers are identifiable as loyal and non loyal the market can accordingly be segmented as loyal consumer market and non-loyal consumer market and separate marketing strategy can be used foreach as Engel and Blackwell,says-

"Brand loyalty is one of segmenting a market". **(Engel and Blackwell,et.al: P597)**

Manufactures always like to know about the market captured by each brand which product is profitable to produce, where it is better to well and the quality to be produced. Hence the knowledge of brand loyalty is major instrument to make a production plant and employ control mechanism to avoid any future difficulties.

According to the above discussions we conclude brand loyalty makes the manufactures aware of parable future progress and gives warning to take suitable action avoid any adverse situations likely to prevail in the future.

2.4) Brand Switching

Simply brand switching is consumer's habit of constantly shifting from one brand to another. In this sense it is opposite to brand loyalty. The buyer who is habitual brand switcher is non-loyal consumers. Why consumers are involved in brand switching behavior? It is the very important question to understand the brand loyal behaviour of consumer because why consumer switch brand explains why consumer are non loyal to the brand There are many causes of occurrence of brand switching behavior of a consumer. Consumers are often observed to do a lot of brand switching. An example el occurs in purchasing cookies the consumer has some beliefs choose a brand of cookies without much evaluation and he evaluate it during consumptions. But next time the consumer may reach for another brand out of boredom or wish of a different taste. So brand switching is needed for sake of variety rather than dissatisfaction.

On the other hand Shiffman and Kanuk Says:

"Some consumer switch brand because they are dissatisfied of bored with a product. Other because they are concerned with price than brand names"**(Shiffman and Kanuk, et.,al P 260)**

A consumer who is loyal to brand for a long time may switch to other brand because of dissatisfaction of boredom with the brand he/she has been using for a long time. Similarly if the consumer is more price conscious than even a slight price-cut in competitive brands may make him/.her move toward these brands. But the research studies on brand switching reveal that brand switching is not very much threatening to the manufacturers. A recent study on consumer purchase habit reported that brands with larger market shares have proportionately larger groups of loyal buyer**(Shiffman and Kanuk, et.al: P 260)**. Another study reported that

contrary to many marketers' beliefs, brand loyalty is declining significantly, the slight decline that has been measured appears to be due to an increase by marketer in sales promotion *i.e. special price deal, coupons, sweepstakes, free samples etc) at the expenses of advertising and targeting toward specially niche.(et.al 260)

Thus it follows that some intra-personal factors such as dissatisfaction, price consciousness and aspiration for testing new brand causes brand switching. Similarly some external factors like special price deals, coupons free samples and comparative advertisement etc. may also cause brand switching. But the definition of Shiffman and Kanujk-

"Such brand switch can not be converted into brand loyalty"(et.al : P 260) The consumer do not keep on sticking up to the brand that they are switched to together with the end of such special deals as price-cut free samples, coupons etc. Consumer's returns back to their previous brands.

2.5) Brand loyalty correlation

Brand loyalty correlation measures the relationship of various factors that are associated with brand loyalty. It explains why brand loyalty varies across product and consumer. Many researchers have been conducted to find out such correlation of brand loyalty. Engel and Blackwell have made the following conclusion after analyzing the findings of around 34 researcher conducted by various scholars and experts.

- a. Socio-economic, demographic and psychological variables generally do not distinguish brand loyal consumers from other consumers when traditional definitions of brand loyalty are used.
- b. When extended definitions of brand loyalty are used some socio-economic, demographic and psychological variables are related to brand loyalty. However those relationships tend to be product specific rather than ubiquitous across product across product categories.

- c. There is limited evidence that the loyalty behavior of an informal group leader affects the behavior of other groups members.
- d. Store loyalty is commonly related with brand loyalty.
- e. There is some evidence that brand loyalty is inversely related to the number of stores shopped.
- f. The relationship between amount purchased and brand loyalty is uncertain because of contradictory findings.
- g. The relationship between inter purchase time and brand loyalty is uncertain due to contradictory findings.
- h. There is limited evidence that perceived risk is positively related to brand loyalty.
- i. Market structure variables including the extensiveness of distribution and market share of the leading brand exert a positive loyalty on brand.
- j. The effect of the number of alternative brands, special deals, price activity is uncertain due to contradictory findings. **(Engel and Blackwell et.al.: P 577-79)**

Engel and Blackwell conclude the researcher have found some factors such as socio-economic, demographic, store loyalty, number of store shopped, market share of leading brand as the correlation of brand loyalty. But their findings are contradictory concerning to other factors such as amount purchased; inter purchased time, number of alternative brands etc. it seems that the researchers have not yet been reached to any concrete result about what are correlation and non-correlations of brand loyalty.

Brand loyalty covers the very wide circumstance. So it is very difficult to find out what factors are correlated what are not. Hundred of correlated factors may found there. To find out what factors are correlated and what are no correlated to brand loyalty, it is necessary to develop the scientific and widely accepted research instrument. The main cause of contradiction among research findings is absence of widely accepted research tradition because they use different definition of brand loyalty.

Some have used traditional definition, which measures brand loyalty on the basis of the consumer purchase where others have used the extended definition of brand loyalty, which measure brand loyalty on the basis of the both consumer purchase and consumer preference. Due to these of different definition and approaches the researches findings concerning brand loyalty correlation have resulted into confusion and contradiction. Hence it is not only difficult but also impossible to state exactly what are the correlation and non-correlation of brand loyalty. Brand loyalty correlation is the important aspect of study of brand loyalty correlation is the important aspect of study of brand loyalty. Brand loyalty correlation varies across products and consumers. Similarly brand correlation identifies the characteristics of brand loyal consumers and distinguished them from the non-loyal one. Thus the loyalties on brand correlation are important for a manufacture. Therefore there must not be any contradictions of confusion about the correlation. Correlation must be defined and stated precisely so that the marketer could use them as the guideline for making strategy and this can be better done by improving the weakness of past attempts and by developing the most scientific and widely accepted research tradition .

2.6) Brand loyalty model

There are various models brand loyalty models, which are using to understand and predict brand loyalty behavior of the consumer. The model helps to identify the factors affecting loyalty behavior of consumer and predict how such factors are likely affect behavior in the future.

The models that have been employed to analyze brand loyalty behavior predicts behavior on the basis of random distribution of probabilities. These models treat the response of the consumers in the market place as the outcome of some probabilistic processes. The models recognize that, there are many consumer and other external variables, which determines the outcome of behavior. Even though these factors of variables are not measure of explicitly included in the model. They are represented by

probability distribution and their affect is accounted. So far most of the model has been concord with predicting brand switching behavior and the rate of trail and repeat purchasing of new product.

There will arise some questions while attempting the behavior models, such as:

Are all the members of the population same to concerned brand loyalty behavior? This question is related with degree of loyalty varies across consumers. Do the acts of parching and using the given brand affect the probability that the given brand will be purchased again in the near future? This is a question, which is related with whether or not short term learning incorporated in the brand choice changing systematically over time because of the influence of promotion, distribution of shifting taste?

All questions mentioned above basically deal with impact of consumer variables such a personality, attitude, income etc on the consumer behavior. Considerable efforts have been made to develop models that describe a functional relationship between the probability of choosing a brand during a purchase occasion and the factors like attitude, personality, income, past experience, price, competitive activity etc. Which affects probability? Some of these models that are important as well as widely used are reviewed below.

2.6.1) Bernoulli Model

According to the Bernoulli model the consumer is supposed to have a constant probability (p) of purchasing the brand under study and the probability of purchasing the brand is detrained from aggregate brand choice data. The model also assumes that the facts like consumer's characteristics, prior purchase or all external influences etc. have no effects on the probability (**Engel and Backwell,et.,al : P. 581**)

For example, let the brand under study be 'A' and all the other brands be 'B' and the probability of purchasing brand 'A' at a purchase occasion

$P(A1)$. Then according to Bernoulli model $P(A1)$ is determined from aggregated brand choices between A and B.

Determining the probability of purchasing a particular brand from aggregate brand choice data, however recognize that certain anticipated or non anticipated circumstances such as limited number of brands available at the store or out of stock conditions may have affect the probability. For Example if the brand under study is available at many stores then the probability of buying that brand may be greater for the consumers who purchase that brand (**Ibid**).

For example illustrating this concept in connection with the person Ram's (a hypothetical name for illustration) purchase of a computer. Suppose Ram has his choice set to four branded computers A, B,C and D.

Assumes that he is interested in four attributes. memory capacity, graphic capability, software availability and price. The following table shows his beliefs about how each brand rates on the four attributes.

Table-1

A consumer's brand beliefs about computer

Attributes	Memory capacity (40%)	Graphic Capability (30%)	Software Availability (20%)	Price (10%)
Brands				
A	10	8	6	4
B	8	9	8	3
C	6	8	10	6
D	4	3	7	8

In the above table Ram rates brand as follows : memory capacity 10, graphic capability 8, software availability, 6 and price 4, similarly he has beliefs about the how the other three computer rate on these attributes. The marketer would like to be able to predict which computer Ram will buy.

If one computer dominated the others on all the criteria, we could predict that Ram would choose it, but his choice consists of brands that vary in their appeal. If Ram wants the most memory capacity he would select brand A, if he want best graphic capability he would buy brand B and so on . Some buyers buys only one attribute and can easily predict their choice.

Most of the buyers will consider several attributes and place weighs to them. If the marketer knew the importance widths that Ram attached to the four attributes he could predict his computer choice.

Suppose Ram assigned 40% of the importance to the computer memory capacity, to the graphic capability, 20 & in its software availability and 10% to its price. In this case to find out Ram's perceived value for each computer these weights(i.e.% of importance given to the attributer by Ram) are multiplied, by his beliefs about each attributes. This leads to the following perceived value.

Computer A-	$0.4(10)+0.3(8)+0.2(6)+0.1(4)$	= 8
Computer B-	$0.4(8) + 0.3(9)+0.2(8)+0.1(3)$	=7.8
Computer C-	$0.4(6) + 0.3(8) + 0.2(10) + 0.1(5)$	= 7.3
Computer D-	$0.4(4) + 0.3(3) + 0.2(7) + 0.1(8)$	=4.7

Thus the reliable predict is that ram will prefer computer A.

This model is called the expectancy value model of consumer choice. It is one of several possible models describing consumer evaluate alternatives.

2.6.2) Markov Model

This model assumes that past purchase influence the probability of current purchase. Many models have been building up on this basic assumption and they are known " Markov Models" Among these models the most commonly used one is first – order Markov Model (**Boyd and Massy, 1992 : 5. 59-63**)

The first order markov model analyzes the impact of short-term consumer learning on the purchase probability. This model assumes that the outcome of the last purchase decision affects the brand-choice probability on the next trial but the model denies that except the last one other previous

purchase has no effect on the probability. For example, the purchase sequence AB and BB would both lead to the same prediction about probability of purchasing brand an on the next purchase because in both cases the last purchase is brand B(Ibid).

This model can be better illustrated by a product category having three brands. Let us suppose the following probabilities representing brand choice behavior of **consumer in a place**

Table No: 2
Probability of brand

Last purchase	Next purchase		
	A	B	C
A	0.80	0.10	0.10
B	0.10	0.60	0.30
C	0.30	0.30	0.40

Note : These probabilities are conditional or transitional probabilities of moving from one stage to another in any two consecutive time period and are estimated on the basis of post purchase data for a sample of customers.

The probabilities state in the table above or the transitional matrix given above shows that the brand purchase in the last purchase exerts great influence on the probabilities that is applicable in the next purchases. If brand A is bought is last purchase it almost certain to be bought in the next purchase of a consumer purchased brand A during a certain period there is 80% chance that he/she will buy Again during the next purchase 3, 10% chance of buying B and 10% chance of buying C. If the same consumer purchase brand B in place of brand A in the last purchase, then his/her chance of buying brand in the next purchase is 10%that of buying B is 60% and of C is 30%(Ibid)

The transitional matrix mentioned above which is Marko model assumes to be stationary (i.e. that remain unchanged through time) can be used to predict the future brand-share values for A,B, and C Furthermore the transitional

matrix(probabilities) in the model can be use as on one way of measuring both the holding power of a given brand and its ability to attraft patronage form other brands. Further the model has been used to estimate the number of periods that will pass before a given brand will be tried.

2.6.3) Linear Learning Model

The primary concept of this linear learning model is similar to that of Markov Model. That is past purchase affect the future brand choice However, this model assumed that the consumer's brand-choice probability changes by certain amount depending on the outcome of a given brand-choice event(whereas in the Markov model, the probability is set to a predetermined value that depends solely on the outcomes of the event) Suppose that buying brand A raise the probability of buying A by 10% while purchasing competing brand B causes the probability of buying brand A drop by 5%. If the probability were 0.75 before a given trial, it would be either 0.75 pf 0.65 after the trial ,depending on the outcome. Similarly, if the initial probability were 0.40 the same model would produce output probability of 0.50 after the purchase of A and 0.35 after the purchase of B. Thus linear learning model shows that there is a liner relationship between pre-purchase and past-purchase probabilities(**et.al: 63-65**)

Alfred Kuchn applies this model to brand choice data and found that is provided good predictions. Many researchers have tested this model even after Alfred Kuchn and have found the performance of the model rather well in the most of the tests. There are many models so far developed as the modifications to the basic linear learning model. Some of them considered as important are those, making their parameters functions of the forces(**Ibid**).

2.6.4) New Trier Model

This models developed by David A Akar to predict the behavior of a consumer who has purchased a new brand. New brand here implies the one that is not used before by a consumer, or if even used before that is

completely forgotten he has used that before (Engel and Blackwell et.al : P 583-84)

According to this model there is trial period after the initial purchase and the probability of purchasing a particular brand in the future is an outcome of the consumer's experiences relating to the brand in the trial period. In the initial purchase the probability of purchasing the trial period purchase that affects the probability. After the initial purchase there may be a number of a trial period purchase. The number of such purchases may vary from consumer to consumer. During the very trial-period purchase the consumer develops a new probability of purchasing the brand and it may not necessarily result into purchase of the brand that we purchased in the initial purchase, it may also result into rejection of the brand (Ibid).

Thus the new trial model assumes that past purchase do not affect the present of future purchase probability and the probability is non stationary and varies from consumer to consumer. Even though the model is considered simple and easier to understand the assumption of consumer. Even though the model is considered simple and easier to understand the assumption of the zero-order process has limited its (Ibid).

2.6.5) Probability Diffusion model

David Montgomery proposed the probability diffusion model. This model assumes that the past purchases do not affect the brand-choice probability in time to time. According to this model, an individual's response probability is a function of external environmental factors. The probability is non-stationary and varies from consumer to consumer. Thus the mechanism of the probability diffusion model is, to some extent related to that of the Markov model (**Boyd and massy, 1996. P 67-68**)

Above we reviewed some widely used brand loyalty models based on the stochastic structure (i.e. based on random distribution of probabilities) These models therefore cannot be free from the problems immanent into the stochastic model . All the stochastic models of brand

loyalty stated above have been applied primarily to the products that are frequently purchased and relatively low priced. These models avoid the issue of multi brand loyalty and neglect the change in stochastic process. Similarly the effects of heterogeneity and non-stationary are quite confusing in the models. Moreover the models demand actual purchase dates that is not always obtainable. Thus, it seems that these models still need some modifications or improvements for their effective use in accurate predictions of brand choice behavior(Ibid)

2.7) Overview of Previous Research

In 1952, the first study on brand loyalty was published by George Brown., This study was conducted on panel of 100 households. Survey method was used for this study. The survey was conducted on the household purchase of frequently purchased low involvement goods such as coffee, orange juice, soap and margarine., Household making five or more purchase was place is one of the four brand loyalty categories depending on the sequence, Brown noted that household demonstrating some degree of loyalty varied from 54 to 95 percent depending on this product involved. On the other hand, percentage of the household which were undividedly brand loyal varied from 12 to 73 percent from product to product.

Anupam Vasudeva (2002) in study of brand loyalty among the urban and rural people, have pointed out. that there are only two factors influencing the brand loyalty market share of the brand and the response to the promotion scheme High market share of the brands attracts more brand loyalty than low market share brands do. Attraction for promotion schemes is thus inversely related to the brand loyalty.

The type of distribution out late from which the brand is brought is not related to the brand loyalty. There is great similarity between the urban and the rural market in the brand loyalty concern.

He also added that the brand loyal cases in both markets were similar with respect to response to promotion schemes. He had also concluded that

the high income groups are attached with the high price brand and the low income groups are attached with the low priced brand. However, generally the higher income group exhibited a level of brand loyalty different from that of the other classes.

In the contest of **Nepal Panta, Yogesh (1993)** in his study on '**Brand loyalty**' has concluded that Nepalese consumers have given high importance to the brand in both consumer durable goods and consumer non-durable goods. The consumers were brand loyal however their percentage is very low. Brand loyalty varies across the products. Brand loyalty is relatively higher in the products that are more frequently needed than those, which are needed or used frequently. In his study he had found that the consumers belonging to the age group of 26 to 40 are more brand loyal than those belonging to other age groups. Brand loyalty was positively associated with the income as well as with free samples, discounts, coupons and price activities and advertisement.

Another researcher **Mr. Shree Bista Ghimire (1979)** has also mentioned something about loyalty on branding in the Nepalese consumer in his study. "**Study on Branding policy of Durable Consumer Goods.**" His study is related with brand policy. He found brand loyalty of the Nepalese consumers to be moderate. In the findings of his study, he states, 34 percent consumers were found highly loyal but an encouraging 55 percent stick up to certain brands. Further only 35 percent consumers would wait for the particular brand." Thus, his findings relating to the loyalty on branding seems to be confusing. According to his findings brand loyalty is differentiated from the consumer behavior like sticking to particular brand and waiting for the favorite brand. Actually, loyalty on branding itself is an outcome of both sticking up to a particular brand and an intention to wait for that in case of unavailability along with positive attitude toward the brand.

Moreover, **Mr. Ghimire** has treated brand loyalty as a general attribute or ubiquitous across products rather than product specific

However the researches conducted so far have proved that brand loyalty varies across products. Hence, the finding of this study concerning to brand loyalty seems to be execution to the fact that is accepted universally.

His study is based on the durable consumer goods: stainless steel products, steel furniture, wooden furniture, glass and electric hoods. These products are not generally purchased repeatedly. Most probably they are bought once in the whole lifetime by majority of the Nepalese consumers. It is incorrect as well as impossible to measure brand loyalty in such products in a very short period, Therefore his work does not put forward any thing rather than branding policy not with loyalty on branding.

A dissertation title "**The Role of advertising in Brand Choice and Product Positioning.**" in reference to the soft drink and instant noodles carried out by **Mr. R.K. Shrestha in 1997** has addressed the following major objectives:

1. To analyze the effectiveness of advertising on brand choice of consumer products.
2. To evaluate the role of advertising in product positioning from the consumer perspectives.
3. To determine the consumer perceptions on advertisements and other promotional tools.

Major findings of the study are :

1. Advertisements are the important promotional tools and major factors in soft drink and instant noodles business and consumer's perception on it was also found well.
2. Advertisement are the means of sales promotion and consumer get knowledge about the producers through it.
3. Television advertising is the most popular media and F.M. is also becoming popular.

A dissertation titled "Marketing of Instant Noodles in Narayangarh" carried out by Mrs. Sahanshila Shrestha in 2002 has addressed the following major objectives.

1. To generate the consumer profile to instant noodles.
2. To generate the consumer's perceptions of the quality, taste and other relevant aspects of instant noodles.
3. To analyze the sales and market share of instant noodles.

Major findings of the study are :

1. The buyers of instant noodles constitute population with variation in terms of correlates such as age, sex, education and family income. Also, majority of the buyers consumer instant noodles. they being the instant and easy item for consumption.
2. The consumers are aware of the various brands of instant noodles in the market and they were found to be easily going for the substitute brands upon the unavailability of their favorite brands in the market.
3. The well known brands of the noodles were found to have relatively greater market than the other

2.8) Conceptual frame work

2.8.1) Brand loyalty: Perceptual background

Loyalty on the branding has been studies from so many angles that the concept has been defined based on the measurement methods used. There are four measurements of brand loyalty.

1. Undivided Loyalty
2. Divided loyalty
3. Unstable loyalty and
4. No loyalty

These measurements can be demonstrated as :

1. Households that purchased the Brand A in the sequence of AAAA suggest undivided loyalty.

2. Households that purchased the Brand A and B in sequence of ABAB suggests divided loyalty.
3. House hold that purchased Brand A and Brand B in the sequence of AABB suggests unstable loyalty.
4. Households that purchase different Brands in the sequence of ABCD suggest the situation of no loyalty.

2.8.2) Variables taken into Considerations

The present study will include the following variables:

Independent Variables Dependent Variables

- | | |
|------------------------------------------------------------------------------------------------------------------------|----------------------|
| <ol style="list-style-type: none"> 1. Age 2. Sex 3. Income 4. Marital Status | <p>Brand loyalty</p> |
|------------------------------------------------------------------------------------------------------------------------|----------------------|

1. Age

The age of the consumers determines the types of product demanded and the choice of outlet. Normally, young consumers are fashion conscious while choosing a product. There fore, they frequently switch from one brand to another. While, middle-aged consumers are status conscious hence they are more brand loyal than younger consumers. Hence, this factor also greatly affects in brand loyalty. So this factor is considered.

2. Sex

Male and female differ very much in their buying behavior. Female are more shopping and bargaining-prone and like to visit several shops to compare price, quality and service. Where as male show more brand and store loyalty.

3. Income

Income is that factor which directly effects consumer's buying process. People with higher income prefer branded and high quality

product. Where as people with lower income are more prices conscious. Therefore. they prefer the products that are cheap and durable.

4. Marital Status

Marital status directly affects consumer buying process. Married and unmarried peoples have different buying behaviors. Unmarried are less shopping and bargaining more and like to visit several shop to compare price, quality and service. Where as married people are more shopping and bargaining less and like to visit less shop and all brand loyally.

2.9) Basic Features of this Study

This study has been carried out in Kathmandu valley. Infact, no study has been carried out so far especially or mainly to find out brand loyalty on low involvement consumer product. This study entitled "Brand loyalty on consumer product in Kathamdu valley" is therefore important in Nepal.

The basic features of this study can be concluded in following points.

1. This is a quantitative research.
2. All study is based on primary data.
3. The research deals with loyalty on five categories of low involvement consumers products viz soap, Shampoo, Instnat noodle, Toothpaste and Tea.
4. Brand loyalty on different consumer products is analyzad in terms, sex, age, income and marital status. Ages of the respondents are categorized in for four groups viz 15-20, 20-25, 25-30 and 30 above. Similarly monthly household income is categorized in five group viz bellow 5000, 5000-10000,10000-15000,15000-20000 and 20000 and above.

5. Frequency and percentage are presented in both table and chart.
6. Findings of the study are validated by testing hypothesis on parametric test (Chi-Square).
7. Causes of brand-switching on the products are calculated, tabulated and analyzed which may be very useful for marketers.

Chapter 3

RESEARCH DESIGN

3) Introduction

The term 'Research Methodology' is combined term of 'research' and 'Methodology'. Simply, research refers investigation or, careful study, especially in order to discover new facts or information. On the other hand, a set of methods used in particular area of activity is known as methodology

Research generates new knowledge which can be used for different purposes; in other word it is a systematic effort to gain new knowledge. Furthermore, the research is used to build a theory, develops policies, support decision-making and solve problems.

Methodology is the research method used to test the hypothesis. It refers to the systematic method causing the problem, formatting the hypothesis, collecting the data and analyzing the facts to reach the certain conclusion.

Research is a systematic and organized effort investigate a specific problem that needs a solution (**Sekarama, 1992**) This process of investigation involves a series of well thought out activities of gathering, recording, analyzing and interpreting the data with the purpose of findings answers to the problem. Thus the entire process by which we attempt to solve problems is called research(**Wolf and Pant 2004;P203**)

Therefore research methodology refers to the method of procedure of research process and it is a way to solve research problems systematically. It facilitates the research work and provides reliability and validity to research. Simply methodology reveals analysis and systematic applications of procedures use in scientific investigation or in a particular research project.

The main objectives of research methodology are to develop the sophisticated research strategy. So it is impossible to complete a research work without research mythology. So this study also employed the research methodology which is presented below.

3.1) Research Design

Research design is the outline of a plan to test the hypothesis and the framework of the study. It is also known as the conceptual structure within which research is conducted.

Research designs are invented to enable the researcher to answer research questions as validly, objectively, accurately and economically as possible (**Kerlinger 2004: P 301**)

After formulating the research study, the logical step is to construct the research design that refers to the entire process of planning and carrying out a research study. The research design asks what approach to the problem should be taken. What method will be used? What strategies will be most effective? Identification, selection and formulation of research problems may be considered as the planning stage of research. The remaining activity refers to the designs, operation and completion of the study (**Wolf and ant.....et.al: P 53**)

3.2) Nature and source data.

This is the consumer-related research, which is directly connected with consumer's purchasing behavior and their attitude towards the brand. So the survey method is used to collect data and all the data and information used in this study is primary in nature. And all the Nepalese consumers, especially consumers of Kathmandu Valley who are selected for the study, are the source of data used in the present study.

3.3) Sample plan

Sample refers to a part chosen from the population. Sample means the 'part of the whole'. The process of selecting a sample from a population is called 'sampling'. It is a tool, which helps researchers to draw conclusions about the characteristics of the population after studying only those observations that are included in the sample (**Shrestha and Manandhar, 2056,P.71**)

3.3.1) Target population

In any statistical investigation the interest usually lies in studying the various characteristics relating to item or individuals belonging to particular groups. This group for individuals under study is known as the population. Further more, population is the aggregate of objects, animate or inanimate, under study in any statistical investigation (**Gupta, 19896, P 1039-40**) the target population of this study is all the consumers of Kathmandu valley.

3.3.2) Sampling unit

Sampling unit of this study is all the consumers of Kathmandu valley who are surveyed for this study based on the different products such as Instant Noodle (includes Mayos, Wai Wai, Rumpum and other) Tea (includes Muna, Tokla, Mechi and other) Soap (includes Dove, Dettol, Lux and other) Tooth Paste (includes Pepsodent, Close-up, Colgate, and other) and Hair Sampoo (includes Clinic plus, Dabour Vatika, Sunsilk and other).

3.3.3) Sample size

Consumers are selected for this study out of all consumers of Kathmandu valley of Nepal to collect required primary data. Out of the huge population, a sample of 100 consumers would be taken for the study. The consumers thus selected as sample for the study would have been randomly pocked up on Judgemental sampling basis taken into consideration that various sex group with proper differentiation on variables such as age sex, marital status and income level etc. are included. In age (we have age group as 15-20,20-25,25-30, above 30) sex(we include male and female) Marital status (we had married and unmarried) and Income level(we include below 5000, 5000-10000,10000-15000,15000-20000 and 20000 and above)

3.3.4) Sampling method

Sampling method used for the study is judgmental sampling. The logic behind using judgmental sampling is this is very small in size of sample in comparison to the population.

Even though, the sample size is very small in comparison to the population yet sufficient efforts have been to make the sample represent the whole population. The numbers of population included in the sample are, therefore, from the different age, groups; income groups the sexes and method marital status.

3.5) Data Collection Procedure

A well structured questionnaire would be used to collect data required for the study which is the main instrument of data collection. The questionnaire is carefully designed as well as presented so that could best serve the purpose of this study. Sample of the questionnaire is presented in the appendix No. 1.

Altogether 100 questionnaires were distributed and all of them were collected as the questionnaires were filled up at the researcher's own presence, response is assumed to be true. Maximum attention has been given while up the questionnaire. The respondents would be supported by oral explanations in case of their confusion or inability to understand any content in the questionnaire.

3.6) Data Analysis and Presentation Procedure

Different Analytical and Statistical tools have been used to study the data. The obtained data are presented in various tables, diagram and charts with supporting interpretation. Data are tabulated according to the nature of data. Chi-Square test of independence is used to test the hypothesis. Percentage analysis method is also used. SPSS software program is implemented for processing of collected data. To get the good results hypothesis is also used in this thesis.

Testing hypothesis is one of the important applications of statistical inference. For testing of hypothesis, an assumption is made about the population parameter. To test whether the assumption or hypothesis is right or not, a sample is selected from the population. Sample statistic is obtained, observe the difference between the sample mean and the population-hypothesized value and test whether the difference is significant or insignificant. Smaller the difference, the sample mean is close to the hypothesized value, and larger the difference the hypothesized value has low chance to be correct. For this study, following hypotheses are made.

Null Hypothesis = H_0

H_{01} : There is no significant difference in brand loyalty between male and female.

H_{02} : The age of the individual does not have significant influence on the brand loyalty.

H_{03} : There is no effect of income on the brand loyalty.

H_{04} : There is no significant difference in brand loyalty between married and unmarried

Chapter-4

DATA PRESENTATION AND ANALYSIS

4.1) Introduction

The previous chapters incorporated introduction of study review of the literature and research methodology employed in the study respectively. This chapter incorporates data presentation and analysis. The data information collected from the respondents are presented, interpreted and analyzed according to response of respondents on the field survey. All the questionnaires were distributed and collected by the researcher herself. Every questionnaire was thoroughly checked after the collection of all the questionnaires distributed. With the help of the SPSS programmed software all response of consumer are preceded, categorized in their respective disciplines. This chapter analyzes consumer response to brand loyalty in terms of their demographic profile.

There are many approaches to measure brand loyalty. Preference purchase approach has been adopted in this study. Brand loyalty have been measured based on consumer's purchase pattern. To see the purchase pattern respondents were asked the name of brands that which they brought in their last four purchases. For this study propose five consumer products has selected viz. soap, shampoo, noodles, toothpaste and tea. Hence, the brand loyalty, which is shown in their respective relationship with chosen demographic variable, is measured based on purchasing pattern of consumers of Kathmandu valley.

4.2) Sex brand Loyalty

Under this topic consumers' response on brand loyalty in terms of sex is analyzed according to the selected product categories.

4.2.1) Sex and Brand Loyalty on soap

The number of respondent of this product is 100. According to their response Dettol, Liril, Lux, Lifeboy, Niva cammy., Mayalu, Peairs, Tulasi, glory, deluxe Dove etc are the different brands of soap available in Nepalese market. In the survey, both male and female respondents were asked to name the soap of their last four purchase. Then the loyalty on the specific brand is considered according to their purchase pattern. Total numbers of respondents are categorized into four groups according to their purchase pattern and preference relating to the different brands of soaps. Table 1 presents the frequency and percentage distribution of respondents by sex and different degree of brand loyalty on soap.

Table no 4.1 Sex and brand Loyalty on Soap

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	15	30	20	40	35	35
Divided Loyalty (ABAB)	12	24	17	34	29	29
Unstable Loyalty (AABB)	9	18	7	14	16	16
No Loyalty (ABCD)	14	28	6	12	20	20
Total	50	100	50	100	100	100

Source :Field Survey 2009

Figure no 4.1 Sex and brand Loyalty on Soap(Bar Diagram)

Table and chart presented reveals that most of the respondents (35%) are undivided brand loyal followed by divided brand loyalty (29%). The number of people who are unstable brand loyal (16%) and non-loyal (20%) is found to be greater than unstable loyal. In terms of sex, females are found to be more loyal in specific brand of soap. 30 percent male respondents and 40 percent female respondents are strongly loyal whereas 24 percent male and 34 percent female are found to have divided loyal. Additionally 18 percent male respondent and 14 percent female respondents are found to be unstable in terms of brand loyalty. In addition, remaining 28 percent male and 12 percent female respondent are found to be non-loyal in any specific brand of soap.

4.2.1) (a) Sex and Brand Loyalty on Soap Chi-Square Test

H₀: There is no significant difference in brand loyalty between male and female.

Table no 4.2 L: Chi-Square Calculation of Sex and brand Loyalty on Soap

Level of Significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi Square test statistic	5.0262

Since Chi-Square (χ^2) test statistic (5.0262) is less than chi Square (χ^2) tabulated value (7.815) value, hence this shows that males and females are found to be equally brand loyal in the case of soap. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted.

4.2.2) Sex and brand Loyalty : Shampoo

Following table and chart presents the frequency and percentage distribution of respondent by sex and different degree of brand loyalty on shampoo.

Table no 4.3 : Sex and Brand Loyalty on Shampoo

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	17	34	20	40	37	37
Divided Loyalty (ABAB)	13	26	10	20	23	23
Unstable Loyalty (AABB)	8	16	9	18	17	17
No Loyalty (ABCD)	12	24	11	22	23	23
Total	50	100	50	100	100	100

Source : Field Survey 2009

Figure no 4.2 Sex and brand Loyalty on Shampoo (Bar Diagram)

Table and chart presented above shows the sex and brand loyalty on shampoo. Among the 100 respondents 37 percent respondent are found strongly loyal on specific brand of shampoo. They have brought same brands AAAA in their last four purchases. They are said to be true loyal buyers. Divided brand loyalty is found in 23% percent of total respondents, they are better to say multi brand loyal as they brought ABAB in their last four purchases. Additional 17 percent respondents are found unstable brand loyal as the brought AABB in their last four purchase and remaining 23 percent respondent are found non loyal because their purchasing pattern do not match with their performance.

In term of the sex, 34 percent male respondents and 40 percent female respondents are strongly loyal on the specific brand of shampoo whereas 26 percent male respondent and 20 percent female find to be divided brand loyal 26 percent male and 20 percent female find to be divided loyal. 16 percent male respondent and 18 percent female respondents are found to be unstable in their purchasing decision. In addition, remaining 24 percent male and 22 percent female respondent are found to be non-loyal any specific brand of shampoo.

4.2.2) (a) Sex and brand Loyalty on Shampoo Chi-Square Test

H₀ : there is no Significant difference in brand loyalty between male and female.

Table no 4.4: Chi-Square Calculation of Sex and brand Loyalty on Shampoo

Level of Significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi Square test statistic	0.7366

Since Chi-Square (t^2) test statistic (0.7366) is less than chi Square (t^2) tabulated value (7.815) value, hence this shows that males and females are found to be equally brand loyal in the case of Shampoo. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted.

4.2.3) Sex and Brand Loyalty : Instant Noodles

The number of respondent of this product is 100. According to their response waiwai, Rumpum, Mayos, etc are the different brands of instant noodle available in the Nepalese market. The frequency and percentage distribution of the response of consumer according to their purchase pattern

and preference relating to different brands of instant noodle are displayed in the following table.

Table no 4.5 : Sex and Brand Loyalty on Instant Noodle

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	10	20	16	32	26	26
Divided Loyalty (ABAB)	13	26	8	16	21	21
Unstable Loyalty (AABB)	7	14	16	32	23	23
No Loyalty (ABCD)	20	40	10	20	30	30
Total	50	100	50	100	100	100

Source : Field Survey 2009

Figure no 4.3 Sex and brand Loyalty on Instant Noodle (Bar Diagram)

Table displays that the majority of the respondents (30%) fall into the purchase pattern of group ABCD i.e. they are not loyal on specific brand of instant noodle as their purchasing pattern do not match with their preference. 26% respondents are found undivided brand loyal and 21 percent are found divided loyalty. Remaining 23 percent, respondents are found unstable brand loyal.

4.2.4) (a) Sex and brand Loyalty on Instant Noodle Chi-Square Test

H₀ : there is no Significant different in brand loyalty between male and female.

Table no 4.6: Chi-Square Calculation of Sex and brand Loyalty on Instant Noodles

Level of Significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi Square test statistic	9.4298

Since Chi-Square (χ^2) test statistic (9.4298) is More than chi Square (χ^2) tabulated value (7.815) value, hence this shows that males and females are found to be not equally brand in loyal in the case of Instant Noodle. There is no significant difference between male and females. Therefore, the null hypothesis has been rejected.

4.2.5) Sex and band Loyalty : Toothpaste.

The response of consumer according to their purchase pattern and preference relating to different brands of toothpaste are presented in the following table.

Table no 4.7: Sex and Brand Loyalty on Toothpaste

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	25	50	24	48	49	49
Divided Loyalty (ABAB)	17	34	16	32	33	33
Unstable Loyalty (AABB)	6	12	4	8	10	10
No Loyalty (ABCD)	2	4	6	12	8	8
Total	50	100	50	100	100	100

4.2.6) Figure no 4.4: Sex and brand Loyalty on Toothpaste (Bar Diagram)

Given table and chart reveals that majority (49%) respondents are strongly brand loyal in case of toothpaste followed by divided loyalty strongly brand loyalty (33). Additional 10 percent respondents are found unstable brand loyal and remaining 8 percent respondents are found non loyal because their purchasing pattern do not match with their preference.

In terms of sex, 50 percent male respondents and 48 percent female respondents are strongly loyal whereas 34 percent male and 32 percent female are found to have divided brand loyal. Additionally 12 percent male respondent and 8 percent female respondents are found to be unstable in terms of brand loyalty. Moreover, remaining 4 percent male and 12 percent female respondent are found to be non loyal in any specific brand of toothpaste.

4.2.4 (a) Sex and brand Loyalty on Toothpaste chi-Square Test

H_0 : There is no significant difference in brand loyalty between male and female.

Table no 4.8: Chi-Square Calculation of Sex and brand Loyalty on Toothpaste

Level of Significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi Square test statistic	2.4506

Since Chi-Square (χ^2) test statistic (2.4506) is less than chi Square (χ^2) tabulated value (7.815) value, hence this shows that males and females are found to be equally brand in loyal in the case of Toothpaste. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted

4.2.5) Sex and Brand Loyalty : Tea

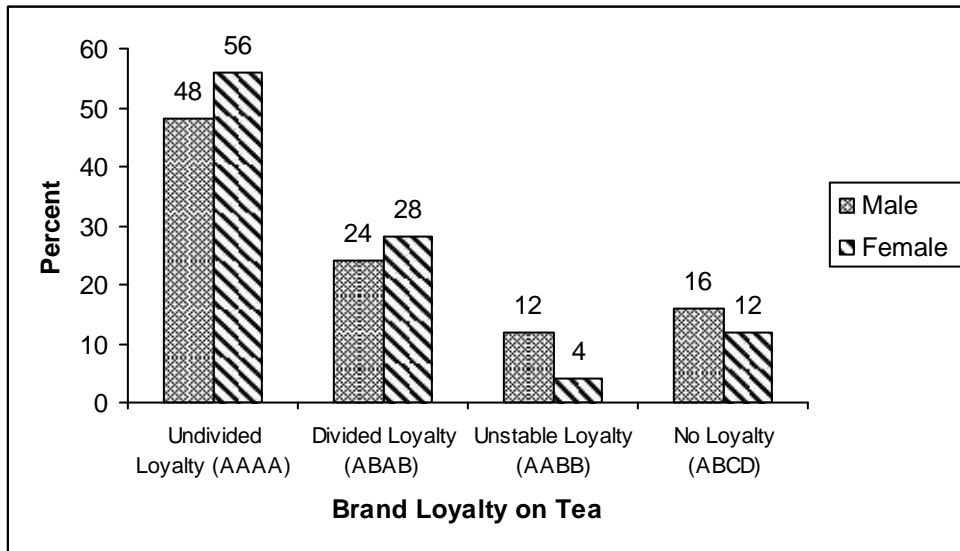
The response of consumers according to their purchase pattern and preference relating to different brands of tea are presented in the following table.

Table no 4.9 : Sex and brand Loyalty : Tea

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	24	48	28	56	52	52
Divided Loyalty (ABAB)	12	24	14	28	26	26
Unstable Loyalty (AABB)	6	12	2	4	8	8
No Loyalty (ABCD)	8	16	6	12	14	14
Total	50	100	50	100	100	100

Source : Field Survey 2009

Figure no. 4.5 : Sex and brand loyalty on Tea



Given table and chart Shows that 52 percent respondents are found strongly brand loyal in case of Tea. The percentage of divided brand loyal, unstable brand loyal and non loyal respondents are 26, 8 and 14 respectively.

48 percent male respondents and 56 percent female respondents are found strongly loyal on specific brand of Tea whereas 24 percent male and 28 percent female are found to have divided brand loyal. 12 percent male respondent and 4 percent female respondents are found to be unstable in terms of brand loyalty. And remaining 16 percent male and 12 percent female respondent are found to be non-loyal in any specific brand of Tea.

4.2.5) (a) Sex and brand Loyalty on Tea Chi-Square Test

H_0 : There is no significant difference in brand loyalty between male and female.

Table no 4.10: Chi-Square Calculation of Sex and brand Loyalty on Tea

Level of Significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi Square test statistic	2.747

Since Chi-Square (χ^2) test statistic (2.747) is less than chi Square (χ^2) tabulated value (7.815) value, hence this shows that males and females are found to be equally brand in loyal in the case of Tea. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted.

4.3) Age and brand loyalty

People's age may be one of the factors that affect their choice. The choice of young people may not be preferred by the ageing people. Under this topic consumer's response on brand loyalty in terms of age is analyzed according to the selected product categories. The age of the respondents are divided into four groups viz 15-20,20-25,25-30 and 30 and above. In the survey, respondents of different age group were asked to name the brand of product of their last four purchases. Then the loyalty on the specific brand is considered according to their purchase pattern and preferences.

4.3.1) Age and brand loyalty : Soap

Following table presents the frequency and percentage distribution of respondents by age and different degree of brand loyalty on soap.

Table no 4.11 : Age and brand Loyalty on Soap

Brand Loyalty	Age group								Total	
	15-20		20-25		25-30		Above 30			
	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	4	21.1	9	30	8	28.6	8	34.8	29	29
Divided Loyalty (ABAB)	6	31.6	10	33.3	10	35.7	9	37	35	35
Unstable loyalty (AABB)	3	15.80	5	16.7	5	17.9	4	17.4	17	17
No Loyalty (ABCD)	9	31.5	6	20	5	17.8	2	10.9	19	19
Total	19	100	30	100	28	100	23	100	100	100

Source : Field Survey 2009

Figure no. 4.6 : Age and brand loyalty on Soap

The above table and chart reveals that majority (21.1%) respondents of 15-20 age groups, 3.0 percent respondents of 20-25 age group, 28.6 percent respondents of 25-30 years group 34.8 percent respondents of 30 and above age group are found to be undivided loyal on the special brand of soap . In the same way 31.6 percent despondence of 15-20,m gar group, 33.3 percent respondent of 20-258 age group, 35.7 percent respondents of 25-30 years age group and 37 percent respondents of 30 and above age are found to have divided brand loyal. Similarly, 15.8 percent respondents of 15-20,age group., 16.7 percent respondents of 20-25 age group, 17.9 percent respondents of 25-30 years age group and 17.4 percent respondents of 30 and above age group are found to be unstable in terms of brand loyalty.

Lastly 31.5 percent respondents of 15-20 age groups , 20 percent respondents of 20-25 age group, 17.8 percent respondents of 25-30 years age group and 10.9 percent respondents of 30 above age group are non loyal in any specific brand.

4.3.1) (a) Age and brand Loyalty on Soap Chi-Square test.

H₀: Age of the individual does not have significant influences on the brand loyalty

Table no. 4.12 Chi-Square Calculation of Age and brand Loyalty on Soap

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	16.9186
Chi Square test statistic	3.8451

Since Chi-Square (χ^2) test statistic (3.8451) is less than chi Square (χ^2) tabulated value (16.9186) value, hence this shows that there is no relation between age and brand . Therefore, the null hypothesis has been accepted.

4.3.2) Age and brand Loyalty : Shampoo

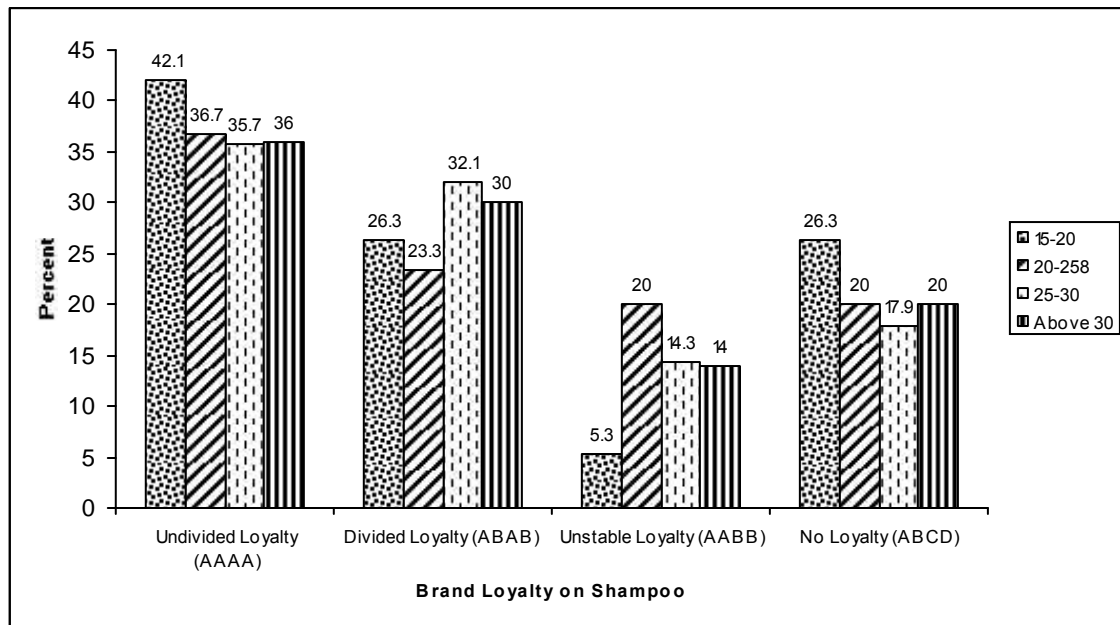
The response of different age group respondent according to their purchase pattern and preference relating to different brands of shampoo are given in the following table.

Table no 4.13: Age and brand Loyalty on Shampoo

Brand Loyalty	Age group								Total	
	15-20		20-25		25-30		Above 30			
	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	8	42.1	11	36.7	10	35.7	7	30.4	36	36
Divided Loyalty (ABAB)	5	26.3	7	23.3	9	32.1	9	39.1	30	30
Unstable loyalty (AABB)	1	5.3	6	20	4	14.3	3	13.1	14	14
No Loyalty (ABCD)	5	26.3	6	20	5	17.9	4	17.4	20	20
Total	19	100	30	100	28	100	23	100	100	100

Source : Field Survey 2009

Figure no. 4.7: Age and brand loyalty on Shampoo



The above table and chart reveals that majority (42%) respondents of 15-20 age groups, 36.7 percent respondents of 20-25 age group, 35.7 percent respondents of 25-30 years group 30.4 percent respondents of 30 age above age group are found to be dividedly loyal on the special brand of Shampoo . IN the same way 26.3 peent respondents of 15-20 age groups, 23.3 percent respondents of 20-25 age group, 32.1 percent respondents of 25-30 years age group and 39.1 percent respondents of 30 and above age group are found to divided brand loyal. Similarly o5.3 percent respondents of 15-20 age group, 20 percent respondents of 20-25 age group, 14.3 percent respondents of 25-30 years age group and

31.1 percent respondents of 30 above age group are found to be unstable in terms of brand loyalty. Lastly 26.3 percent respondents of 15-20 age groups, 20 percent respondents of 20-25 age group, 17.9 percent respondents of 25-30 years age group and 17.4 percent respondents of 30 and above age group are non loyal in any specific brand.

4.3.2) (a) Age and brand Loyalty on Shampoo Chi-Square test.

H₀: Age of the individual does not have significant influences on the brand loyalty

Table no. 4.14 Chi-Square Calculation of Age and brand Loyalty on Shampoo

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	16.9186
Chi Square test statistic	3.3353

Since Chi-Square (t^2) test statistic (3.3353) is less than chi Square (t^2) tabulated value (16.9186) value, hence this shows that there is no relation between age and brand . Therefore, the null hypothesis has been accepted.

4.3.3) Age and brand Loyalty : Instant Noodles

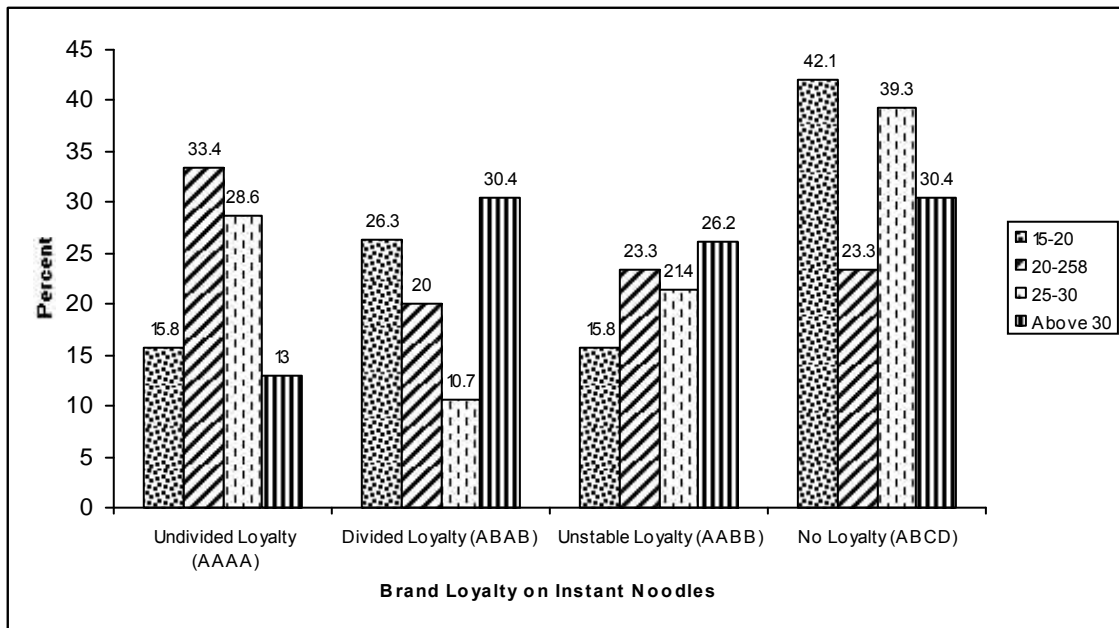
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Instant Noodles are given in the following table.

Table no 4.15: Age and brand Loyalty on Instant Noodles

Brand Loyalty	Age group								Total	
	15-20		20-25		25-30		Above 30			
	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	3	15.8	10	33.4	8	28.6	3	13	24	24
Divided Loyalty (ABAB)	3	26.3	6	20	3	10.7	7	30.4	21	221
Unstable loyalty (AABB)	5	15.8	7	23.3	6	21.4	6	26.2	22	22
No Loyalty (ABCD)	8	42.1	7	23.3	11	39.3	7	30.4	33	33
Total	19	100	30	100	28	100	23	100	100	100

Source : Field Survey 2009

Figure no. 4.8: Age and brand loyalty on Shampoo



The above table and chart presented above reveals that majority of respondents in 15-20 and 25-30 years groups (42.1% and 39.3% respectively) are not loyal in any specific brand of Instant noodles whereas in age group 20-25 strongly loyal consumers hold the majority (33.4%). Similarly, most of the respondents (30.4%) of 30 and above age group seem to be dividedly loyal on the specific brand of Instant noodles. Among total 100 respondents majority belongs to the non loyal group.

4.3.3) (a) Age and brand loyalty on instant noodles Chi-Square Test .

H^0 : Age of the individual does not have significant influences on the brand loyalty.

Table no. 4.16: Chi-Square Calculation of Age and brand Loyalty on Instant Noodles

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	16.9186
Chi Square test statistic	7.9151

Since Chi-Square (χ^2) test statistic (79151) is less than chi Square (χ^2) tabulated value (16.9186) value, hence this shows that there is no relation between age and brand. Therefore, the null hypothesis has been accepted.

4.3.4) Age and brand Loyalty : Toothpaste

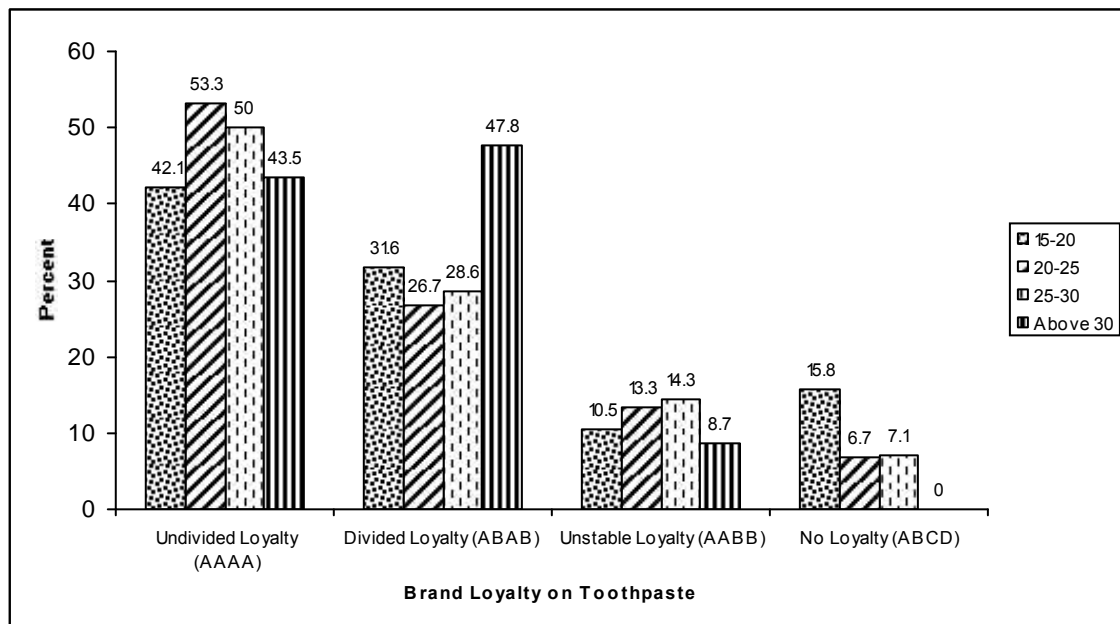
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Toothpaste are given in the following table.

Table no 4.17: Age and brand Loyalty on Toothpaste

Brand Loyalty	Age group								Total	
	15-20		20-25		25-30		Above 30			
	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	8	42.1	16	53.3	14	50	10	43.5	48	48
Divided Loyalty (ABAB)	6	31.6	8	26.7	8	28.6	11	47.8	33	33
Unstable loyalty (AABB)	2	10.5	4	13.3	4	14.3	2	8.7	12	12
No Loyalty (ABCD)	3	15.8	2	6.7	2	7.1	0	0	7	7
Total	19	100	30	100	28	100	23	100	100	100

Source : Field Survey 2009

Figure No. 4.9 : Age and Brand Loyalty : Toothpaste



The above table and chart reveals that majority (42.1%) respondents of 15-20 age groups, 53.3 percent respondents of 20-25 age groups, 50 percent respondents of 25-30 years group 43.5 percent respondents of 30 and above age are found to be undividedly loyal on the specific brand of Toothpaste. In the same way 31.6 percent respondents of 15-20, age groups, 26.7 percent respondents of 20-25 age group (28.6) percent respondents of 25-60 years age group and 47.8 percent respondents of 30 and above age group are found to divided brand loyal. Similarly 10.5 percent respondents of 15-20 age group, 13.3 percent respondents of 20-25 age group[, 14.3 percent respondents of 25-30 years age group and 8.7 percent respondents of 30 above age group are found to be unstable in term of brand loyalty. Lastly 15.8 percent respondent of 15-20 age group, 6.7 percent of respondents of 20-25 age group, 7.1 percent of respondents of 25-30 age group and 0 percent respondent of 30 and above age group are non loyal in any specific brand.

4.3.4) (a) Age and brand loyalty on toothpaste Chi-Square Test .

H^0 : Age of the individual does not have significant influences on the brand loyalty.

Table no. 4.18: Chi-Square Calculation of Age and brand Loyalty on Toothpaste

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	16.9186
Chi Square test statistic	6.5489

Since Chi-Square (t^2)test statistic (6.5489) is less than chi Square (t^2)tabulated value (16.9186) value, hence this shows that there is no relation between age and brand . Therefore, the null hypothesis has been accepted.

4.3.5) Age and brand Loyalty : Tea

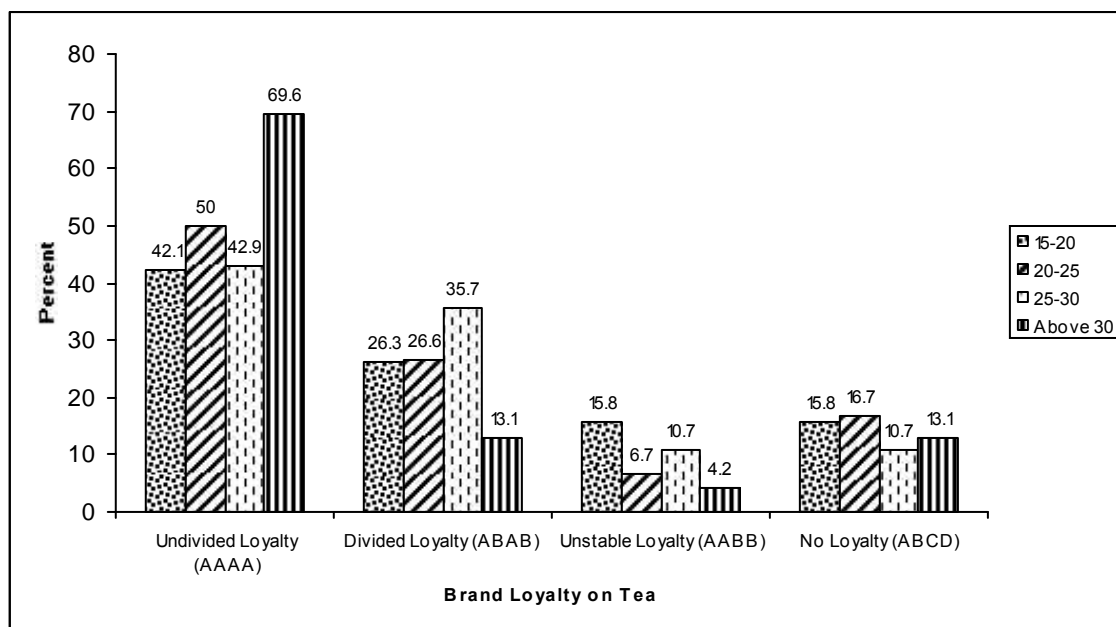
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Toothpaste are given in the following table.

Table no 4.19: Age and brand Loyalty on Tea

Brand Loyalty	Age group								Total	
	15-20		20-25		25-30		Above 30			
	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	8	42.1	15	50	12	42.9	16	69.6	51	51
Divided Loyalty (ABAB)	5	26.3	8	26.6	10	35.7	3	13.1	26	26
Unstable loyalty (AABB)	3	15.8	2	6.7	3	10.7	1	4.2	9	9
No Loyalty (ABCD)	3	15.8	5	16.7	3	10.7	3	13.1	14	14
Total	19	100	30	100	28	100	23	100	100	100

Source : Field Survey 2009

Figure No. 4.10 : Age and Brand Loyalty : Tea



The above table and chart reveals that (42.1%) respondents of 15-20 age group, 50 percent respondents of 20-25 age group, 42.9 percent respondents of 25-30

years group and 69.6 percent respondents of 30 age above age group are found to be undividedly loyal on the specific brand of Tea. In the same way 206.3 percent respondents of 15-20, age group, 26.6 percent respondents of 20-25 age group, 35.7 percent respondents of 25-30 years age groups and 13.1 percent respondents of 30 and above age group are found to divided brand loyal. Similarly 15.8 percent respondents of 15-20 age group, 6.7 percent respondents of 20-25 age group, 10.7 percent respondents of 25-30 years age group and 4.2 percent respondents of 30 above age group are found to be unstable in terms of brand loyalty. Lastly 15.8 percent respondents of 15-20 age group. 16.7 percent respondents of 20-25 age group, 10.7 percent respondents of 25-30 years age group and 13.1 percent respondents of 30 and above age group are non loyal in any specific brand. In the total figure majority of respondents 51% seems to be strongly loyal followed by divided loyal (26%), non-loyal(9%) and unstable loyal (14%) respectively.

4.3.5 (a) Age and brand loyalty on Tea Chi-Square Test .

H^0 : Age of the individual does not have significant influences on the brand loyalty.

Table no. 4.18: Chi-Square Calculation of Age and brand Loyalty on Tea

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	16.9186
Chi Square test statistic	5.9569

Since Chi-Square (t^2) test statistic (5.9569) is less than chi Square (t^2) tabulated value (16.9186) value, hence this shows that there is no relation between age and brand . Therefore, the null hypothesis has been accepted.

4.4) Income and Brand loyalty

Income is considered the major factor that affects the consumer's choice. Under this topic, degree of loyalty of respondents in any specific brand of the product is analyzed according to their monthly household income.

4.4.1) Income and Brand Loyalty :Soap

Under this topic brand loyalty of respondents of specific brand of toilet soap and analyzed with the help of frequency table and bar chart according to their monthly household income.

Table no 4.21: Income and Brand Loyalty on Soap

Brand Loyalty	Monthly House hold Income										Total	
	Below 500		5000-10000		10000-15000		15000-20000		2000 and above			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	2	18.2	10	33.3	5	23.8	7	30.4	5	33.4	29	29
Divided (ABAB)	6	54.5	10	33.3	5	23.8	8	34.8	6	40	35	35
Unstable Loyalty (AABB)	2	18.2	6	20	4	19.1	9	13.10	2	13.3	17	17
No Loyalty (ABCD)	1	9.1	4	13.4	7	33.3	5	21.7	2	13.3	19	19
Total	11	100	30	100	21	100	23	100	15	100	100	100

Source : Field Survey 2009

Figure No. 4.11 : Income and brand Loyalty on Soap

In the above table and chart we can see that among 11 respondents having bellow 5000 monthly income, 18.2 percent are strongly loyal, 54.5 percent are divided loyal, 18.2 percent are unstable loyal 9.1 percentage non loyal on specific brand of soap. Similarly among 30 respondents having monthly household income 5000-10000, the percentage of strongly loyal person dividedly loyal person is equal (33.33%). Unstable and non-loyal respondents of this income group are 20 and 13.4 percent respectively. Among 21 respondents of income category 10000-15000, the percentage of undivided, divided unstable and loyal respondents are 23.8, 23.8, 19.1 and 33.3 respectively. Similarly among 23 respondents of 15000-20000 income categories. 30.4 percent are strongly loyal, 34.8 percent are dividedly loyal, and 13.1 percent are strongly loyal, 21.7 percent and non-loyal . Among 15 respondents having more than 20000 montly household income, 33.4 percent are strongly loyal, 40 percent are dividedly loyal. 13.3 percent are unstable loyal and 13.3 percent are non-loyal on purchasing any specific brand of soap.

4.4.1) (a) Income and brand Loyalty on Soap Chi-Square Test

H_0 : There is no effect on income on brand loyalty.

Table no. 4.22: Chi square Calculation of Income and Brand Loyalty on Soap

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	9
Tabulate value	21.02606
Chi Square test statistic	7.9807

Since Chi-Square (t^2)test statistic (7.9807) is less than chi Square (t^2)tabulated value (21.02606) value, hence this shows that there is no relation between age and brand . Therefore, the null hypothesis has been accepted.

4.4.2) Income and Brand Loyalty: Shampoo

Under this topic brand loyalty of respondents of specific brand of shampoo are analyzed with the help of frequency table and bar chart according to their monthly household income.

Table no 4.23 : Income and Brand Loyalty on Shampoo

Brand Loyalty	Monthly House hold Income										Total	
	Below 500		5000-10000		10000-15000		15000-20000		2000 and above			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	3	27.3	14	46.7	8	38.1	6	26.1	5	33.3	36	36
Divided (ABAB)	3	27.3	8	26.7	7	33.3	8	34.8	4	26.7	30	30
Unstable Loyalty (AABB)	1	9	3	10	3	14.3	6	26.1	3	20	16	16
No Loyalty (ABCD)	4	36.4	5	16.7	3	14.3	3	13	3	20	18	18
Total	11	100	30	100	21	100	23	100	15	100	100	100

Source :Field Survey 2009

Figure no. 4.12 : Income and Brand Loyalty on Shampoo

In the above table and chart we can see that majority of respondents (36.4%) below 5000 income group are not-loyal in any specific product of shampoo. But opposite to this group, in the income groups 5000-10000, 10000-15000 and 20000 and above, strongly loyal respondents held the majority. In the income group 15000-20000, most of the respondents belong to dividedly loyal groups

4.4.2) (a) Income and brand Loyalty on Shampoo Chi-Square Test on Shampoo

H₀: There is no effect on income on the brand loyalty.

Level of Significance	0.05
Number of row	4
Number of column	4
Degree of freedom	12
Tabulate value	21.02606
Chi Square test statistic	8.9952

Since Chi-Square (t^2) test statistic (8.9952) is less than chi Square (t^2) tabulated value (21.02606) value, the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.4.3) Income and brand Loyalty on Instant Noodles

In the case of product Instant Noodles, majority of respondents in all income group except in the group 20000 and above are non-loyal in any brand. In the income group (20000 and above) strongly loyal respondents contracts the majority (35.5%), Table : 25 and Figure 13)

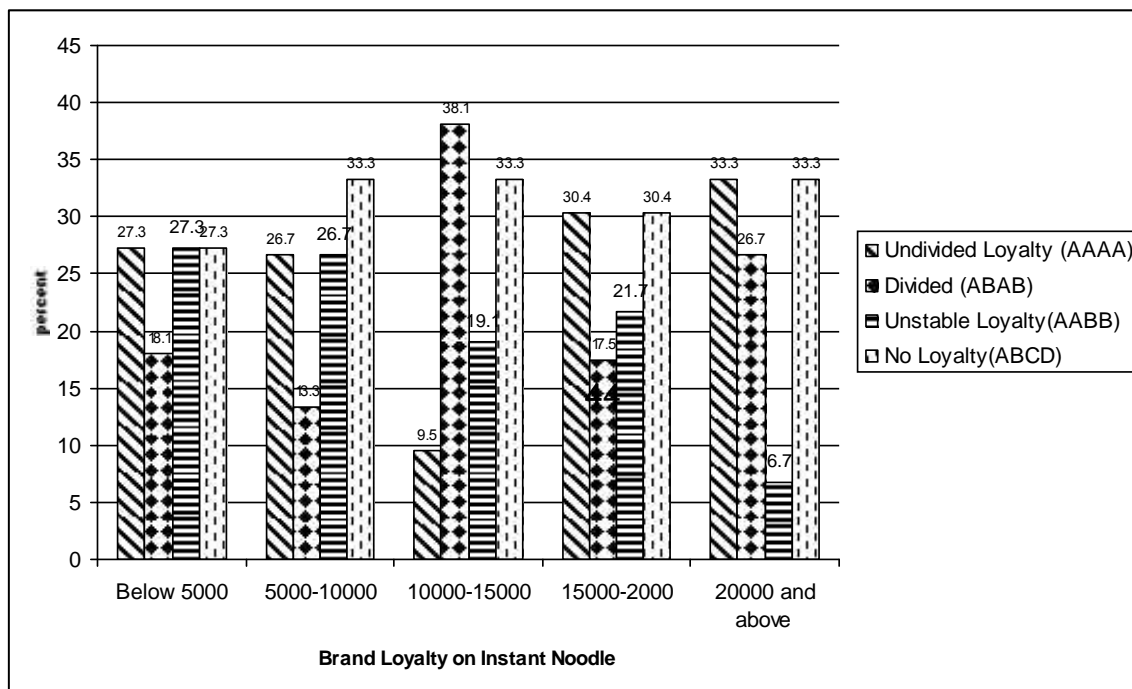
Table no. 4.25: Income and Brand Loyalty: Instant Noodles

Brand Loyalty	Monthly House hold Income										Total	
	Below 500		5000-10000		10000-15000		15000-20000		2000 and above			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	3	27.3	8	26.7	2	9.5	7	30.4	5	33.3	25	25

Divided (ABAB)	2	18.1	4	13.3	8	38.1	4	17.5	4	26.7	22	22
Unstable Loyalty (AABB)	3	27.3	8	26.7	4	19.1	5	21.7	1	6.7	21	21
No Loyalty (ABCD)	3	27.3	10	33.3	7	33.3	7	30.4	5	33.3	32	32
Total	11	100	30	100	21	100	23	100	15	100	100	100

Source :Field Survey 2009

Figure no. 4.13 : Income and Brand Loyalty : Instant Noodles



The table presented above reveals that majority of respondents of all defined income groups fall in strongly non-loyal categories. 27.3 percentage respondents of below 5000 income group, 33.3 percentage respondents of 5000-10000 income group, 33.3 percentage respondents of 10000-15000 income groups, 30.4 presents of respondents of 15000-20000 income groups and 33.3 percentage of respondents of 20000 and above income group fall in this categories.

Total percentage of undivided loyal respondents is 25 percentages whereas divided loyal respondents are 22 percent in total. Unstable loyal respondents are 21 percentage in total respondents. It is remarkable that non-loyal respondents are highest in 15000-20000 income groups whereas strongly loyal respondents are highest in 20000 and above.

4.4.2 (a) Income and brand Loyalty on Instant Noodles Chi-Square Test

H_0 : There is no effect on income on the brand loyalty.

Table no. 4.26: Chi Square Calculation of Income and Brand Loyalty on Instant Noodles

Level of Significance	0.05
Number of row	4
Number of column	5
Degree of freedom	12
Tabulate value	21.02606
Chi Square test statistic	9.0035

Since Chi-Square (t^2) test statistic (9.0035) is less than chi Square (t^2) tabulated value (21.02606) value, the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.4.4 Income and brand Loyalty: Toothpaste

Under this topic brand loyalty of respondents on specific brand of toothpaste are analyzed with the help of frequency table and bar chart according to their monthly household income.

Table no. 4.27 : Income and brand Loyalty : Toothpaste

Brand Loyalty	Monthly House hold Income										Total	
	Below 500		5000-10000		10000-15000		15000-20000		2000 and above			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	4	36.4	15	50	10	47.6	12	52.1	7	46.7	48	48
Divided (ABAB)	5	45.5	7	23.3	9	42.8	7	30.4	5	33.3	33	33
Unstable Loyalty (AABB)	1	9.1	5	16.7	1	4.8	3	13.2	2	13.3	12	12

No Loyalty (ABCD)	1	9	3	10	1	4.8	1	4.3	1	6.7	7	7
Total	11	100	30	100	21	100	23	100	15	100	100	100

Source :Field Survey 2009

Figure no. 4.14: Income and Brand Loyalty : Toothpaste

In the above table and chart we can see that among 11 respondents having bellow 5000 monthly income. 36.4 percent are strongly loyal, 45.5 percent are divided loyal, 9.1 percent are unstable loyal and 9 percent are non loyal on specific brand of Toothpaste. Similarly among 30 respondents having monthly household income. 5000-10000, the percentage of strongly loyal person is 50, and percentage of dividedly loyal person is 23.3. Unstable and non-loyal respondents of this income group are 16.7 and 10 percent respectively. Among 21 respondents of income category 10000-15000, the percentage of undivided, divided, unstable and non loyal respondent are 47.6, 42.8, 4.8 and 4.8 respectively. Similarly among 23 respondents of 150000-20000 income categories, 52.1 percent are strongly loyal and 30.4 percent are dividedly loyal, and 13.2 percent are unstable loyal and 4.3 percent are non-loyal. Among 15 respondents having more than 20000 monthly household income. 46.7 percent are strongly loyal, 33.3 percent are dividedly loyal, 13.3, percent are unstable loyal and 6.7 percent are non-loyal on purchasing any specific brand of Toothpaste.

4.4.4(a) Income and Brand Loyalty on Toothpaste Chi-Square Test.

H_0 : There is no effect on income on the brand loyalty.

Table no. 4.28 : Chi square Calculation of Income and Brand Loyalty on Toothpaste

Level of Significance	0.05
Number of row	4
Number of column	5
Degree of freedom	12
Tabulate value	21.02606
Chi Square test statistic	4.8755

Since Chi-Square (χ^2) test statistic (4.8755) is less than chi Square (χ^2) tabulated value (21.02606) value, the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.4.5 Income and brand Loyalty : Tea

There are varieties brand of Tea available in the market in different retail price . This topic attempts to analyze the use of Tea by respondents according to their monthly household income.

Table no. 4.29 : Income and brand Loyalty : Tea

Brand Loyalty	Monthly House hold Income										Total	
	Below 500		5000-10000		10000-15000		15000-20000		2000 and above			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Undivided Loyalty (AAAA)	6	54.5	15	50	11	52.3	11	47.8	10	66.7	53	53
Divided (ABAB)	1	9.1	11	36.7	3	14.3	8	34.8	2	13.3	25	25
Unstable Loyalty (AABB)	1	9.1	0	0	4	19.1	3	13.1	1	6.7	9	9
No Loyalty (ABCD)	3	27.3	4	13.3	3	14.3	1	4.3	2	13.3	13	13
Total	11	100	30	100	21	100	23	100	15	100	100	100

Source :Field Survey 2009

Figure no. 4.15: Income and Brand Loyalty : Tea

The table presented above shows that majority respondent of all defined income group falls in strongly loyal category. 54.5 percent respondents of below 5000 income groups, 50% respondents of 5000-10000 income groups, 52.3 percent respondent of 10000-15000, 47.8 percent respondents or 15000-2000 income group and 66.7 percent respondents of 20000 and above income group of dividedly loyal respondents is 25 whereas unstably loyal respondents are only 9 percent in

total. Non-loyal respondents constitute 13 percent of total respondents. It is remarkable that non-loyal respondents are highest in below 5000 income group whereas strongly loyal respondents are highest in 20000 and above income group.

4.4.4) (a) Income and Brand Loyalty on Tea-Chi-Square Test

H0 : There is no effect on income on the brand loyalty.

Table no 4.30: Chi- square calculation of Income and brand Loyalty on Tea

Level of Significance	0.05
Number of row	4
Number of column	5
Degree of freedom	12
Tabulate value	21.02606
Chi Square test statistic	14.7528

Since Chi-Square (t^2)test statistic (14.7528) is less than chi Square (t^2)tabulated value (21.02606) value, the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.5) Marital Status and brand Loyalty :

Marital status may be one of the factors that affect their choice. under this topic, consumer respond on brand loyalty in them of martial status is analyzed according to selected product categories. The despondence in marital status is married and unmarried. In the survey, respondents of different status were asked to name the broad of product of their last four purchases. The loyalty on special brand is identified according to this purchased pattern and preference.

4.5.1) Marital status and Brand loyalty :Soap

Following labels process the frequency and percentage distribution of respondents by marital status and different degree of brand loyalty of soap.

Table 4.31 : Marital Status and brand Loyalty on Soap

Brand Loyalty	Married		Unmarried		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	20	40	17	34	37	37
Divided Loyalty (ABAB)	13	26	10	20	23	23
Unstable Loyalty (AABB)	7	14	11	22	18	18
No Loyalty (ABCD)	10	20	12	24	22	22
Total	50	100	50	50	100	100

Source : Field Survey, 2008

Figure no . 4.16 : marital Status and brand Loyalty on Soap

Bar Diagram

Table and chart present above reveals that most of the respondents (37%) all undivided loyalty followed by divided brand loyalty (23%) 18%, 22% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of soap 40%, married and 34% unmarried were strongly loyal whereas 26% married and 20% unmarried are found to be divided loyal, 14% married and 22% unmarried are found to have unstable in form of brand. 20% married and 24% of unmarried all found to be non loyal in any specific brand of soap.

4.5.1 (a) Marital Status and brand Loyalty on soap Chi-Square Test

H0: There is no significant difference in brand loyalty between married and unmarried.

Table no. 4.32 : Chi-square Calculation of marital Status and Brand Loyalty on Soap

Level of significance	0.05
Number of row	4

Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi-Square Test statistic	1.705

Since Chi-Square (t^2) test statistic (1.705) is less than chi-Square (t^2) tabulated value (7.815) value; hence it follows that married and unmarried all found to be equally brand loyal in the case of soap. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.5.2) Marital Status and Brand Loyalty : Shampoo

Table no. 4.33 : Marital Status and brand Loyalty on Shampoo

Brand Loyalty	Married		Unmarried		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	20	40	15	30	35	35
Divided Loyalty (ABAB)	15	30	14	28	29	29
Unstable Loyalty (AABB)	7	14	9	18	15	16
No Loyalty (ABCD)	8	16	12	24	20	20
Total	50	100	50	50	100	100

Source : Field Survey, 2009

Figure no . 4.17 : Marital Status and brand Loyalty on Shampoo

Table and chart present above reveals that most of the respondents (35%) are undivided loyalty followed by divided brand loyalty (29%) 16% , 20% all the unstable brand loyal and non-loyal respectively. In term of marital status. Married people all found to be brand loyal in special brand of brand of shampoo 40% married and 30% unmarried were strongly loyal whereas 30% married and 28%

unmarried are found to be divided loyal, 14% married and 18% unmarried and found to have unstable inform of brand. 16% married and 24% of unmarried all found to be non-loyal in any specific brand of shampoo.

4.5.2 (a) Marital Status and Brand loyalty on shampoo chi-Square test.

H0: There is no significance difference in brand loyalty believe married and unmarried

Level of significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi-Square Test statistic	1.7986

Since chi-Square (t^2)test statistic (1.7986) is less then chi-Square (t^2)tabulated value (7.815) value; hence his flows that married and unmarried all found to be equality brand loyal in the case of Shampoo. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.5.3) Marital Status and Brand Loyalty : Instant Noodles

Table no. 4.33 : Martial Status and brand Loyalty on Instant Noodles

Brand Loyalty	Married		Unmarried		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	20	40	18	36	38	39
Divided Loyalty (ABAB)	12	24	15	30	27	27
Unstable Loyalty (AABB)	8	16	6	12	14	14
No Loyalty (ABCD)	10	20	11	22	21	21
Total	50	100	50	50	100	100

Source : Field Survey, 2009

Figure no. 4.18: Marital Status and Brand Loyalty on Instant Noodles

Table and chart present above revels that must of the respondents (38%) are undivided loyalty followed by divided brand loyalty (27%) 14%, 21% all the unstable brand loyal and non-loyal respectively. In term of marital status.

Married people all found to be brand loyal in special brand of brand of instant noodle 40% married and 36% unmarried were strongly loyal whereas 24% married and 30% unmarried are found to be divided brand loyal, 16% married and 12% unmarried and found to have unstable inform of brand 20% married and 22% of unmarried all found to be non-loyal in any specific brand of instant noodle.

4.5.3 (a) Marital Status and Brand loyalty on instant noodles chi-square test:

H₀ : There is no significance difference in brand loyalty believe married and unmarried.

Table no. 4.36 : Chi-Square Calculation of Marital Status and brand Loyalty :

Level of significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi-Square Test statistic	0.7716

Since chi-Square (t^2) test statistic (0.7716) is less than chi-Square (t^2) tabulated value (7.815) value; hence it follows that married and unmarried all found to be equality brand loyal in the case of Instant noodles. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.5.4) Marital Status and Brand Loyalty : Toothpaste

Table no. 4.37 : Marital Status and brand Loyalty on Toothpaste

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	18	36	20	40	38	38
Divided Loyalty (ABAB)	15	30	13	20	28	28
Unstable Loyalty (AABB)	10	20	11	22	21	21
No Loyalty (ABCD)	7	14	6	12	13	13
Total	50	100	50	50	100	100

Source : Field Survey, 2009

Figure no 4.19: Marital Status and Brand Loyalty on Toothpaste

Table and chart present above reveals that most of the respondents (38%) are undivided loyalty followed by divided brand loyalty (28%) 21%, 13% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of toothpaste 36% married and 40% unmarried were strongly loyal whereas 30% married and 26% unmarried are found to be divided loyalty, 20% married and 22% unmarried and found to have unstable inform of brand. 14% married and 12% of unmarried all found to be non-loyal in any specific brand of toothpaste.

4.5.4 (a) Marital Status and Brand Loyalty Toothpaste Chi-Square Test :

H₀: There is no significance difference in brand loyalty between married and unmarried.

Table no. 4.38 : Chi-Square Calculation of Marital Status and brand Loyalty

Level of significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi-Square Test statistic	0.3724

Since chi-Square (x^2) test statistic (0.3724) is less than chi-Square (x^2) tabulated value (7.815) value; hence it follows that married and unmarried all found to be equally brand loyal in the case of Toothpaste. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.5.5) Marital Status and Brand Loyalty : Tea

Table no. 39 : Marital Status and Brand Loyalty on Tea

Brand Loyalty	Male		Female		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	28	56	24	48	52	52
Divided Loyalty (ABAB)	14	28	10	20	24	24

Unstable Loyalty (AABB)	3	6	8	16	11	11
No Loyalty (ABCD)	5	10	8	16	13	13
Total	50	100	50	50	100	100

Source : Field Survey, 2009

Figure no. 4.20: Marital Status and Brand Loyalty on Tea

Table and chart present above reveals that most of the respondents (52%) are undivided loyalty followed by divided brand loyalty (24%) 11%, 13% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of tea 56% married and 48% unmarried were strongly loyal whereas 28% married and 20% unmarried are found to be divided loyalty, 6% married and 16% unmarried and found to have unstable inform of brand. 10% married and 16% unmarried all found to be non-loyal in any specific brand of tea.

4.5.5 (a) Marital Status and brand loyalty on Tea Chi-Square test :

H_0 : there is no significant difference in brand loyalty between married and unmarried.

Table no. 4.40 : Chi-Square Calculation of Marital Status and Brand loyalty

Level of significance	0.05
Number of row	4
Number of column	2
Degree of freedom	3
Tabulate value	7.815
Chi-Square Test statistic	3.939

Since chi-Square (χ^2) test statistic (3.939) is less than chi-Square (χ^2) tabulated value (7.815) value; hence it flows that married and unmarried all found to be equality brand loyal in the case of Tea. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.5) Factors Causing Brand Switching

It has been already presented in various table and chart that the number of respondent who are strongly loyal in the specific brand of any product is very low. People switch brand for many purposes. In this topic, it is tempted

to find out the causes of brand switching in different products. Respondents were asked the question. "Which one of the following factors makes you leave one brand and switch to other?" The factors provided with the question are:-

- i. Price off
- ii. Advertising
- iii. A desire to test new brand
- iv. Others

Others, includes factors like quality, test's ent, smell availability, health, conscious, from friends and recommendation, purity, suitability fairness, availability near by shop etc. To analyze the factors causing brand switching undividedly loyal(AAAA) dividedly loyalty (ABAB) and unstable loyal (AABB) respondents are grouped as brand loyal respondents and rests are defined as non brand loyal respondent. The response of the respondents on the question is presented in the table 41.

Table no. 4.41 : Factors Causing Brand Switching

Name of Product	Factors	Brand loyal	%	Non brand loyal	%	Total	%
Soap	Price off	23	23	4	4	27	27
	Advertising	28	28	8	8	36	36
	Desire to test New product	11	11	3	3	14	14
	Others	20	20	3	3	23	23
	Total	82	82	18	18	100	100
Shampoo	Price off	20	20	7	7	27	27
	Advertising	31	31	8	8	39	39
	Desire to test New product	13	13	1	1	14	14
	Others	18	18	2	2	20	20
	Total	82	82	18	18	100	100
Instant Noodles	Price off	20	20	9	9	29	29
	Advertising	22	22	12	12	34	34
	Desire to test New product	9	9	5	5	14	14
	Others	16	16	7	7	23	23
	Total	67	67	33	33	100	100
Toothpaste	Price off	37	32	12	12	49	49
	Advertising	27	27	7	7	34	34
	Desire to test New product	9	9	1	1	10	10
	Others	6	6	1	1	7	7
	Total	79	79	21	21	100	100
Tea	Price off	40	40	13	13	53	53
	Advertising	23	23	3	3	26	26
	Desire to test New product	7	7	1	1	8	8
	Others	9	9	4	4	13	13
	Total	79	79	21	21	100	100

Source: Field Survey 2009

The table shows that advertisement is the most effective factor for switching brand of soap. 36 percent (28% brand loyal and 8% non-loyalbrand loyal) respondents responded that adversitisng is the factor that inspires them to leave the one brand and switch on another brand of soap. Similarly, 39 percent(31% brand loyal and 8% non-brand loyal) respondents of shampoo are affected by advertisement to switch the brand . Advertising has effected dominantly for brand switching in the

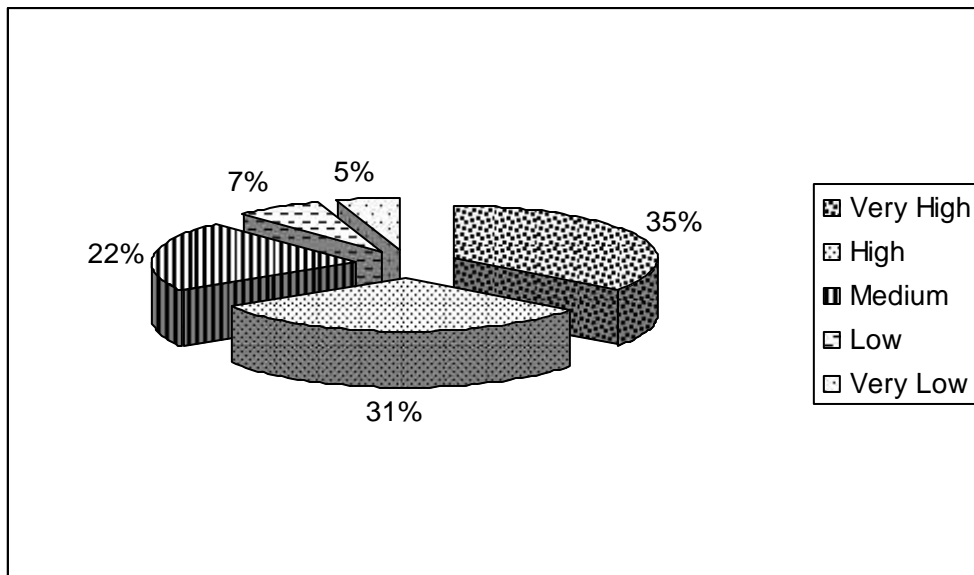
product instant noodles too. 34 percent (22% brand loyal and 12% non-loyal) respondents are found to be affected by advertising campaign to switch the brand of instant noodles. However, in the case of toothpaste and Tea, most of the respondents are affected by the price activities to switch another brand of the product. 41, percent respondents 37% brand loyal and 12% non-loyal respondents) responded that they are highly impressed by the price activities to leave one brand and switch to other brand of toothpaste. Similarly 53, percent respondents (40% are brand loyal and 13% non-loyal) are found to be affected by price activities to switch their favorite brand of Tea. 34 percent (27% brand loyal and 7% non-loyal) respondents of toothpaste and 26 percent (23% brand loyal and 3% non-loyal) respondents of Tea are inspired by advertisement to leave on brand and switch to other. 27 percent 23% brand loyal and 4% non-loyal) respondents of soap, 27 percent (20% brand loyal and 7% non loyal) respondents of shampoo and 29 percent(20% brand loyal and 9% non loyal) respondents of instant noodles are affected by price activities(price off) for brand switching. In the same way 14% percent (11% loyal and 3% non-loyal) respondents of soap, 14 percent (13% loyal and 1% non-loyal) respondents of Shampoo, 14 percent(9% loyal and 5% non-loyal) respondents of Instant Noodles, 10 percent (9% loyal and 1% non-loyal) respondents of toothpaste and 8 percent(7% loyal and 1% non-loyal) respondents of Tea responded that they were motivated to switch the brand because of a desire to use new product Moreover, rest of the respondents have others reason for brand switching.

4.7) Effects of Incentives in brand Choice

Table no. 4.42 Effects of Incentives in brand Choice

Effects of incentives	Frequency	Percent
Very High	35	35
High	31	31
Medium	22	22
Low	7	7
Very Low	5	5
Total	100	100

Figure no. 4.21 : Effects of Incentives in Brand Choice



The table and chart presented above shows that most of respondents of consumers are affected by incentives like free goods, price off etc. 35 percent of respondents responded that those incentives very highly effects in brand choice. Similarly 31 percent of respondent replied that the effect is high, 22 percent of respondents have opinion that those incentives have medium effect in brand choice. Very few respondents (7% and 5% respectively) responded that the effect of the incentives is low and very low. According to respondents received from consumer we can conclude that majority or consumer are effected by incentives like free sample, price off, free coupon, prize, bumper, discount etc. for brand choice.

4.8) The following major findings are deduced from the study.

4.8.1) Finding regarding sex variable

1. The greater percent of female are found to have undivided loyalty and divided loyalty. Male are also found undivided loyalty and divided loyalty in case of soap. Test shows that there is no difference in brand loyalty between male and female.
2. In the case of shampoo, greater percent male and female are found to have undivided loyalty divided loyal. Test show that there is no difference in brand loyalty between male and female.

3. In case of Instant Noodles greater percentage of female are found to have loyal and most of male are found to have no loyalty. Test shows that there is significant difference between male and female.
4. Similarly in the case of toothpaste percentage of loyal respondent are found high. They are equally brand loyal. There is no significant difference in brand loyalty between male and female.
5. In case of Tea both male and female respondent are found highly loyal. Among them female are more than male and test statistic shows that there is no difference in brand loyalty between male and female.

4.8.2) Finding regarding Age variable.

1. Under age group 15-20, greater percentage of respondents are found to have divided loyalty and no loyalty in case of soap. There is no relation between age and brand loyalty. Greater percentage of respondents is found to have divided loyal among them.
2. Most of respondent are found to have undividedly loyal in case of shampoo. This indicates that, they are conscious in the case of shampoo. Test statistics shows that there is no relation between age and brand loyalty.
3. In the case of Instant Noodles greater percentage of respondents are found to have no loyalty. Among them greater percentage of respondent of age group 20-25 are found loyal. Test statistics indicates that there is no relation between age and brand loyalty.
4. In the case of toothpaste most of respondents is fall in undividedly loyal categories. Most of respond of age group 20-25 and 25-30 are found strongly loyal. Test statistic indicates that there is no relation between age and brand loyalty.
5. In the case of Tea, most of respondents are found to have undividedly brand loyal. Among them, greater percentage of age group 30 and above, are found more than other group. The test statistics shows that there is no relation between age and brand loyalty.

4.8.3) Findings regarding Income Variable:

1. Under income group 20000 and above greater parentage of respondent are found to have undividedly loyal in the case of shop. test statistics show that there is no relation between income and brand loyalty.
2. In the case of shampoo greater percentage of respondent of 20000 and above income group are found undividedly brand loyal. In this case most of respondent are in to undividedly brand. In this case most of respondent are into undividedly brand loyal. And test statistics show that there so no relation between income and brand loyalty.
3. In the case of Instant Noodles, most of the respondents are found to have no loyal, However among them greater percentage of respondents of income group 20000 and above are found undividedly loyal in the case of noodles. This indicates that there is no relation between income and brand loyalty.
4. In the case of toothpaste most of respondents or greater percentages of respondents are found loyal consumer categories. Among them greater percentage of income group 15-30 and above is found more loyal them other.
5. In the case of Tea more respondents are found to have undivided loyal. In addition, followed by divided loyal and unstable loyal. This indicates that there is relation between income and brand loyalty. test statistics indicated that greater income group has brand loyal in case of Tea.

4.8.4) Finding Regarding Marital Status

1. The greater parentage of married are found to have undivided loyalty and divided loyalty. Incase of unmarried are found to have undivided loyalty and divided loyalty in case of soap test shows there is no different in brand loyalty between married and unmarried.
2. In case of shampoo: greater percentage of married and unmarried are found to have undivided loyalty. Test shows that there is no difference in brand loyalty between married and unmarred.

4. In case of toothpaste percentage of loyal respondent are found high in unmarried then to be in married. Test shows that there is no significant different between unmarried and married.
5. Similarly in case of Tea, both married and unmarried are found to be highly loyal but among them married are higher than unmarried. Test shows that there is no significant different between unmarried and married.

4.8.5) Causes of Brand Switching

1. Advertising campaign is found to be the dominant factor for brand switching in products soap, shampoo and instant.
2. In the case of the products Toothpaste and Tea Majority of the people are affected price activities (price off) for brand switching.
3. It is found that incentives like price off, free, goods etc. highly affects people to purchase the brand.

Chapter 5

SUMMARY, CONCLUSION AND RECOMMENDATION

The intent of this study is to analyze the brand loyalty of consumer product in Kathmandu valley. A brief introduction about the study has been already presented in chapter one. In second chapter various journals, related books, other publication as well as unpublished master degree dissertation have been reviewed. Research methodology has been described in chapter three, while all the available data has been presented and analyzed in chapter four.

In this chapter the effort has been made first to present summary of major findings and conclusion drawn from the analysis. The last steps proceed with the recommendation.

5.1 Summary

Industrial activities have greatly increased in Nepal over the past years. The country which was overwhelmingly dependent on agriculture: although has not completely grown out of this dependence but has shown significantly growing industrial involvement and development which has consequently opened a door to an alternative support to sustain its economic life. Every year new fields of industrial importance are being uncovered and consequently the numbers of different industrial units are increasing. All these have offered betterment to the nation and also have introduced a very tough competition in the Nepalese Market. Today, a product to be sold successfully in the market requires presentation and promotion in order to win the heart of the consumer, one should not only have good Quality but it should be accompanied by brand names, labels attractive packaging and lots more.

Considering the very realities of the market, this study is a sincere endeavor of finding out brand loyalty of consumer production in Kathmandu valley and its growth in them over the years if any. Besides the main objectives of finding out the brand loyalty of consumer products in

Kathmandu valley, the study also contains the attempt of examining the brand awareness in Nepalese consumers and analyzing its impact on purchase decision and to examine the relationChip of brand loyalty with demographic variables Tea, Instant Noodle, Tooth Paste, Shampoo and Soap are the five different kinds of consumer goods selected for the study.

This study is based on scientific method of research. All the Nepalese consumers of Kathmandu valley are considered population of the study. A sample of 100 consumers is randomly taken out of the population on the basis of convenience sampling basis taking into account that there is an involvement of significant number of respondents with variation in age, sex income level and marital status etc., A well structured questionnaire is the main instrument for collection of required data. All the participants were provided with the questionnaire to give their sincere opinions andwere collected after been completed by them.

The data thus collected by the means of questionnaire are presented, interpreted and analyzed so as to obtain the objective of the study.

From the interpretation and analysis of the data, it is fund that Nepalese consumers have high degree of brand awareness and most of them are brand loyal in all the products selected for the study which has grown significantly in over the years. Similarly, it is also found that the factors such as age, sex, marital status and income level etc. are related to brand loyalty and the direction and degree of the correlation varies across the products

5.2) Conclusions

Following conclusion are deducted from the study

1. Consumers of Katmandu valley give high importance to brand. They purchase the products based on brand.
2. Most of consumers have good knowledge about all the brands available in the market.

3. Brand Loyalty varies also product to product and loyalty toward brand is relatively higher in the product that is more frequency needed as compared to those needed or used less frequency.
4. Brand loyalty varies consumer to consumer. Some consumers are more brands loyal than other and vice versa.
5. No relation between consumers age and brand loyalty was established.
6. Only in case of Instant Noodles male and female are varies in loyalty.
7. In case of Tea, higher income group is more loyal on brand.
8. Most of respondent are influenced by incentive for their brand choice.
9. Most of consumers of kathmandu valley are found undividedly loyal in specific brand of chosen products categories except in instant noodles.
10. Grater percentage of consumer switches the brand in cause of advertising in products soap, shampoo and instant noodle.
11. In case of toothpaste and tea greater percentage of consumer switches the brand in case of price- off.

5.3) Recommendation

Following recommendation are made based on finding of the study.

1. Particular attention should be given in branding the products, brand is necessary in almost all types of product.
2. Brand should be distinctive or unique in every types of product. The distinct brand will be very much helpful to differentiate the desire product of the consumer from the other products.
3. Studies or brand loyalty should be made on continuously. Most of consumer showing brand loyalty indicates towards hidden assets of the manufactures or sellers. They should have knowledge of these

valuable assets. It will give them effective guideline for developing successful marketing strategy.

4. The product line of the same brand should be increase according to preference of consumers/. So that brand switching is discouraged. The quality of product should also be maintained.
5. The following recommendations are made for the future researchers.
6. Sample size should be larger. Products chosen for the study under brand loyalty are those, which are purchased regularly and repeatedly and population using such product is very large, therefore small of sample cannot accurately resemble the population.
7. The product to be included in the study should be having diversified nature so that each of them represents as many types of product as possible.
8. The questionnaire used in study should be as short and simple as possible.
9. Effective statistical tools should be used to analyze and interpret collected data.

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ANNEX-1
TRIBHUVAN UNIVERSITY
FACULTY OF MANAGEMNT
Makawanpur Multiple Campus
Hetauda, Makawanpur

Questionnaire for the research of Master of business studies of dissertation survey entitled" **Brand loyalty consumer products in Kathmandu valley**"

I am Deepika Chitrakar, MBS students at Makawanpur Multiple Campus. I am conducting a research study on brand loyalty of consumer product in Kathmandu Valley, So I request you to co-operate me by filling up this questionnaire. The more accurately and elegantly you fill up this questionnaire, the more accurate and meaningful my study will be.

A brand is the name, term, sign or symbol or a combination of them which you use to demand your desired product in the market or which you use to differentiate the product of one producer from that of the other.

Research questions:

Respondent Profile:

Name :

Sex Male Female

Age :

Marital Status:.....

Family monthly income

Please tick (✓) in the answer for which you agree with.

1) Which product you regularly use?

- a) Soap
- b) Shampoo
- c) Toothpaste
- d) Instant noodle
- e) Tea

1.1) For product soap

- a) Do you already decide upon which brand to buy before going the shop or store to buy it?
 - i) Yes
 - ii) No
- b) Following are the different types of the soap? How do you buy them?
 - i) By Brand
 - ii) By inspection
- c) Which soap do you use for bathing purpose?
 - i) Dove
 - ii) Dettol
 - iii) Lux
 - iv) Others
- d) Which brand did you buy in last four purchases?
 - i)
 - ii)
 - iii)
 - iv)
- e) What do you do if your favorite brand is not available?
 - i) Wait for favorite
 - ii) Buy the alternative

1.2) For product shampoo?

- a) Do you already decide upon which brand to buy before going the shop or store to buy it?
 - i) Yes
 - ii) No
- b) Following are the different types of the shampoo? How do you buy them?
 - i) By brand
 - ii) By inspection
- c) Which Shampoo do you use for bathing purpose?
 - i) Clinic plus
 - ii) Dabur Vatika
 - iii) Sun silk
 - iv) Others
- d) Which brand did you buy in last four purchases?
 - i)
 - ii)
 - iii)
 - iv)
- e) What do you do if your favorite brand is not available?
 - i) Wait for favorite
 - ii) Buy the alternative

1.3) For product toothpaste

- a) Do you already decide upon which brand to buy before going the shop or store to buy it?
 - i) Yes
 - ii) No
- b) Following are the different types of the toothpaste? How do you buy them?
 - i) By brand
 - ii) By inspection
- c) Which toothpaste do you use for cleaning your teeth?
 - i) Pepsodent
 - ii) Close up
 - iii) Colgate
 - iv) Others
- d) Which brand did you buy in last four purchases?
 - i)
 - ii)
 - iii)
 - iv)
- e) What do you do if your favorite brand is not available?
 - i) Wait fir favorite
 - ii) Buy the alternative

1.4) For product Instant Noodles

- a) Do you already decide upon which brand to buy before going the shop or store to buy it?
 - i) Yes
 - ii) No
- b) Following are the different types of the noodles? How do you buy them?
 - i) By brand
 - ii) By Inspection
- c) Which noodles do you use to drink?
 - i) Mayos
 - ii) Waiwai
 - iii) Rumpum
 - iv) Others
- d) Which brand did you buy in last four purchases?
 - i)
 - ii)
 - iii)
 - iv)
- e) What do you do if your favorite brand is not available?
 - i) Wait for favorite
 - ii) Buy the alternative

1.5) For product Tea

- a) Do you already decide upon which brand to buy before going the shop or store to buy it?
 - i) Yes
 - ii) No
- b) Following are the different types of the tea? How do you buy them?
 - i) By brand
 - ii) By Inspection
- c) Which tea do you use to drink?
 - i) Muna
 - ii) Tokla
 - iii) Mechi
 - iv) Others
- d) Which brand did you buy in last four purchases?
 - i)
 - ii)
 - iii)
 - iv)
- e) What do you do if your favorite brand is not available?
 - i) Wait for favorite
 - ii) Buy the alternative

2. Which of the following factors makes you leave your favorite brand(the brand you wanted to buy) and switch to another alternative ?

Soap

- a) Price off
- b) Advertisement campaign
- c) A desire to test new product
- d) Others

Shampoo

- a) Price off
- b) Advertisement campaign
- c) A desire to test new product
- d) Others

Toothpaste

- a) Price off
- b) Advertisement campaign
- c) A desire to test new product
- d) Others

Noodles

- a) Price off
- b) Advertisement campaign
- c) A desire to test new product
- d) Others

Tea

- a) Price off
- b) Advertisement campaign
- c) A desire to test new product
- d) Others

3. To what extent does the incentive (price off, free goods.....etc.) affect your brand choice?

- a) Very high
- b) High
- c) Medium
- d) Low
- e) Very low

ANNEX-II
COMPUTATION OF CHI SQUARE

Chi –square (χ^2) test is calculated in the following steps

Step 1 Formulation of hypothesis

H0 : Null hypothesis

H1 : Alternative hypothesis

Step 2 :Set $\alpha = 0.05$

Degree of freedom($\hat{\nu}$)= (r-1) (c-1)

Table value of $\chi^2_{\alpha} = 0.05(c-1)(r-1)$

Calculation of Expected frequency = $\frac{(\text{Row Total} \times (\text{Column Total}))}{\text{Grand Total}}$

Step 3 : Compute $\chi^2 = \sum \frac{(O - E)^2}{E}$

1. Sex and Brand Loyalty

1.A Computation of Chi-square (χ^2) sex and Brand Loyalty on soap

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
15	17.5	-2.5	6.25	0.3571
12	14.5	-2.5	6.25	0.4310
9	8	1	1	0.125
14	10	4	16	1.6
20	17.5	2.5	6.25	0.3571
17	14.5	2.5	6.25	0.4310
7	8	-1	1	0.125
6	10	4	16	1.6
				5.0262

1.B. Computation of Chi-square (χ^2) Sex and Band Loyalty on Shampoo

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
17	18.5	-1.5	2.25	0.1216
13	11.5	1.5	2.25	0.1959
8	8.5	-0.5	0.25	0.0294
12	11.5	0.5	0.25	0.217
20	18.5	15	2.25	0.1216
10	11.5	-1.5	2.25	0.1956
9	8.5	0.5	0.25	0.0294
11	11.5	-0.5	0.25	0.0219
				0.7366

1.C. Computation of Chi-square (χ^2) Sex and Band Loyalty on Instant**Noodles**

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
10	13	-3	9	0.6923
13	10.5	2.5	6.25	0.5952
7	11.5	-4.5	20.25	1.7608
20	15	5	25	1.6666
16	13	3	9	0.6923
8	10.5	-2.5	6.25	0.5952
16	11.5	4.5	20.25	1.7608
10	15	-5	25	1.6666
				9.4298

1.D. Computation of Chi-square (χ^2) Sex and Band Loyalty on Toothpaste

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
25	24.5	0.5	0.25	0.0102
17	16.5	0.5	0.25	0.0151
6	5	1	1	0.20
2	4	-2	4	1
24	24.5	-0.5	0.25	0.0102
16	16.5	-0.5	0.25	0.0151
4	5	-1	1	0.20
6	4	2	4	1
				2.4506

1.E. Computation of Chi-square (χ^2) Sex and Band Loyalty on Tea

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
24	26	-2	4	0.1538
12	13	-1	1	0.0769
6	4	2	4	1
8	7	1	1	0.1428
28	26	2	4	0.1538
14	13	1	1	0.0769
2	4	-2	4	1
6	7	-1	1	0.1428
				2.747

2. Age and brand Loyalty

1. A. Computation of Chi-square (χ^2) Age and brand Loyalty on Soap

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
4	5.51	-1.51	2.2801	0.4138
6	6.65	0-0.65	0.4225	0.0635
3	3.23	-0.23	0.0529	0.0163
6	3.61	2.39	5.7.121	1.5822
9	8.7	0.3	0.09	0.00103
10	10.5	-0.5	0.25	0.0238
5	5.10	-0.10	0.01	0.0019
6	5.70	0.30	0.09	00.0157
8	8.12	-0.12	0.144	0.0177
10	9.80	0.20	0.04	0.0040
5	4.76	0.24	0.0576	0.0121
5	5.32	-0.32	0.1024	0.0192
8	6.67	1.33	1.7689	0.2652
9	8.05	0.95	0.9025	0.1121
4	3.91	0.09	0.0081	0.0020
2	4.37	-2.37	5.6169	1.2853
				3.8451

2. B. Computation of Chi-square (χ^2) Age and brand Loyalty on Shampoo

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
8	6.84	1.16	1.3456	0.1967
5	5.70	-0.70	0.49	0.0859
1	2.66	-1.66	1.3456	0.5058
5	3.80	1.2	1.095	0.2881
11	10.8	0.20	0.04	0.0037
7	9	-2	4	0.4444
6	4.20	1.80	3.24	0.7714
6	6	0	0	0
10	10.08	-0.08	0.0064	0.0006
9	8.40	0.60	0.36	0.0428
4	3.92	0.08	0.0064	0.0016
5	5.60	-0.60	0.36	0.0642
7	8.28	-1.28	1.63840	0.1978
9	6.90	2.10	4.41	0.63914
3	3.22	-0.220	0.04840	0.0150
4	4.60	-0.60	0.360	0.0782
				3.3353

2. C. Computation of Chi-square (χ^2) Age and brand Loyalty on Instant Noodle

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
3	4.546	-1.56	2.4336	0.5336
5	3.99	101	1.0201	0.2556
3	4.18	-1.18	1.9324	0.3331
8	6.27	1473	2.9929	0.4773
10	7.2	2.8	7.84	1.0888
6	6.3	-0.3	0.09	0.0142
7	6.6	0.40	0.16	0.0242
7	9.9	-2.90	8.41	0.8494
8	6.72	1.28	1.63840	0.2438
9	5.88	-2.88	8.2499	1.4106
36	6.16	-0.16	0.0256	0.0041
11	9.24	1.76	3.0976	0.3352
3	5.52	-2.52	6.3504	1.1504
7	4.83	2.17	4.7089	0.9749
6	5.06	0.94	0.8836	0.1746
7	7.59	-0.59	0.3481	0.0458
				7.9151

2.D. Computation of Chi-square (χ^2) Age and brand Loyalty on Toothpaste

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
8	9.12	-1.121	1.2544	0.1375
6	6.27	-0.27	0.0729	0.0116
2	2.28	-0.28	0.0784	0.0343
3	1.33	1.67	2.7889	2.0969
16	14.4	1.6	1.3456	0.0934
8	9.9	-1.9	3.61	0.3696
4	3.6	0.40	0.16	0.0444
2	2.1	-0.10	0.01	0.0047
14	13.44	0.56	0.3136	0.0233
8	9.24	-1.24	1.5376	0.1664
4	3.36	0.640	0.4096	0.1219
2	1.96	0.04	0.0016	0.0008
10	11.04	-1.04	1.0816	0.0979
11	7.59	3.41	11.6281	1.5320
2	2.76	-0.76	0.5776	0.2092
0	1.61	-1.61	2.5921	1.61
				6.5489

2. E Computation of Chi-square (χ^2) Age and brand Loyalty on Tea

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
8	9.69	-1.69	2.8561	0.2947
5	4.94	0.06	0.0036	0.0007
3	1.71	1.29	1.4161	0.8281
3	2.66	0.34	0.11560	0.0434
15	15.3	-0.3	0.09	0.0058
8	7.8	0.20	0.04	0.0051
2	2.7	-0.7	0.49	0.1814
5	4.2	0.80	0.64	0.1523
12	14.28	-2.28	5.19847	0.3640
10	7.28	2.72	1.6492	0.2265
3	2.52	0.48	0.2304	0.0316
3	3.92	-0.92	0.8464	0.2159
16	11.73	4.27	18.2329	1.5543
3	5.98	-2.98	8.8804	1.4850
1	2.07	-1.07	1.1449	0.5530
3	3.22	-0.22	0.0484	0.0150
				5.9568

3. Income and Brand Loyalty

3 A. Computation of Chi-square(χ^2) income and brand Loyalty on Soap

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
2	3.19	-1.19	1.4161	0.4425
6	3.85	2.15	4.6225	1.2006
2	1.87	0.13	1.3489	0.7213
1	2.09	-1.09	1.1881	0.5684
10	8.7	1.3	1.69	0.1942
10	10.5	-0.5	0.25	0.0238
6	5.1	0.9	0.81	0.1588
4	5.7	-1.7	2.89	0.5070
5	6.09	-1.09	1.1881	0.1950
5	7.35	-2.35	5.5225	0.7513
4	3.57	0.43	0.1849	0.0517
7	3.99	3.01	9.0601	2.2707
7	6.67	0.33	0.1089	0.0163
8	8.05	-0.05	0.0025	0.003
3	3.91	-0.91	0.8281	0.2117
5	4.37	0.63	0.3969	0.0908
5	4.35	0.65	0.4225	0.0971
6	5.25	0.75	0.5625	0.1071
2	2.55	-0.55	0.3025	0.1186
2	2.85	-0.85	0.7225	0.2535
				7.9807

3 B. Computation of Chi-square (χ^2) income and brand Loyalty on Shampoo

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
3	3.96	-0.96	0.9216	0.2327
3	3.3	-0.3	0.09	0.0272
1	1.76	-0.76	3.0976	1.76
4	1.98	2.02	4.0804	2.0608
14	10.8	3.2	10.24	0.9481
8	9	-1	1	0.411
3	4.8	-1.8	3.24	0.675
5	5.4	-0.4	0.16	0.296
8	7.56	0.44	0.1936	0.0256
7	6.3	0.7	0.49	0.0777
3	3.36	-0.36	0.1296	0.0385
3	3.78	-0.78	0.6084	0.1609
6	8.28	-2.28	5.1984	0.6278
8	6.9	1.1	1.21	0.1753
6	3.68	2.32	5.3824	1.4626
3	4.14	-1.14	1.2996	0.3139
5	5.4	-0.4	0.16	0.0296
4	4.5	-0.5	0.25	0.0555
3	2.4	0.6	0.36	0.15
3	2.7	0.3	0.09	0.0333
				8.9952

3 C. Computation of Chi-square (χ^2) income and brand Loyalty on Instant Noodle

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
3	2.75	0.25	0.0625	0.0227
2	2.42	-0.42	0.1764	0.0728
3	2.31	0.69	0.4761	0.2061
3	3.52	-0.52	0.2704	0.0768
8	7.5	0.5	0.25	0.0333
4	6.6	-2.6	6.76	1.0242
8	6.3	1.7	2.89	4.587
10	9.6	0.4	0.16	0.0166
2	5.25	-3.25	10.5625	2.0119
8	4.62	3.38	11.4244	2.4728
4	4.41	-0.41	0.1681	0.0381
7	6.72	0.28	0.0784	0.0116
7	5.75	1.25	1.5625	0.2717
4	5.06	-1.06	1.1236	0.2220
5	4.83	0.17	0.0289	0.0059
7	7.36	-0.36	0.1296	0.0176
5	3.75	1.25	1.5625	0.4166
4	3.3	0.7	0.49	0.1484
1	3.15	-2.15	4.6225	0.14674
5	4.8	0.2	0.04	0.0083
				9.0035

3 D. Computation of Chi-square (χ^2) income and brand Loyalty on Toothpaste

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
4	5.28	-1.28	1.6384	0.3103
5	3.63	1.37	1.8769	0.5170
1	1.32	-0.32	0.1024	0.0775
1	0.77	0.23	0.0529	0.0687
145	14.4	0.6	0.36	0.025
7	9.9	2.9	8.41	0.8494
5	3.6	1.4	1.96	0.5444
3	2.1	0.9	0.81	0.3857
10	10.08	-0.08	0.0064	0.0006
9	6.93	2.07	4.2849	0.6183
1	2.52	1.52	2.3104	0.9168
1	1.47	-0.47	0.2209	0.1502
12	11.04	0.960	0.9216	0.0834
7	7.59	-0.59	0.3481	0.0458
3	2.76	0.24	0.0576	0.0280
1	1.61	-0.61	0.3721	0.2311
7	7.2	-0.2	0.04	0.0055
5	4.95	0.05	0.0025	0.005
2	1.8	0.20	0.04	0.0222
1	1.05	-0.05	0.0025	0.0023
				4.8755

3 E. Computation of Chi-square (χ^2) income and brand Loyalty on Tea

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
6	5.83	0.17	0.0289	0.0049
1	2.75	-1.75	3.0625	1.1136
1	0.99	0.01	0.0001	0.001
3	1.43	1.57	2.4649	1.7237
15	15.9	-0.9	0.81	0.0509
11	7.5	3.5	12.25	1.6333
0	2.7	-2.7	7.29	2.7
-4	3.9	0.1	0.01	0.0025
11	11.13	-0.13	0.0169	0.0015
3	5.25	-2.25	5.0625	0.9642
4	1.89	2.11	4.4521	2.3556
3	2.73	0.27	0.0729	0.0267
11	12.19	-1.19	1.4161	0.1161
8	5.75	2.25	5.0625	0.8804
3	20.07	0.93	0.8649	0.4178
1	2.99	-1.99	3.9601	1.3244
10	7.95	2.05	4.2025	0.5286
2	3.75	-1.57	3.0625	0.8166
1	1.35	-0.35	0.1225	0.0907
2	1.95	0.05	0.0025	0.0012
				14.7528

4. Marital Status and brand Loyalty

4. A. Computation of Chi-square (χ^2) marital status and brand Loyalty on Soap

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
20	18.5	1.5	2.25	0.1216
13	11.5	1.5	4.3	0.1956
7	9	-2	0.1	0.4444
10	11	-1	2.25	0.0909
17	18.5	-1.5	2.25	0.1216
10	11.5	-11.5	4.	0.1956
11	9	2.	0.1	0.4444
12	11.0	01	0.5	0.0909
				1.705

4. B. Computation of Chi-square (χ^2) marital status and brand Loyalty on Shampoo

Observed frequency	Expected frequency	(O-E)	(O-E) ²	(O-E) ² /E
20	17.5	2.5	6.25	0.3571
15	14.5	0.5	0.25	0.0172
7	8	-1	1	0.125
8	10	-2	4	0.4
15	17.5	-2.5	6.25	0.3571
14	14.5	-0.5	60.25	0.0172
9	8	1	1	0.125
12	10	2	4	0.4
				1.7986

4. C. Computation of Chi-square (χ^2) marital status and brand Loyalty on Instant Noodle

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
20	19	1	1	0.0526
12	13.5	-1.5	2.25	0.1666
8	7	1	1	0.1428
10	10.5	-0.5	0.25	0.238
18	19	-1	1	0.0526
15	13.5	1.5	2.25	0.1666
6	7	-1	1	0.1428
11	10.5	0.5	0.25	0.238
				0.7716

4. D. Computation of Chi-square (χ^2) marital status and brand Loyalty on Toothpaste

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
18	19	-1	1	0.0526
15	04	-1	1	0.0714
10	10.5	-0.5	0.25	0.0238
7	6.5	0.5	0.25	0.0384
20	19	1	1	0.0526
13	14	-1	1	0.0714
11	10.5	0.5	0.25	0.0238
6	6.5	-0.5	0.25	0.0384
				0.3724

4. E. Computation of Chi-square (χ^2) marital status and brand Loyalty on Tea

Observed frequency	Expected frequency	(O-E)	(O-E)²	(O-E)²/E
28	26	2	4	0.1538
14	12	2	4	0.333
3	5.5	-2.5	6.25	1.1363
5	6.5	-1.5	2.25	0.3461
24	26	-2	4	0.1538
10	12	-2	4	0.333
8	5.5	2.5	6.25	1.1363
8	6.5	1.5	2.25	0.3461
				3.939