

CHAPTER-I

INTRODUCTION

1.1 Background of the Study

The word "Marketing" is derived from the word 'market'. Market is an area for potential exchanges. Thus, it is a group of buyers and sellers interested in negotiating, the terms of purchase or sale of goods or services. So it consists of the forces of supply and demand.

Marketing is a comprehensive term and it includes all resources and a set of activities necessary to direct and facilitate the flow of goods and services from producer to consumer in the process of distribution process. Human efforts, finance and management constitute the primary resources in marketing.

A simple meaning of 'marketing' is selling of goods and services. It is the purchase and sale of goods and services in the market. Marketing is defined from the viewpoints of different parties involved in the market. To a salesman it is selling; to an advertiser it is advertising; to a housewife it is purchasing of necessary goods; to a producer it is the distribution of product goods or services. So, it is not limited to the purchasing and selling of goods.

Marketing may be defined as the process of exchange between seller and buyer. It involves a number of inter-related activities designed to plan, promote, distribute, and price a product or service in order to meet the wants and needs of both the parties in exchange transaction, viz., consumers (buyers) and producers (sellers).

We have twin activities which are most significant in marketing:

1. Matching the product or service, an article of trade, with demand, i.e. customer needs and desires or target market.
2. The transfer of ownership and possession at every stage in the flow of goods from the primary producer to the ultimate consumer.

Marketing comprises all activities involved in the determination and satisfaction of customer needs at a profit. By means of marketing function, marketer can direct the firm's response to an ever-changing market environment and orient all parts of the business toward the creation of a satisfied customer.

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 as sale- "telling and selling" but in the new sense of satisfying consumer's needs (*Kotler and Armstrong, 1997: 15*). 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 change and intense completion are today's environment. Marketing success belongs to those who can deliver what customers are willing 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: 8*).

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: 21*).

Generally speaking, marketing adds value to goods by changing their ownership and by changing their time and place of consumption (*Candiff and Still, 1972: 7*).

Above definition gives 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 goods and services. People are involved in marketing 10 types of entities: goods, services, experiences, events, persons, places, properties, organization, information and ideas (*Kotler, 2000: 3*). According to Prof. Phillip Kotler and Gary 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: 274*).

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: 404*).

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 the 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 conducting researches on brand loyalty. But on researcher in Nepal has paid 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.

1.2 Statement of the Problem

Along with the increment of population and improvement of economic condition arising the demand and production up. Highly developed technology has made 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 brands to consumers.

Today one can use the products produced in any corner of the world sitting home and consumers have more freedom to choose the brands, they have the chance 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 to measure loyal consumer on branding in entire Nepalese market. Marketers are always concerned with real number of consumer and their beliefs and

opinions concerning their brand and competing brand. On the basis of this problem the problems of this study are presented below.

1. What is the brand consciousness of consumers in Bharatpur City?
2. Whether the consumers of Bharatpur are brand loyal or not?? If they are loyal what is the status 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 and preference of consumers of Bharatpur City?

1.3 Objectives of the Study

The study was focused on brand loyalty of consumer products in Bharatpur city. The objective of this study can be listed as follows:

- a. To evaluate the brand consciousness of the Nepalese consumers.
- b. To find out the number of loyal consumers towards brand or percentage of brand loyal consumer.
- c. To analyze the relationship of brand loyalty with demographic variables like age sex income and marital status.
- d. To recommend remedial measures or important for developing marketing strategies and for conducting further research on loyalty in brand.

1.4 Significance 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 towards

development. Success of there industry is the main function of successful marketing of its products. In the era of cutthroat competition, successful marketing demands an 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. The 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 behavior 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 and non loyal consumer market and the study of loyalty on branding gives control in planning marketing mix. Besides this implication of study on 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."

1.5 Focus of the Study

Industrialization and overall development of a country are considered as two coincidence that because industrialization is the impetus of Development. It is not coincidence that industrialized

countries are development too, but it is true that the countries like United States, 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. The economy of Nepal is characterized by excessive dependence on agriculture. The industrial sector is in a developing stage (*Agrawal, 1994: 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 lurching 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 product is 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: 404*). Thus brand is not only a name gives to a product but also a technique by which differentiate the product from previous ones. Every producers or marketers seek to

get positive attitude toward the brand of his product. Every manufacture 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 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: 776*).

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 type 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, advertisement s and price activities. Similarly there are some others who are frequently shifting from one brand to another, such consumers are no- 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: 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 or trust or experience of the same product. If they think a brand is good in term of quality, price, social status and their needs, they develop a positive attitude toward the brand and make repeat purchase, which is valuable assets of the manufacture and this state, is known their loyalty on brand. In the simple way who have the positive attitude towards 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 a brand does necessarily mean brand loyalty. A consumer may purchase repeatedly a brand due to unavailability of alternative brand or ignorance about the alternatives one of a attractive display y so a brand then others alternatives brands and other many factors many affect their repeat purchase. So who are truly faithful to the brand only such customers are said to be loyal to the brand.

Competition is the main characteristics of modern marketing, which is increasing day by day in Nepalese market. Industries producing many different types of products and also large number of products are being imported from other countries. So that competition is very tough in Nepalese market. Every producer launches their product as the excellent form different promotional tools like TV commercials, Radio, Newspapers, Posters, Hoarding boards, Pamphlets, Cinemas and other electronic and non- electronic media

tools offering to their products. Each and every producers and marketers want to capture high loyal market share and develop a loyalty on there product brand.

Above-mentioned circumstances are wide speared in 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 products selected for the study are described below.

-) **Soap**: soaps used for bathing which will keep us fresh and tidy.
-) **Hair shampoo**: Different types of shampoo are available in market for washing hair, persons preferred it for healthily and strong hair.
-) **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, pets, jar etc.
-) **Toothpaste**: It is used to make our teeth clean, healthy and shine which protects our teeth from germs, every person use it every day.
-) **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.

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 less important 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, TV, 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

found 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 responses, reactions and attitudes in relation to the brand of these products and their purchasing pattern of the same are studied and examined whether or not the consumers are loyal on branding.

1.6 Research Hypothesis

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.

1.7 Limitation of the Study

The limitation of this study is follows:

- a. The products included in this 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 Bharatpur City.
- 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.

1.8 Scheme of the Study

The whole study has been categorized into five main chapters. Which are as follows:

Chapter 1: Introduction: Chapter one is the introductory part of the thesis which consists general background, statement of the problem, objectives of the study, significance of the study, focus of the study, hypothesis, and limitation of the study.

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

Chapter 3: Research Methodology: This chapter includes the research design, data collection procedure, sample plan, method to analysis and presentation.

Chapter 4: Data Presentation and Analysis: This 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: Summary, Conclusion and Recommendations: This is the last chapter which includes summary, conclusion and recommendations for further improvement.

At the end of the chapters bibliography and appendices have been incorporated.

CHAPTER-II

REVIEW OF LITERATURE

While doing research the previous study cannot be ignored because it provides the foundation of present study. In other words, there has to be continuous research of relevant literature provides the knowledge of the status of the field of research to the researchers.

"According to Wolf and Pant, the purpose of literature review is that find out what research studies have been conducted in one's chosen field of study and what remains to be done. It provides the foundation for developing a comprehensive theoretical framework from which hypothesis can be developed for testing. The literature survey also minimizes the risk of purposing the dead ends in research (*Woolf and Pant: 1999*). So, various books, journals, articles, and previous dissertations have been analyzed and reviewed in this chapter which is presented below:

2.1 Introduction

Marketing has been developing together with development in human civilization. If we turn three four hundred years back to the history of human civilization we find marketing of that time, by modern standard relatively uncultured, craft men carried on their business face to face with consumer.

Changing in the time period concept of marketing has been changing drastically. 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. Stage of development of the transnational corporation is presented by Warren J. Keegan as, (*Keegan, 2000: 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 either 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, 2000: 25*).

Today all the marketing activities revolve 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: 3*). In the modern business world understanding of consumer choice, purchase decision- making 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 competitors" (*Kotler, 2000: 404*)

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 buyers or use the product. (*Kotler, 2000: 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 (*McCarthy and Pereult Jr. 1990: 235*).

The term brand is broadly applied to all identifying marks, such as trade names, trade marks, trade symbols, picture, design of the package, distinctive coloring or lettering with or without some attractive slogan (*Sherlekar, 1993: 216*).

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 basses of quality certifications, warranties and guarantees.

2.2.1 Brand Name/Brand Mark/Trademark

A brand has several components. Out of them above terms brand name, brand mark and trademark may make some confusion because they seems similar in terms. A brand name is that part of the brand that can be vocalized and includes letters, words, and numbers (*Koirala, 1997: 166*) Wai Wai, Close Up and Sunsilk are the brand names. A brand name consists of works, letters, and /or numbers which are vocalized (*Stanton, 1978: 215*)

A brand mark is the part of the brand which appears in the form of a symbol, design, or distinctive coloring or lettering. (et.al.: 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.: 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 : 166*). A brand name or a brand mark can be converted into a trademark buy registering concerned department of government.

2.3 Brand of Loyalty

'Brand loyalty' is a temporal aspect of consumer behavior. Loyalty on branding analyzes whether of not a consumer is loyal to as specific bran or set of band time a certain period.

Studies on brand loyalty began when researches on consumer's behavior became popular. Today we found 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 defined in different way by the different scholars, experts, behavioral scientists and researchers. They have used different approaches and criteria to measure brand loyalty behavior approach and 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 measurement while reviewing the literature.

One of the earliest definition on brand loyalty has given buy James. F. Engel and Roger D. Blackwell, who emphasis the sequence 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 loyalty
- c. Unstable loyalty, and
- d. No loyalty on branding (*Engel and Blackwell, 1982: 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 type of loyalty.

- a. Undivided loyalty: If the purchase sequence is AAAAAA
- b. Divided loyalty : If the purchase sequence 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: 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 more weight 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.: 567*) 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 purchased brand or set of brands. The grater the proportion of purchase of a brand or set of brands the higher the loyalty on 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 : 568*) They found one segment of the population to be 'high national bran loyal' and fond 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: 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 any attachment to brand attributes and they can be immediately capture by another brand display is other devices (*Engel and Blackwell, et.al. 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 vary according to the approach used. They define brand loyalty in terms of consigers behavior or consumer purchase only. In this sense, they are based on repeat purchase behavior rather than bran loyalty behavior.

Jocoby and chestnut defines rand loyal as- 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 as set such brands, and
- f. Function of psychological (i.e. decision making evaluative) process" (*Engel and Blackwell, et. al: 571*).

The theme of Jacoby'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. Jacoby'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 by same brands due to May factors such as psychological commitment, ignorance of other alternative brands, and unavailability of other alternative brand or may other factors. Any way it is necessary to know which factors are contributing to loyalty. Another important aspect of Jacoby'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 brand s 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 out 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 scientists believe 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 emphasizes the role of mental process in building grand loyalty. They believe that consumers engage in extensive problem solving behavior involving brands and attribute

and brand loyalty is an outcome of mental process of the consumer. The consumer are not loyal to an brand simply because the brand satisfies their needs, but they are loyal to a specific 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 not is 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 fiancé 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 advantages- 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 (*Aaker, 2000, 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 for each as Engel and Blackwell, says-

"Brand loyalty is one of segmenting a market" (*Engel and Blackwell, et.al: 597*).

Manufactures always like to know about the market captured by each brand which product is profitable to produce, where it is better to ell 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 behavior of consumer because why consumer switch brand explains why consumers 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 for 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. Others because they are concerned with price than brand names" (*Shiffman and Kanuk, et al. : 260*).

A consumer who is loyal to a brand for a long time may switch to other brand because of dissatisfaction or 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 band switching reveal that brand switching is not every 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.: 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, sweeps takers, free samples etc.) at the expenses of advertising and targeting towards specially niche (et.al: 260)

Thus it follows that some intro-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 Kanuk-

"Such brand switch can not be converted into brand loyalty." (et.al. : 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. consumers 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 don 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 categories.
- c. There is limited evidence that the loyalty behavior of an informal group leader affects the behavior of other group 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 Backwell et al.: 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 non- 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 leanly on the basis of the both consumer purchase and consumer preference. Due to these of different definition and approaches the researches findings convening brand loyalty correlation have resulted into confusion and contradiction. Hence it is not only difficult but also impossible to estate exactly what are the correlation and non- correlation of brand loyalty. Brand loyalty correlation is the important aspect of study of brad 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 distinguishes them from the non- loyal one. Thus the loyalties on brand correlation are important for a manufacture. Therefore there must not be any contradictions or confusion about the correlation. Correlation must be defined and stated precisely so that the marketer

could use them as the guideline for making strangely 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 models 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 consumers and other external variables, which determines the outcome of behavior. Even though these factors or 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 have been concerned 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 that 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 or shifting taste?

All questions mentioned above basically deal with impact of consumer variables such as 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 determined 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 effect on the probability. (*Engel and Backwell, et.al. : 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 particular occasion (F) is represented by $P(AT)$.(Ibid.)

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 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 2.1: A consumer's brand beliefs about computer

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

Source: Assumed data.

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 computers 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 buyer buys only one attribute and can easily predict their choice.

Most of the buyers will consider several attributes and place weights to them. if the marketer knew the importance weights that ram attached to the for attributes he could predict his computer choice.

Suppose tam 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 tam'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.

$$\text{Computer A- } 0.4(10) + 0.3(8) + 0.2(6) + 0.1(4) = 8$$

$$\text{Computer B- } 0.4(8) + 0.3(9) + 0.2(8) + 0.1(3) = 7.8$$

$$\text{Computer C- } 0.4(6) + 0.3(8) + 0.2(10) + 0.1(5) = 7.3$$

$$\text{Computer D- } 0.4(4) + 0.3(3) + 0.2(7) + 0.1(8) = 4.7$$

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,

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 2.2 : Probability of brand choice

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 stated 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 purchase. 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 A 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 attract patronage from 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 raises 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 or 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 linear relationship between pre-purchase and post - purchase probabilities (et. al / 63-65).

Alfred Kuchn applied this model to brand choice data and found that it 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 these forces (Ibid).

2.6.4. New Trier Model

This model is 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 had 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 particular brand is constant for the consumer who bought it. This is 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 was purchased in the initial purchase, it may also result into rejection of that brand. (Ibid)

Thus the new trial model assumes that past purchase do not affect the present or 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: 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 of improvements for their effective use in accurate predictions of brand choice behavior (*Ibid*).

2.7 Review of Previous Researches

In 1952, the first study on brand loyalty was published by George Brown. This study was conducted on a 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. Households making five or more purchase was place is one of the four brand loyalty categories depending on the sequence of brand purchased. On the basis of definition of brand choice sequence, Brown noted that households demonstrating some degree of loyalty varied from 54 to 95percent 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.

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 outlet 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 context of Nepal, Panta (1993) in his study on 'Brand Loyalty' had 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 activity and advertisement.

Another researcher, 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 finding 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, 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 his 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.

Rayamajhi (2010), presented his thesis entitled "Brand Loyalty of Consumer Products in Kathmandu Valley." Rayamajhi had conducted

this research mainly to find out whether the brand loyalty exists or not in the Nepalese consumers market. The research was an exploratory in nature. The main aim of this study was to find out brand loyalty behavior of consumers of Nepal with special reference to the Kathmandu valley.

This was the consumer related research, which was directly connected with consumer's purchasing behavior and their attitude towards the brand. So the survey method was used to collected data and all the data and information used in this study was primary in nature. And all the Nepalese consumers especially consumers of Bharatpur City who were selected for the study were the source of data used in the study. Both male and female consumers were taken as sample.

From the research, Rayamajhi has concluded following major findings:

1. The greater percent of female were found to have undivided loyalty and divided loyalty. Male were also found undivided loyalty and divided loyalty.
2. Under age group 15-20, greater percentages of respondents were found to have divided loyalty and no loyalty. There was no relation between age and brand loyalty. Greater percentage of respondents were found to have divided loyal among them.
3. Most of respondent were found to have undividedly loyal. This indicates that, they were conscious in brand loyalty. Test statistics had shown that there was no relation between age and brand loyalty.

4. Under income group 20,000 and above greater percentage of respondent were found to have undividedly loyal. Test statistics show that there is no relation between income and brand loyalty.
5. The greater percentage of married were found to have undivided loyalty and divided loyalty. In case of unmarried were found to have undivided loyalty and divided loyalty. Test shows there was no difference in brand loyalty between married and unmarried.
6. Advertising Campaign was found to be the dominant factor for brand switching in products.
7. It was found that incentives like price off, free goods etc. highly affects people to purchase the brand.

2.8 Conceptual Framework

2.8.1 Brand Loyalty: Perceptual Background

Loyalty on the branding has been studied 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:

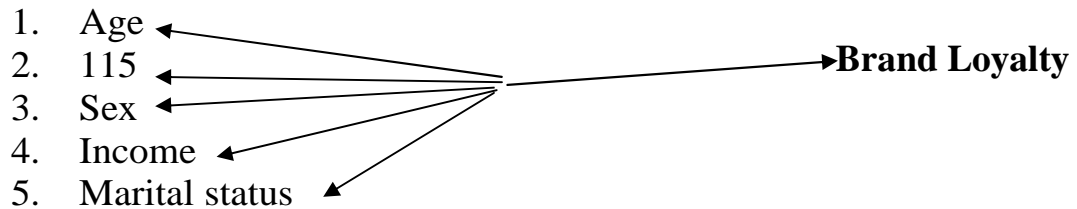
1. Households that purchased the Brand A in the sequence of AAAA suggest undivided loyalty.

2. Households that purchased the Brand A and B in sequence of ABAB suggests divided loyalty.
3. Households 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



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. Therefore, 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 consumers' 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 consumers 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 Bharatpur City. In fact, 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 Bharatpur City" 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 consumer products viz. soap, Shampoo, Instant noodle, Toothpaste and Tea.
4. Brand loyalty on different consumer products is analyzed 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.

2.10 Research Gap

There is a gap between this research and previous researchers. Most of the previous research studies were based on Kathmandu Valley. Most of them have indicated the food and beverage products. Till now, nobody has done any research on brand loyalty of consumer products in Bharatpur city. So, to fulfill this gap, this research study has been conducted in Bharatpur city.

CHAPTER-III

RESEARCH METHODOLOGY

Research methodology, the third chapter of the study is an art of scientific inquiry. In other words, it is systematic product of knowledge. It provides the connection between the hypothesis and the collection of data. This chapter discusses methods of data collection, how the study is preceded and what variable are studies. The main objective of research methodology is to develop the sophisticated research strategy. So it is impossible to complete a research work without research methodology. The basis purpose of study is to analyze the brand loyalty of consumer products in Bharatpur city. So this study also employed the research methodology which is presented below.

3.1 Research Design

“Research design is the plan, structure, and strategy of investigation conceived so as to obtain answer to research questions and to control variance” (Karliger, 2002).

Research design is the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control the variance. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing the hypothesis and their operational implications to the final analysis data. The structure of the research is more specific. It is the outline, the scheme, and the paradigm of the operation the variables. When we draw diagram that outline the variable and their relation and just a position; we build structural schemes for accomplishing operational research purpose. Strategy, as used here, is also more specific than plan. In other works, straggly implies how the

research objectives will be researched and how the problems encountered in the research will be tackled (*Wolf and Pant et.al.: 50*).

There are many types of research design such historical research, descriptive research, case study research, field/ survey study research, co- relational research, departmental research etc.

The present study is descriptive as well as exploratory in nature. The main aim of this study is to find out brand loyalty behavior of consumers of Nepal with special reference to the Bharatpur City. Therefore, the survey research design is adopted for the study. The consumers of Nepal are surveyed to obtain data and information about the consumer personality, purchase pattern and attitude to the different brands selected to the stuffy., the data and information collected from the survey to the consumer are rearranged tabulated, analyzed and interprets according to the need to each study for attaining the stated objectives.

3.2 Nature and Sources of 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 collected data and all the data and information used in this study is primary in nature. And all the Nepalese consumers especially consumers of Bharatpur City who are selected for the study are the source of data used in the present study.

3.3 Population and Sample

Sample refers to a part chosen from the population. Sample means the 'part of the whole.' The process of selecting a sample form a population is called 'sampling'. It is a tool, which helps to researchers to draw conclusion about the characteristics of the population after studying only those observations that are included in the sample (*Shrestha and Manandhar, 2056: 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 a particular group. This group for individuals under study is known as the population. Furthermore, population is the aggregate of objects, animate or inanimate, under study in any statistical investigation (Gupta, 1996: 1039-40). The target population of this study is all the consumers of Bharatpur city.

3.3.2 Sampling unit

Sampling unit of this study is all the consumers of Bharatpur City who are surveyed for this study.

3.3.3 Sample Size

Sample size selected for this study i.e. only 100 consumers of Bharatpur City of Nepal to collected required primarily data.

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 pupation included in the sample are, therefore, from the different age groups, income groups, the sexes and method marital status.

3.4 Data Collection Procedure

A well- structured questionnaire is used to collect data required for the study, which is the main instrument of data collection. The questionnaire was 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 were supported by oral explanations in case of their confusion or inability to understand any content in the questionnaire

3.5 Data Analysis

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.

CHAPTER-IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter incorporates data presentation and analysis. The data and 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.

However, various approaches can be made to measure brand loyalty, but in this research preference purchase approach has been adopted in this study. Brand loyalty have been measured based on consumers' 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 Bharatpur City.

In course of conducting this research, the researcher selected 100 consumers or respondents (50 male and 50 females) and tried to find-out views of consumers. Obtaining responses, various tables are prepared. Homogeneous natures of data have been put into the same table. The data are presented and analyzed here under.

4.1 Sex and Brand Loyalty

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

4.1.1 Sex and Brand Loyalty: Soap

According to total number of respondents' view about this product i.e. 100, 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 purchases. 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 4.1 presents the frequency and percentage distribution of respondents by sex and different degree of brand loyalty on soap.

Table 4.1: Sex and Brand Loyalty on Soap

F = Frequency

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 2011.

Figure 4.1: Sex and Brand Loyalty on Soap

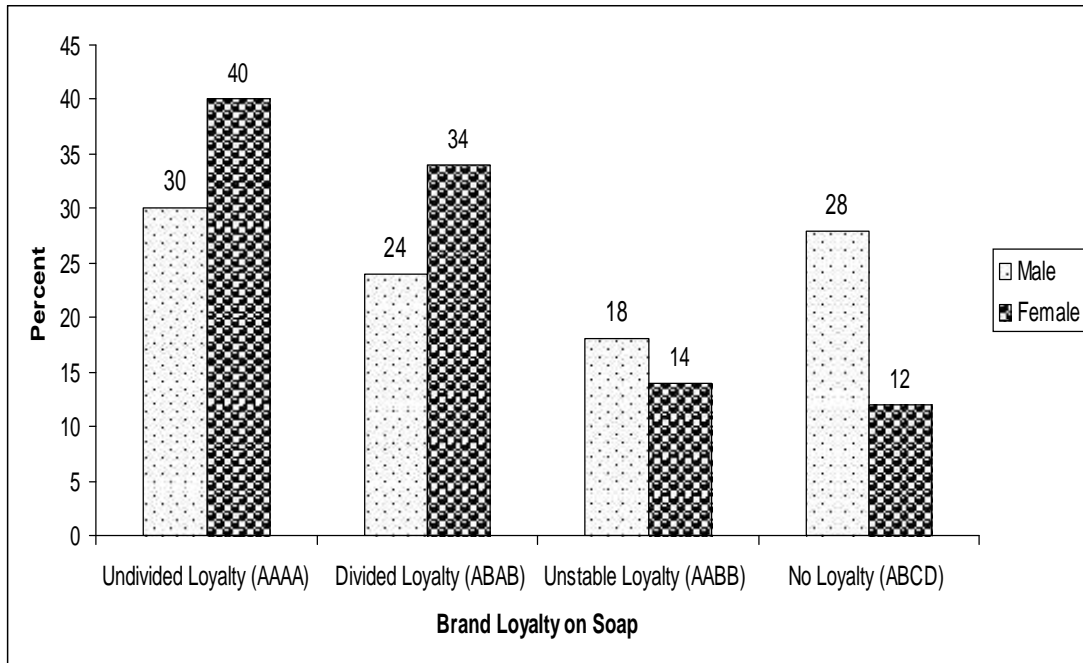


Table and chart presented reveals that most of the respondents (35%) are undivided brand loyal followed by divided brand loyalty (29%). The number of people who are unstable brand loyal (16%) and non-loyal (20%) is found to be greater than unstable loyal. In terms of sex, females are found to be more 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.

4.1.1 (a) Sex and Brand Loyalty on Soap Chi-square Test

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

Table 4.2: Chi-square Calculation of Sex 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	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 in loyal in the case of soap. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted.

4.1.2 Sex and Brand Loyalty: Shampoo

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

Table 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 2011.

Figure 4.2: Sex and Brand Loyalty on Shampoo

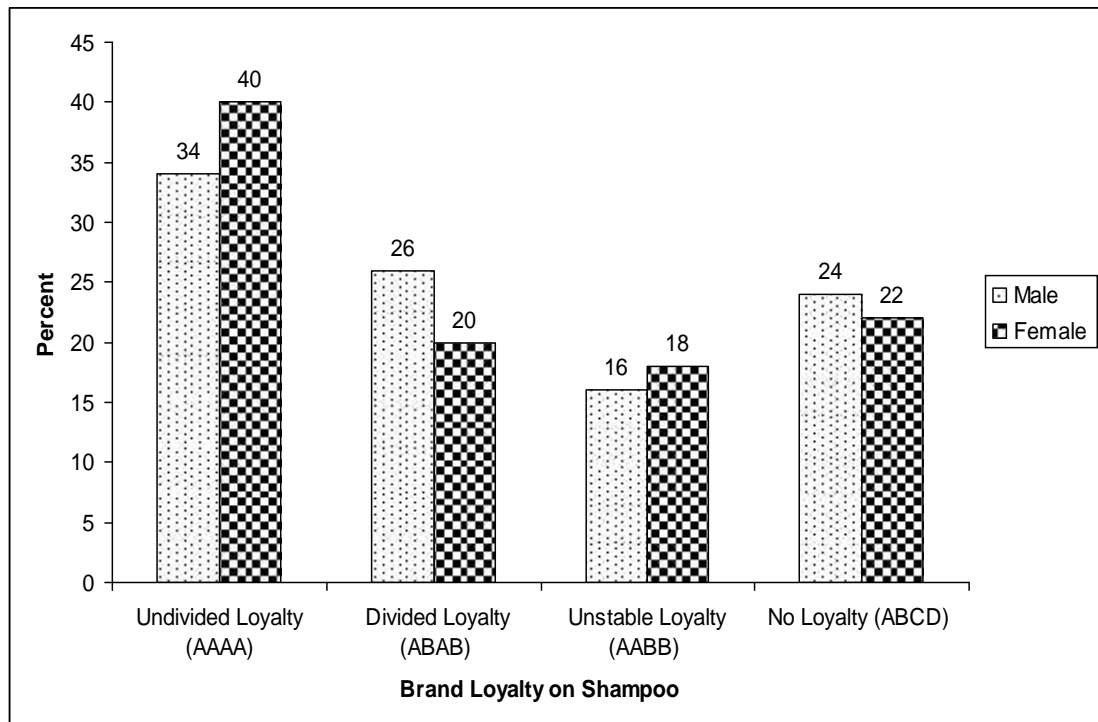


Table and chart presented above shows the sex and brand loyalty on shampoo. Among the 100 respondents 37 percent respondent are found strongly loyal on specific brand of shampoo. They have brought same brands AAAA in their last four purchases, they are said to be true loyal buyers. Divided brand loyalty 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 bran loyal as the brought AABB in their last four purchases 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 bran 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.

4.1.2 (a) Sex and Brand Loyalty on Shampoo Chi-square Test

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

Table 4.4: Chi- square Calculation of Sex 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 f^2 test statistic	0.7366

Since chi square f^2 test statistic (0.7366) is less than chi square f^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.

4.1.3 Sex and Brand Loyalty: Instant Noodles

The number of respondent of this product is 100. According to their response Waiwai, Rumpum, Mayos, Ramba, Rara, YumYum 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 brand of instant noodle are displayed in the following table.

Table 4.5: Sex and Brand Loyalty: 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 2011

Figure 4.3: Sex and Brand Loyalty of Instant Noodle

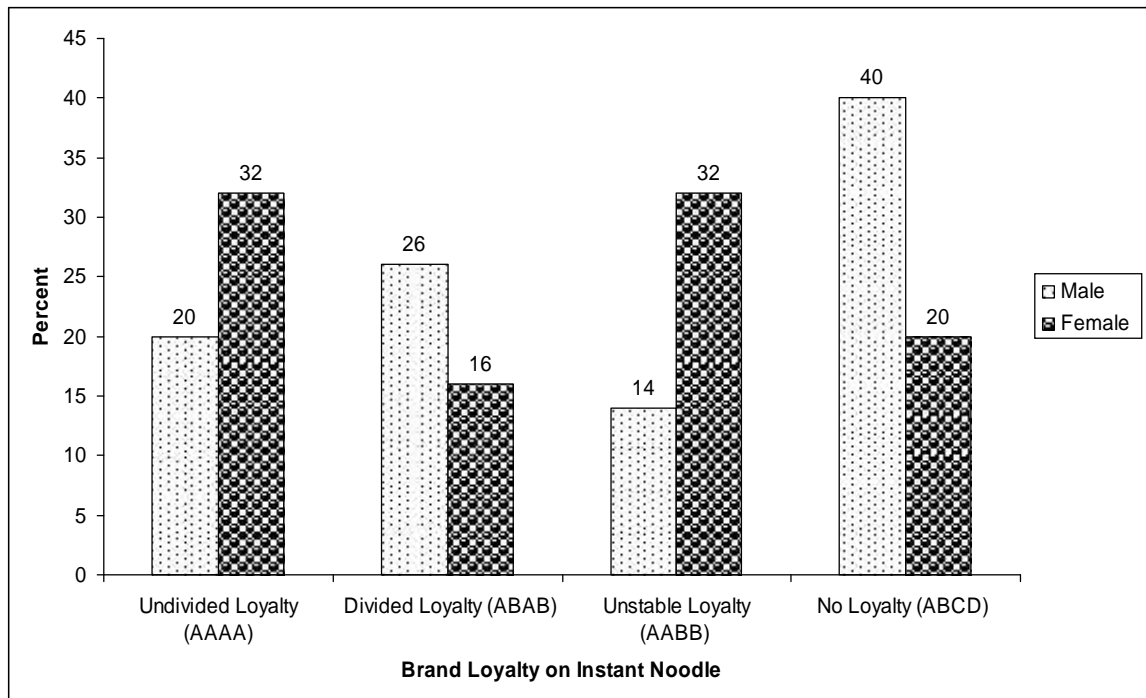


Table displays that the majority of the respondents (30%) fall in to the purchase pattern of group ABCD i.e. they are not loyal on specific brand of instant noodle as their purchasing pattern do not match with their preference. 26% percent respondents are found undivided brand loyal and 21 percent are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

20 percent female and 40 percent male respondent are found non-loyal, 32 percent female and 20 percent male are found undivided loyal. Additional 32 percent female and 14 percent male are found unstable loyal remaining 16 percent female and 26 percent male are found divided loyal in terms of purchasing Instant Noodle.

4.1.3 (a) Sex and Brand Loyalty on Instant Noodle Chi-square Test

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

Table 4.6: Chi-square Calculation of Sex 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	9.4298

Since chi quire f^2A test statistic (9.4298) is more than chi square f^2A tabulated value (7.815) value; hence, this shows that males and females are found to be not equally brand loyal in case of instant noodle. There is significant different between male and females. Therefore, the null hypothesis has been rejected.

4.1.4 Sex and Brand Loyalty: Toothpaste

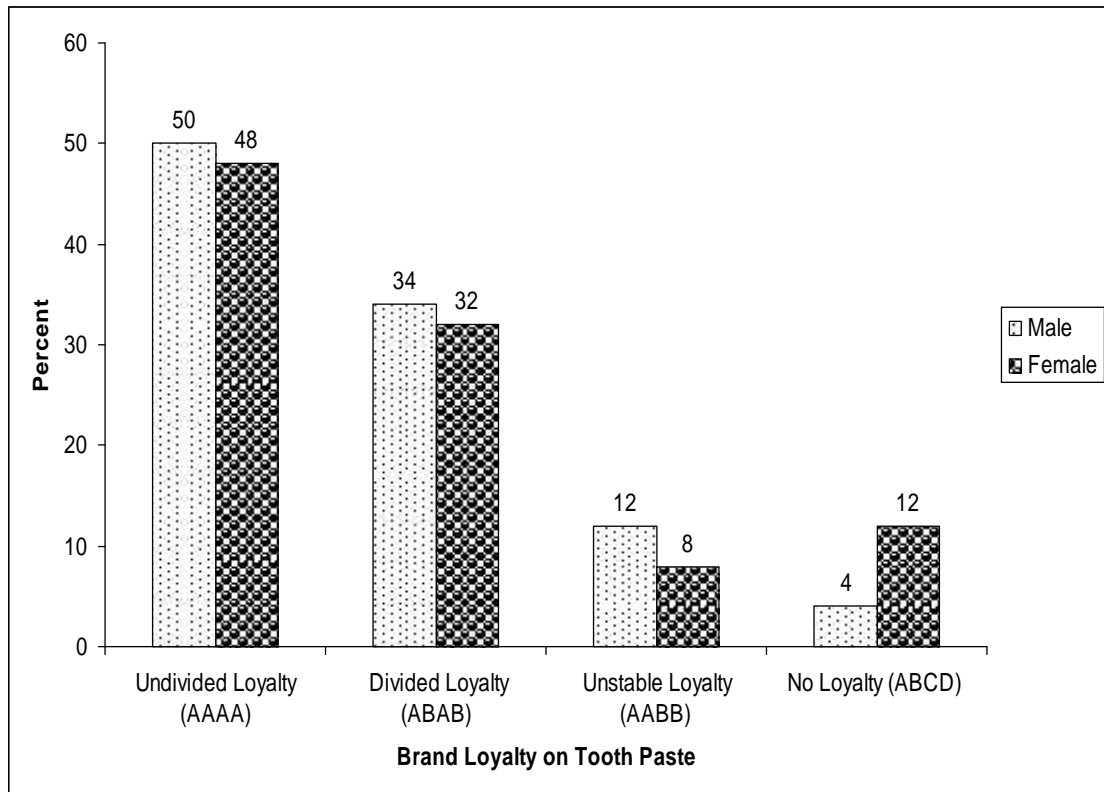
The response of consumer according to their purchase pattern and preference relating to different brands of toothpaste are presented in the following table.

Table 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

Source: Field survey 2011.

Figure 4.4: Sex and Brand Loyalty on Toothpaste



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 does 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.

4.1.4 (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 4.8: Chi-square Calculation of Sex 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	2.4506

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

4.1.5 Sex and Brand Loyalty: Tea

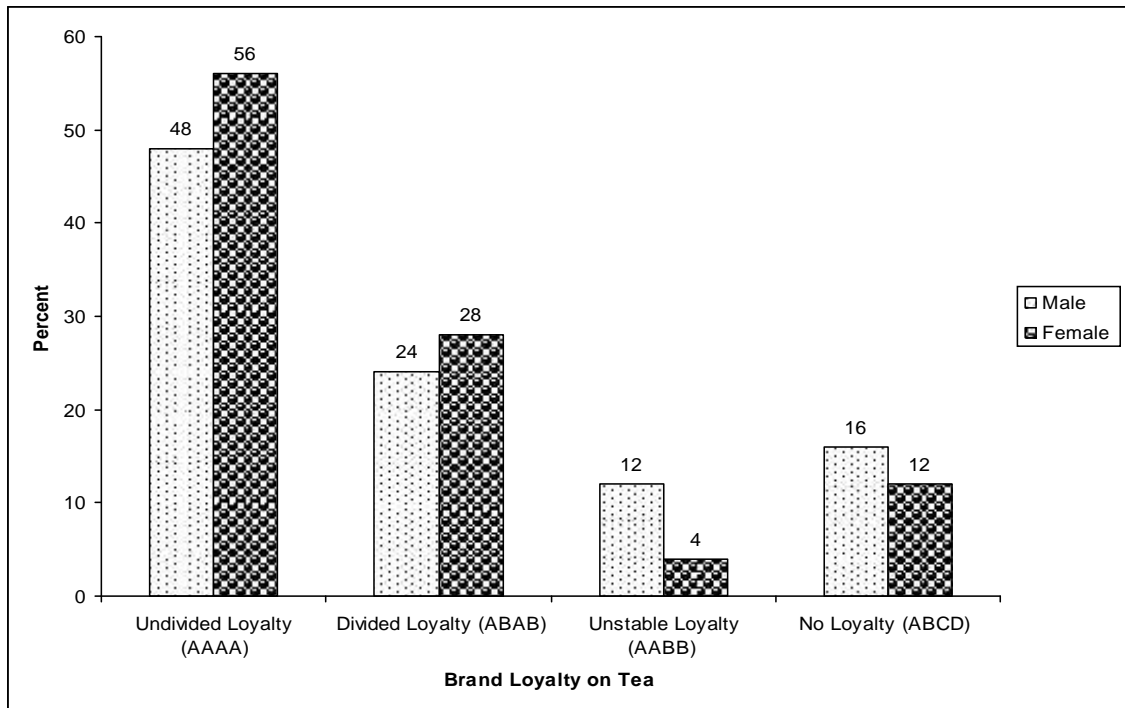
The response of consumer according to their purchase pattern and preference relating to different brands of tea are presented in the following table.

Table 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 2011

Figure 4.5: Sex and Brand Loyalty on Tea



Given table and chart shows that 52 percent respondent are found strongly brand loyal in case of Tea. The percentages 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.

4.1.5 (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 4.10: Chi-square Calculation of Sex 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 $f^2 A$ test statistic	2.747

Since chi square $f^2 A$ test statistic (2.474) is less than chi square $f^2 A$ tabulated value (7.815) value; hence, this shows that males and females are found to be equally brand loyal in the case of tea. There is no significant difference between male and females. Therefore, the null hypothesis has been accepted.

4.2 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, consumers' response on brand loyalty in terms of age is analyzed according to the selected product categories. The ages 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.

4.2.1 Age and Brand Loyalty: Soap

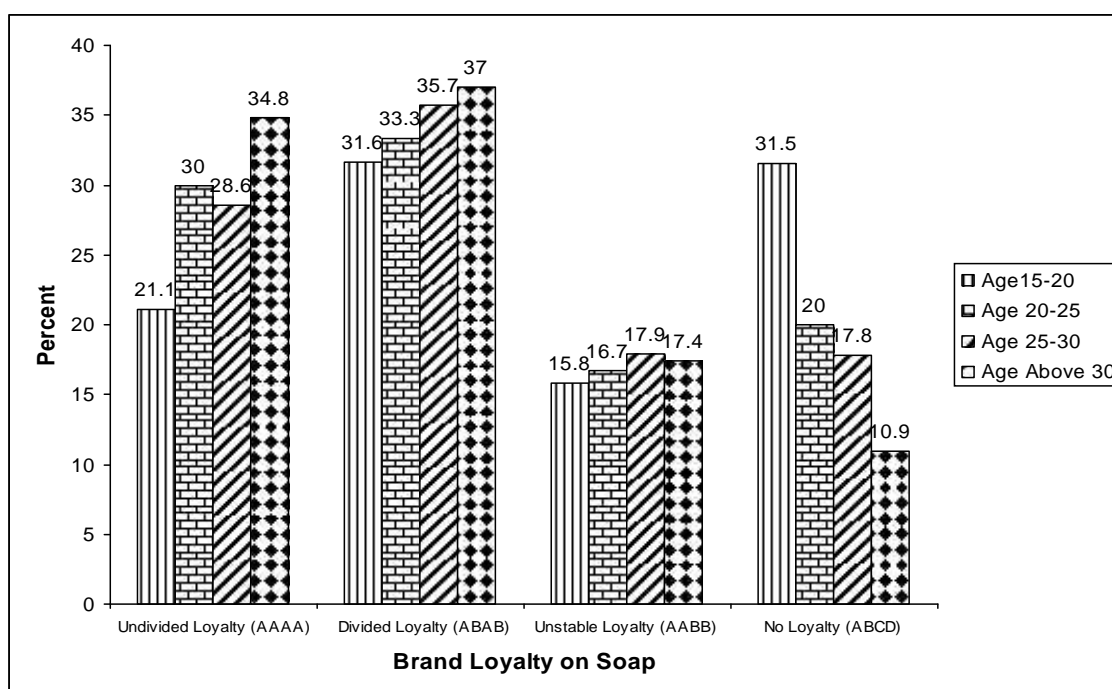
Following table presents the frequency and percentage distribution of respondents by age and different degree of brand loyalty on soap.

Table 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)	6	31.5	6	20.0	5	17.8	2	10.9	19	19
Total	19	100	30	100	28	100	23	100	100	100

Source: Field survey 2011.

Figure 4.6: Age and Brand Loyalty on Soap



The above table and chart reveals that majority (21.1%) respondents of 15-20 age group, 30 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, age group, 33.3 percent respondent of 20-25 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, 16.7Percent 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 group, 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.

4.2.1 (a) Age and Brand Loyalty on soap Chi- square Test

H_0 : Age of the individual does not have significant influence on the bran loyalty

Table 4.12: Chi-square Calculation of Age and Brand Loyalty

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 quire f^2A test statistic (3.8451) is less than chi square f^2A tabulated value (16.9186) value; hence, this shows that there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.2.2 Age and Brand Loyalty: Shampoo

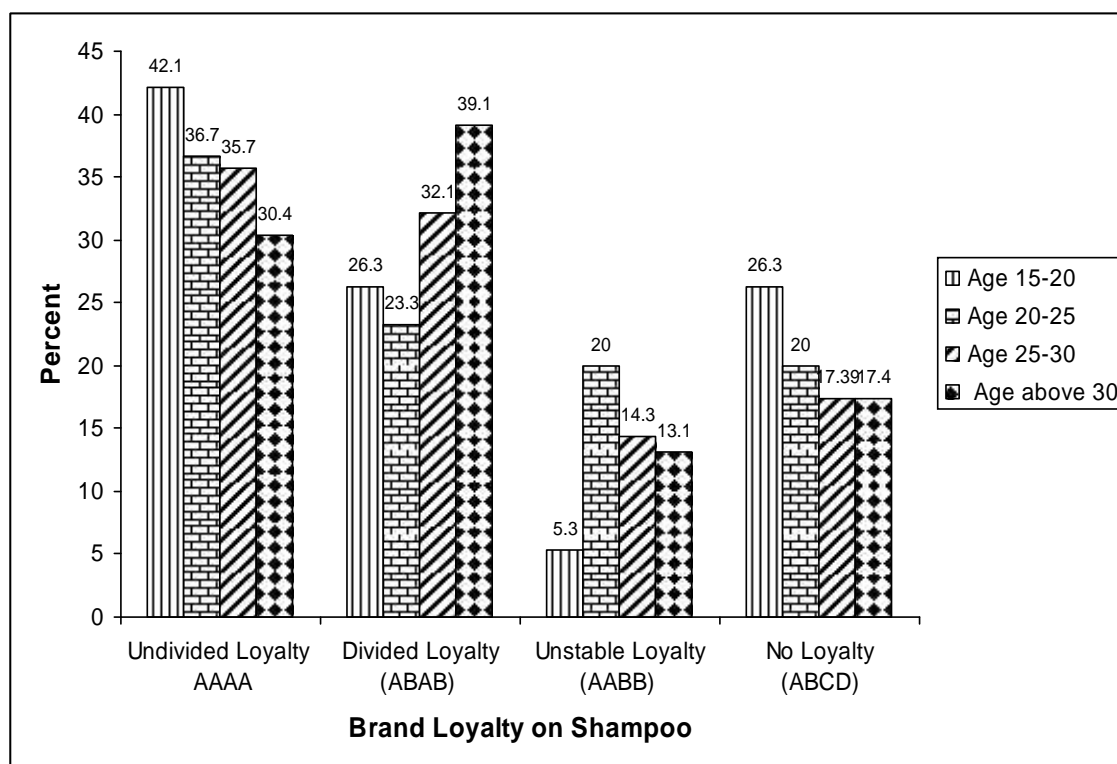
The response of different age group respondent according to their purchase pattern and preference relating to different brands of shampoo are given in the following table.

Table 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 2011.

Figure 4.7: Age and Brand Loyalty on Shampoo



The above table and chart reveals that (42.1%) respondents of 15-20 age group, 36.7 percent respondents of 20-25 age group, 35.7 percent respondents of 25-30 years age group and 30.4 percent respondents of 30 age above age group are found to be dividedly loyal on the specific brand of shampoo. In the same way 26.3 percent respondents of 15-20, age group, 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 5.3 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 group, 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.

4.2.2(a) Age and Brand Loyalty on shampoo Chi-square Test

H_0 : Age of the individual does not have significant influence on the brand loyalty

Table 4.14: Chi-square Calculation of Age and Brand Loyalty

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 test statistic (3.3353) is less than chi square tabulated value (16.9186) value; hence, this shows that

there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.2.3 Age and Brand Loyalty: Instant Noodles

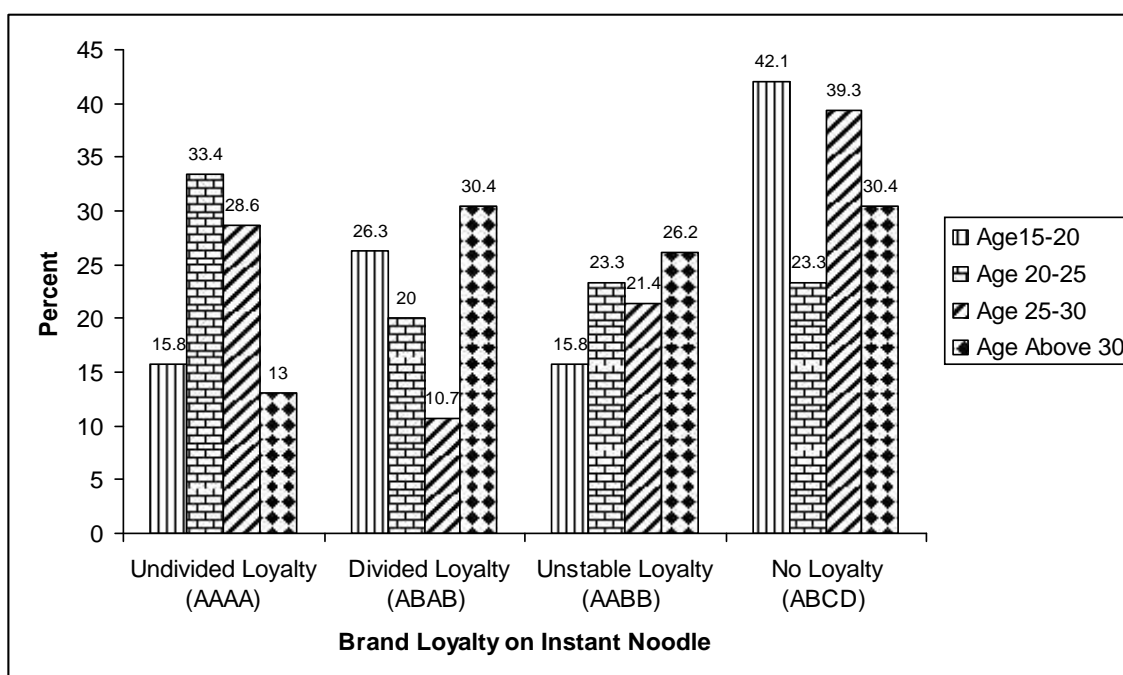
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Instant noodles are given in the following table.

Table 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)	5	26.3	6	20	3	10.7	7	30.4	21	21
Unstable Loyalty (AABB)	3	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 2011.

Figure 4.8: Age and Brand Loyalty: Instant Noodles



The above table and chart presented above reveals that majority of respondents in 15-20 and 25-30 years age group (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.

4.2.3 (a) Age and Brand Loyalty on Instant Noodles Chi- square Test

H_0 : Age of the individual does not have significant influence on the brand loyalty

Table 4.16: Chi-square Calculation of Age and Brand Loyalty

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 test statistic (7.9151) is less than chi square tabulated value (16.9186) value; hence, this shows that there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.2.4 Age and Brand Loyalty: Toothpaste

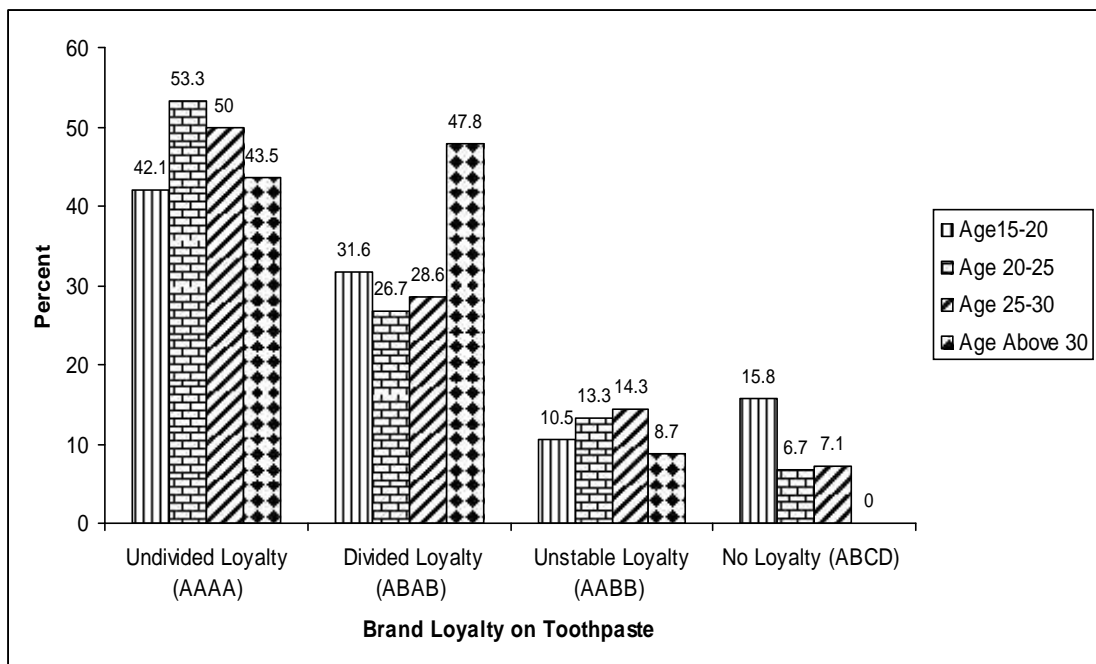
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Toothpaste are given in the following table.

Table 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 2011

Figure 4.9: Age and Brand Loyalty: Toothpaste



The above table and chart reveals that majority (42.1%) respondents of 15-20 age group, 53.3 percent respondents of 20-25 age group, 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 group, 26.7 Percent

respondents of 20-25, age group, (28.6) percent respondents of 25-30 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.

4.2.4 (a) Age and brand loyalty on toothpaste chi-square test.

H_0 : Age of the individual does not have significant influence on the brand loyalty

Table 4.18: Chi-square Calculation of Age and Brand Loyalty

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 test statistic (6.5489) is less than chi square tabulated value (16.9186) value; hence, this shows that there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.2.5 Age and Brand Loyalty: Tea

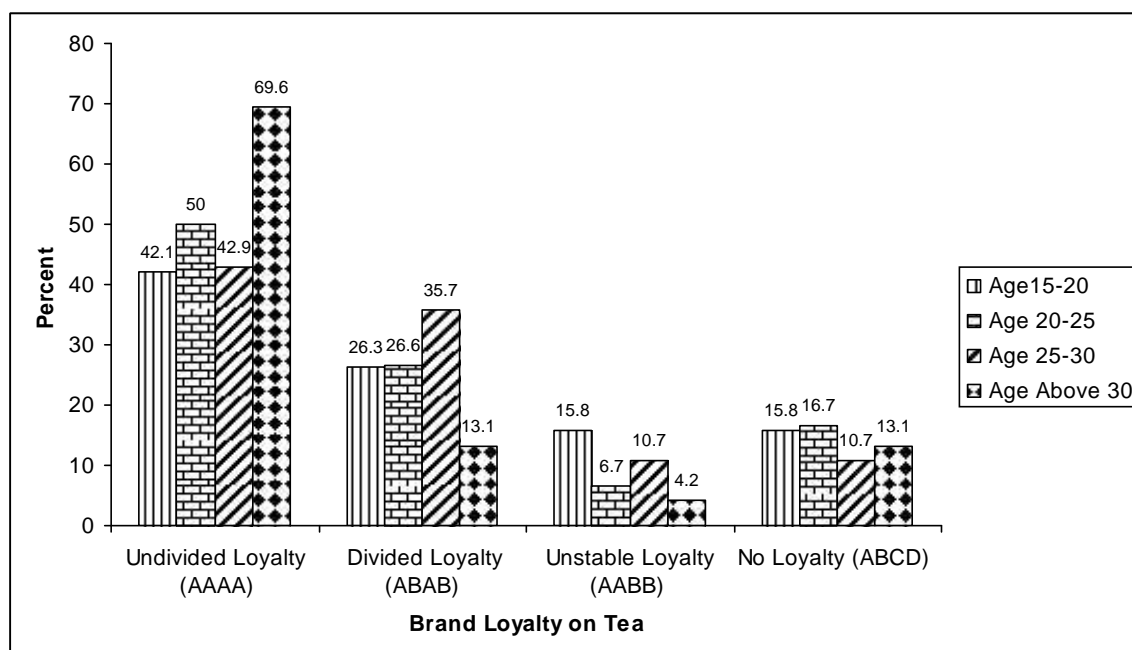
The response of different age group respondent according to their purchase pattern and preference relating to different brands of Tea are given in the following table.

Table 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 2011.

Figure 4.10: Age and Brand Loyalty on 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

26.3 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 group 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.

4.2.5 (a) Age and Brand Loyalty on Tea Chi- square Test

H_0 : Age of the individual does not have significant influence on the brand loyalty

Table 4.20: Chi-square Calculation of Age and Brand Loyalty

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 test statistic (5.9569) is less than chi square tabulated value (16.9186) value; hence, this shows that there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.3 Income and Brand Loyalty

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

4.3.1 Income and Brand Loyalty: Soap

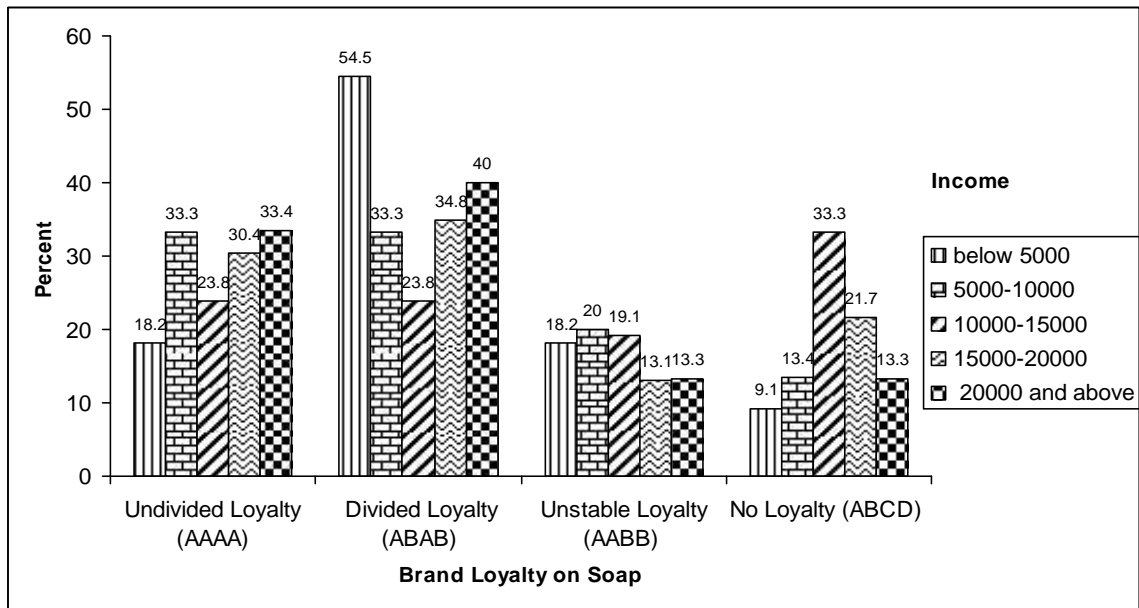
Under this topic brand loyalty of respondents of specific brand of toilet soap and analyzed with the help of frequency table and bar chart according to their monthly household income.

Table 4.21: Income and Brand Loyalty on Soap

Brand loyalty	Monthly Household Income										Total	
	Below 5000		5000-10000		10000-15000		15000-20000		20000 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	3	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 2011

Figure 4.11: Income and Brand Loyalty on Soap



In the above table and chart we can see that among 11 respondents having below 5000 monthly income, 18.2 percent are strongly loyal, 54.5 percent are divided loyal, 18.2 percent are unstable loyal 9.1 percent are non loyal on specific brand of soap. Similarly among 30 respondents having monthly household income 5000-10000, the percentage of strongly loyal person and 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 percentages 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 monthly 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.

4.3.1 (a) Income and Brand Loyalty on Soap Chi-Square Test

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

Table 4.22: Chi square Calculation of Income and Brand Loyalty

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	7.9807

Since chi square test statistic (7.9807) is less than chi square tabulated value (21.02606) value; hence, this shows that there is no relation between age and brand. Therefore, null hypothesis is accepted.

4.3.2 Income and Brand Loyalty: Shampoo

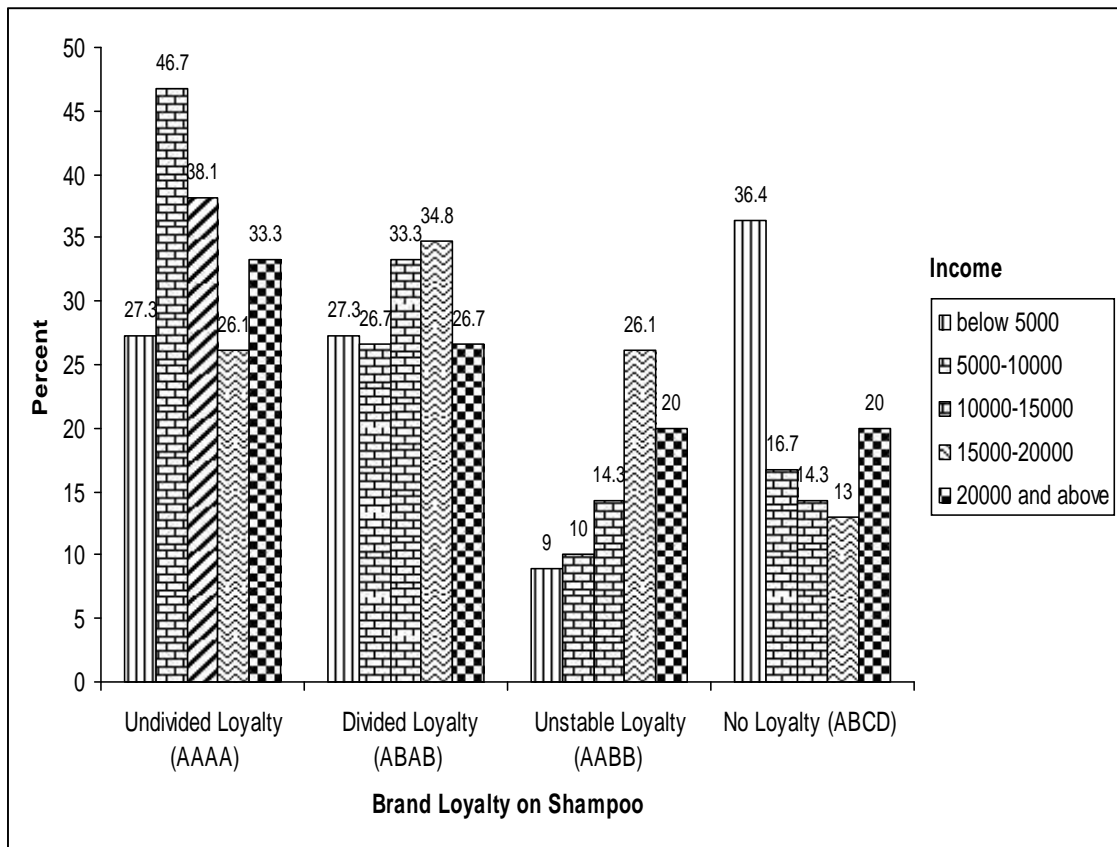
Under this topic brand loyalty of respondents of specific brand of shampoo are analyzed with the help of frequency table and bar chart according to their monthly household income.

Table 4.23: Income and Brand Loyalty on Shampoo

Brand loyalty	Monthly Household Income										Total	
	Below 5000		5000-10000		10000-15000		15000-20000		20000 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 2011

Figure 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 non-loyal in any specific product of shampoo. But, opposite to this group, in the income groups 5000-1000, 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 group.

4.3.2 (a) Income and Brand Loyalty on Shampoo Chi-Square Test

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

Table 4.24: Chi square Calculation of Income and Brand Loyalty

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	8.9952

Since chi square test statistic (8.9952) is less than chi square Tabulated value (21.02606) value; the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.3.3 Income and Brand Loyalty: Instant Noodles

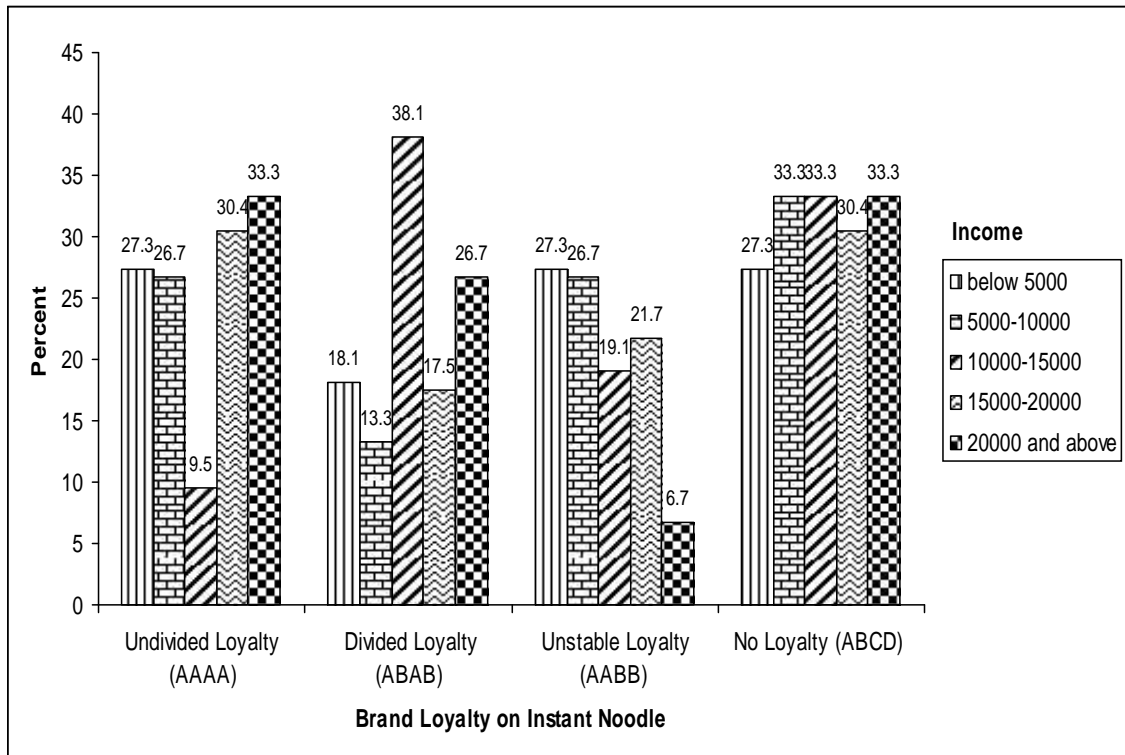
In the case of product Instant noodles, majority of respondents in all income group except in the group 20000 and above are non-loyal in any brand. In the income group (20000 and above) strongly loyal respondents contracts the majority (35.5%). (Table: 25 and figure 13)

Table 4.25: Income and Brand Loyalty: Instant Noodles

Brand loyalty	Monthly Household Income										Total	
	Below 5000		5000-10000		10000-15000		15000-20000		20000 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 2011

Figure 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 percentages 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.

4.3.3 (a) Income and Brand Loyalty on Instant Noodles Chi-Square Test

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

Table 4.26: Chi square Calculation of Income and Brand Loyalty

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 quire f^2A test statistic (9.0035) is less than chi square f^2A tabulated value (21.02606) value; the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.3.4 Income and Brand Loyalty: Toothpaste

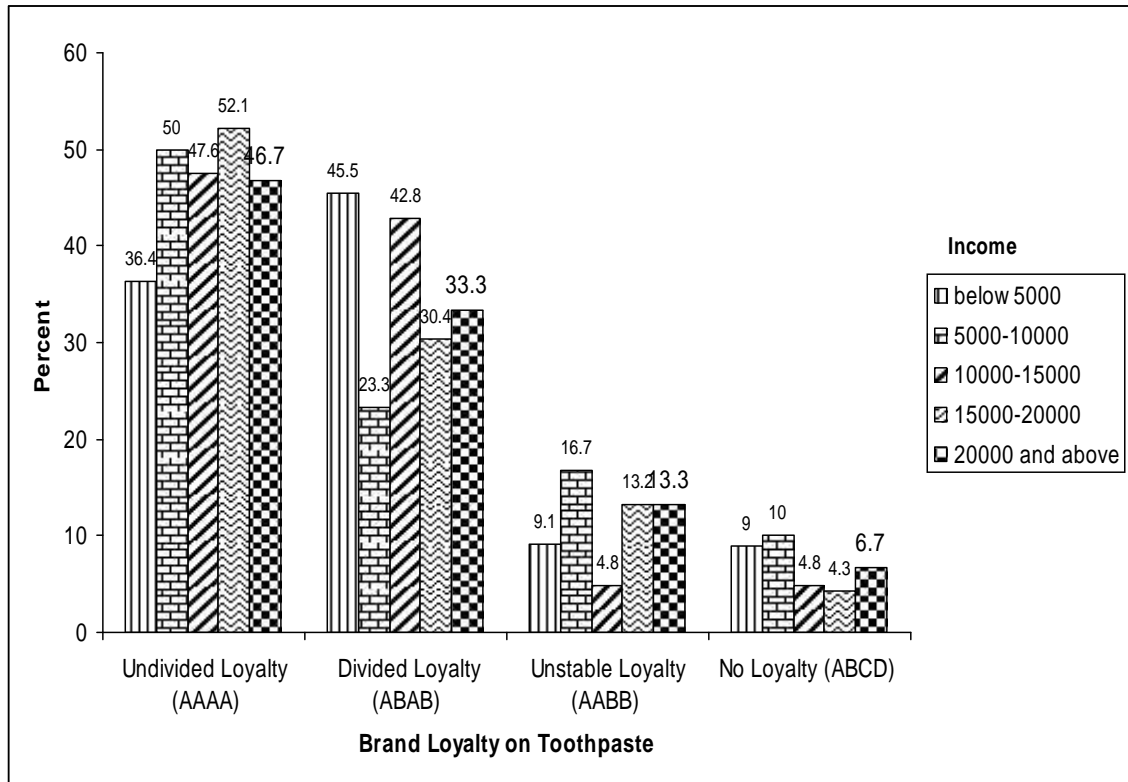
Under this topic brand loyalty of respondents on specific brand of toothpaste are analyzed with the help of frequency table and bar chart according to their monthly household income.

Table 4.27: Income and Brand Loyalty: Toothpaste

Brand loyalty	Monthly Household Income										Total	
	Below 5000		5000-10000		10000-15000		15000-20000		20000 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 2011

Figure 4.14: Income and Brand Loyalty: Toothpaste



In the above table and chart we can see that among 11 respondents having below 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 percentages of undivided, divided, unstable and non-loyal respondents are 47.6, 42.8, 4.8 and 4.8 respectively. Similarly among 23 respondents of 15000-20000 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.

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

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

Table 4.28: Chi square Calculation of Income and Brand Loyalty

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 test statistic (4.8755) is less than chi square tabulated value (21.02606) value; the null hypothesis is accepted. Hence there is no significant difference in any income group on brand loyalty.

4.3.5 Income and Brand Loyalty: Tea

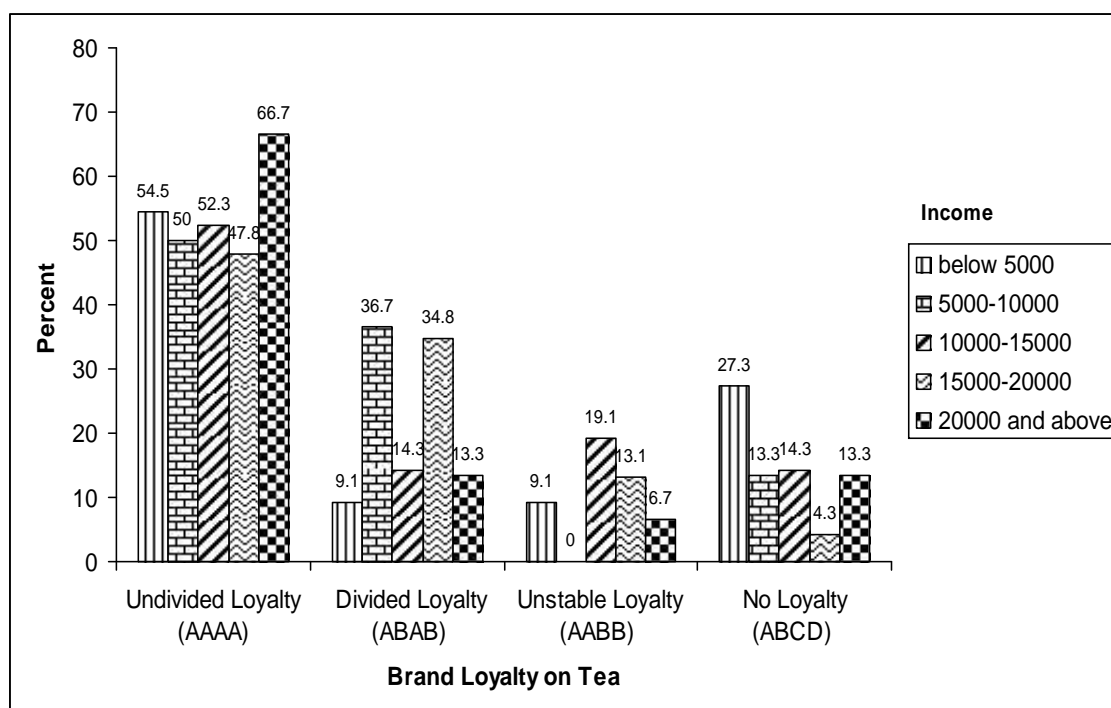
There are varieties brand of Tea available in the market in different retail price. This topic attempts to analyze the use of Tea by respondents according to their monthly household income.

Table 4.29: Income and Brand Loyalty: Tea

Brand loyalty	Monthly Household Income										Total	
	Below 5000		5000-10000		10000-15000		15000-20000		20000 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 2011.

Figure 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 group, 50% respondents of 5000-10000 income group, 52.3 percent respondent of 10000-15000, 47.8 percent respondents of 15000-20000 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.

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

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

Table 4.30: Chi square Calculation of Income and Brand Loyalty

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 quire $f^2 A$ test statistic (14.7528) is less than chi square $f^2 A$ 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 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 term of marital 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.

4.4.1 Marital status and Brand loyalty: soap

Following labels process the frequency and percentage distribution of respondents by marital status and different degree of broad 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	100	100	100

Source: Field survey, 2011.

Figure 4.16: Marital Status and Brand Loyalty on Soap

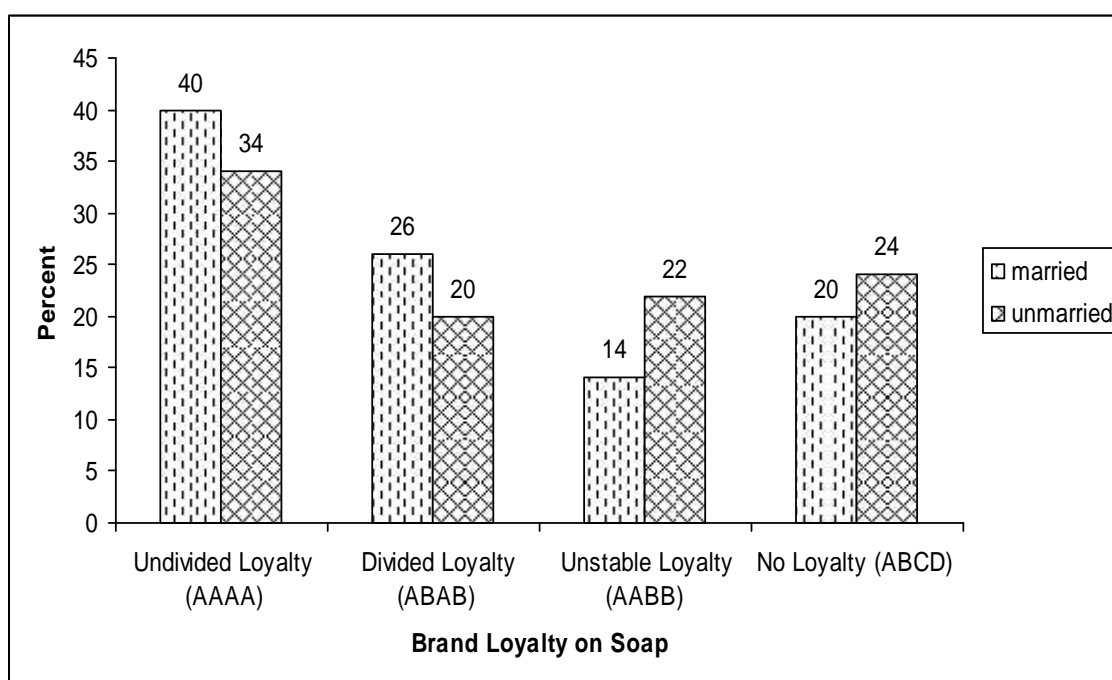


Table and chart present above reveals that most of the respondents (37%) all undivided loyalty followed by divided brand loyalty (23%). 18%, 22% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of 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.

4.4.1(a) Marital Status and Brand Loyalty on soap Chi- Square Test

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

Table 4.32: 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	1.705

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

4.4.2 Marital status and Brand loyalty: Shampoo.

Table 4.33: Martial 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	16	16
No Loyalty (ABCD)	8	16	12	24	20	20
Total	50	100	50	50	100	100

Source: Field survey, 2011.

Figure 4.17: Marital Status and Brand Loyalty on Shampoo

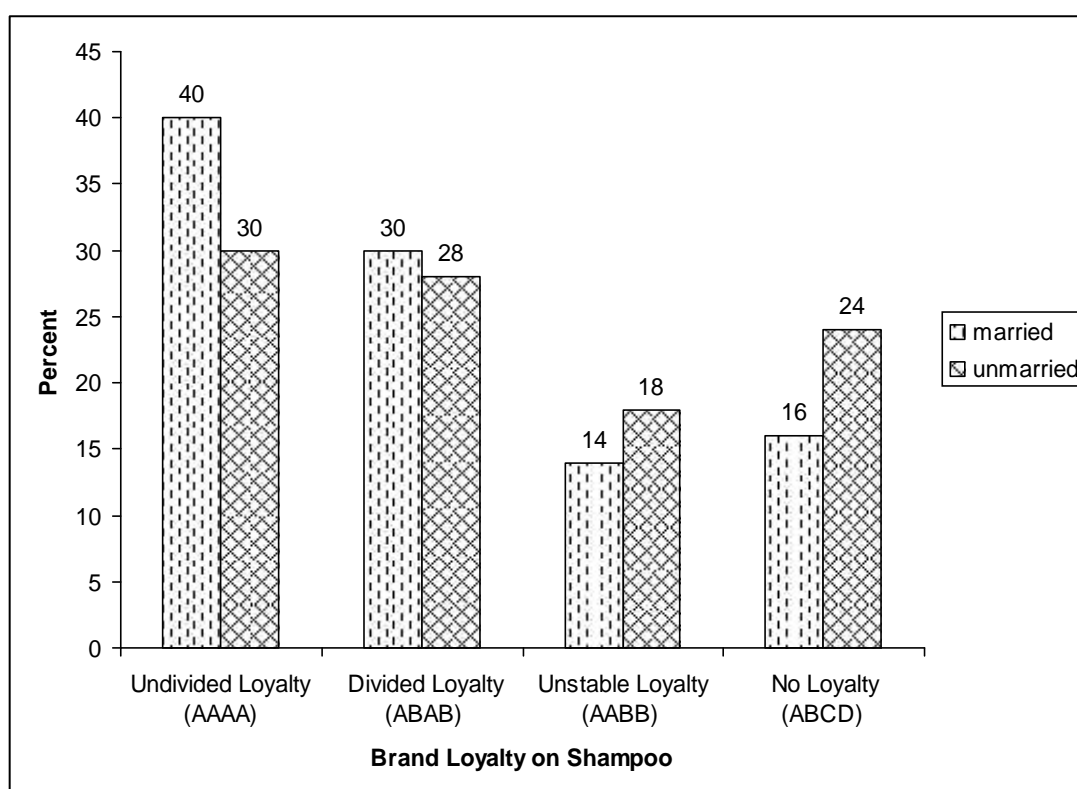


Table and chart present above reveals that most of the respondents (35%) are undivided loyalty followed by divided brand loyalty (29%). 16%, 20% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of 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 are found to have unstable in form of brand. 16% married and 24% of unmarried all found to be non-loyal in any specific brand of shampoo.

4.4.2(a) Marital status and Brand loyalty on shampoo chi-square Text.

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

Table 4.34: 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	1.7986

Since chi-square f^2 test statistic (1.7986) is less than chi-square f^2 tabulated value (7.815) value; hence it follows 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.

4.4.3 Marital Status and Brand Loyalty: Instant Noodles

Table 4.35: Marital Status and Brand Loyalty and Instant Noodles

Brand loyalty	Married		Unmarried		Total	
	F	%	F	%	F	%
Undivided Loyalty (AAAA)	20	40	18	36	38	38
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	100	100	100

Source: Field survey, 2011.

Figure 4.18: Marital Status and Brand Loyalty on Instant Noodles

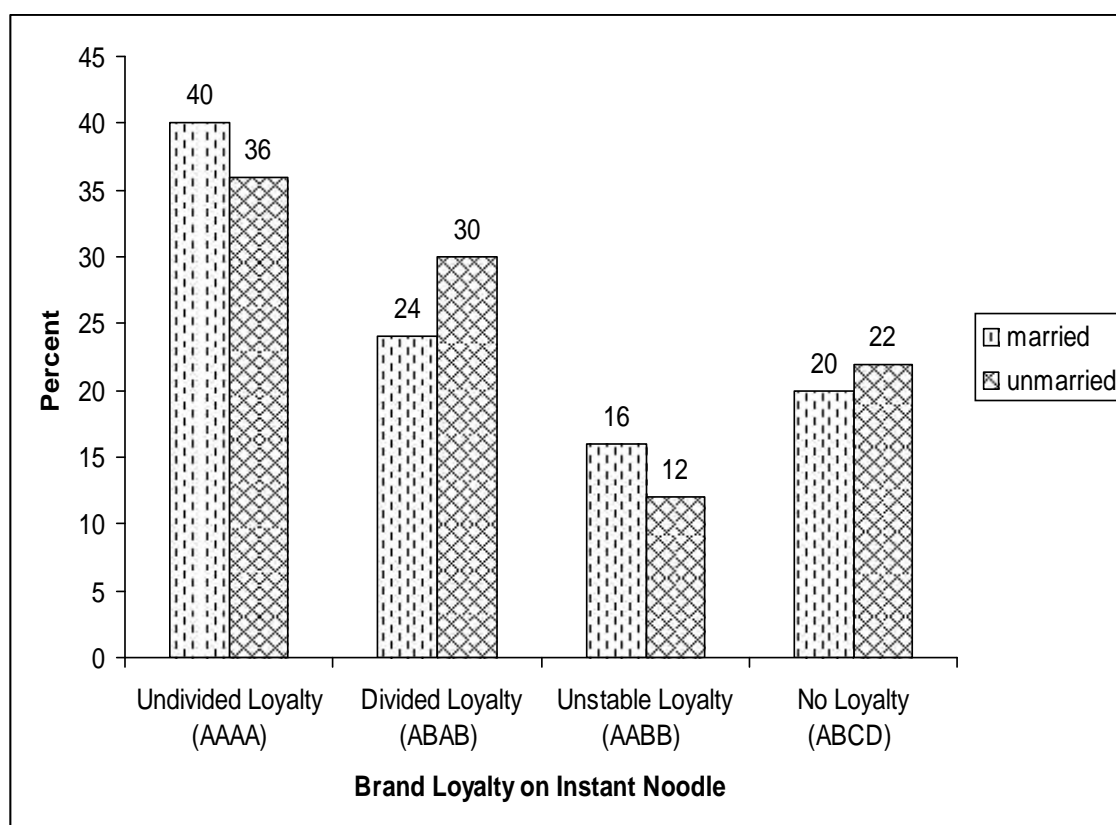


Table and chart present above reveals that most of the respondents (38%) are undivided loyalty followed by divided brand loyalty (27%). 14%, 21% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of 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 in form of brand. 20% married and 22% of unmarried all found to be non-loyal in any specific brand of instant noodle.

4.4.3(a) Marital status and Brand loyalty on instant noodles chi-square test

H_0 : There is no significance difference in brand loyalty believe married and unmarried.

Table 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 f^2 test statistic (0.7716) is less than chi-square f^2 tabulated value (7.815) value; hence it flows that married and unmarried all found to be equality brand loyal in the case of instant noodle. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.4.4 Marital Status and Brand Loyalty: Toothpaste

Table 4.37: Marital Status and Brand Loyalty: 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	100	100	100

Source: Field survey 2011

Figure 4.19: Marital Status and Brand Loyalty on toothpaste

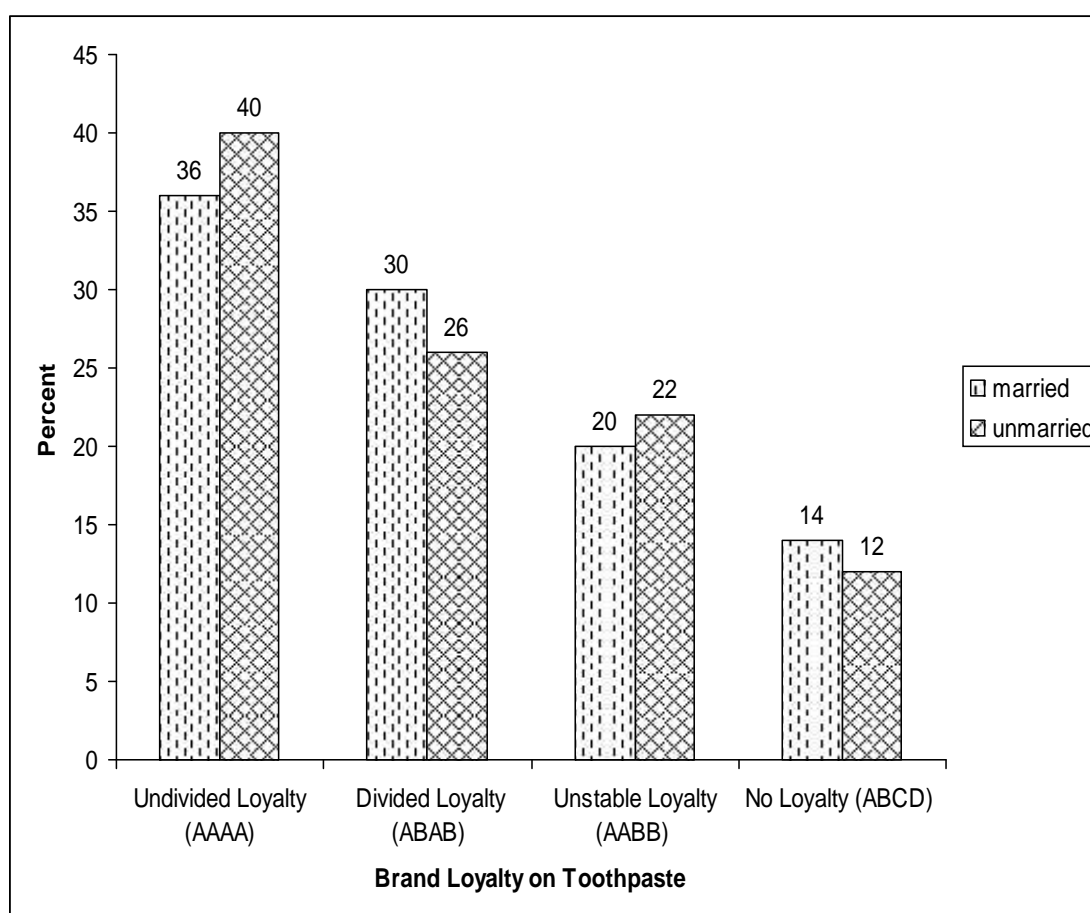


Table and chart present above reveals that most of the respondents (38%) are undivided loyalty followed by divided brand loyalty (28%). 21%, 13% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of tooth paste 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 in form of brand. 14% married and 12% of unmarried all found to be non-loyal in any specific brand of toothpaste.

4.4.4(a): Marital Status and Brand Loyalty on Toothpaste Chi-Square test:

H_0 : There is no significance difference in brand loyalty believe married and unmarried

Table 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 f^2 test statistic (0.3724) is less than chi-square f^2 tabulated value (7.815) value; hence it flows that married and unmarried all found to be equality brand loyal in the case of toothpaste. There is no significant difference between married and unmarried. Therefore, the null hypothesis has been accepted.

4.4.5 Marital Status and Brand Loyalty: Tea

Table 4.39: 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	100	100	100

Source: Field survey 2011

Figure 4.20: Marital Status and Brand Loyalty on Tea

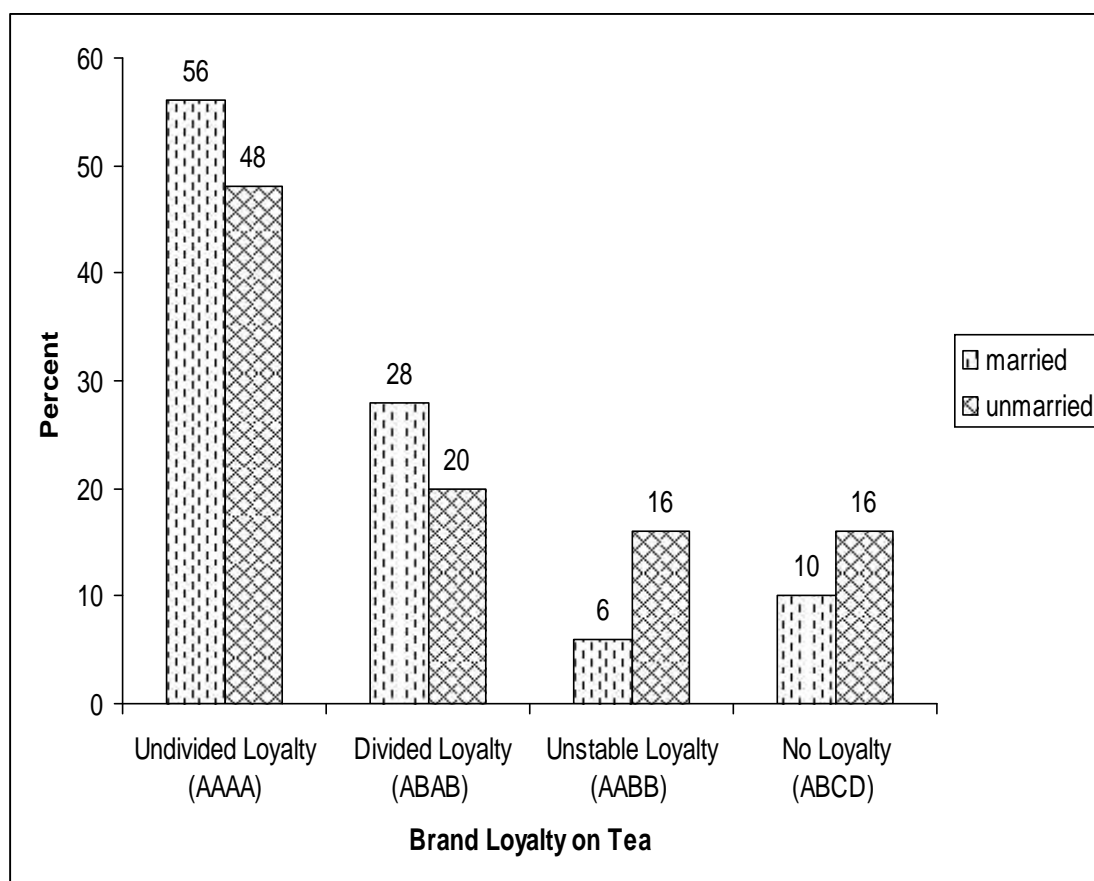


Table and chart present above reveals that most of the respondents (52%) are undivided loyalty followed by divided brand loyalty (24%). 11%, 13% all the unstable brand loyal and non-loyal respectively. In term of marital status, Married people all found to be brand loyal in special brand of brand of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

4.4.5(a)) marital status and brand loyalty on tea Chi- square test:

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

Table 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 f^2 test statistic (3.939) is less than chi-square f^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 attempted 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, sent, 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 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	37	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 2011.

The table shows that advertisement is the most effective factor for switching brand of soap. 36 percent (28% brand loyal and 8% non- brand loyal) respondents responded that advertising is the factor that inspires them to leave the one brand and switch on

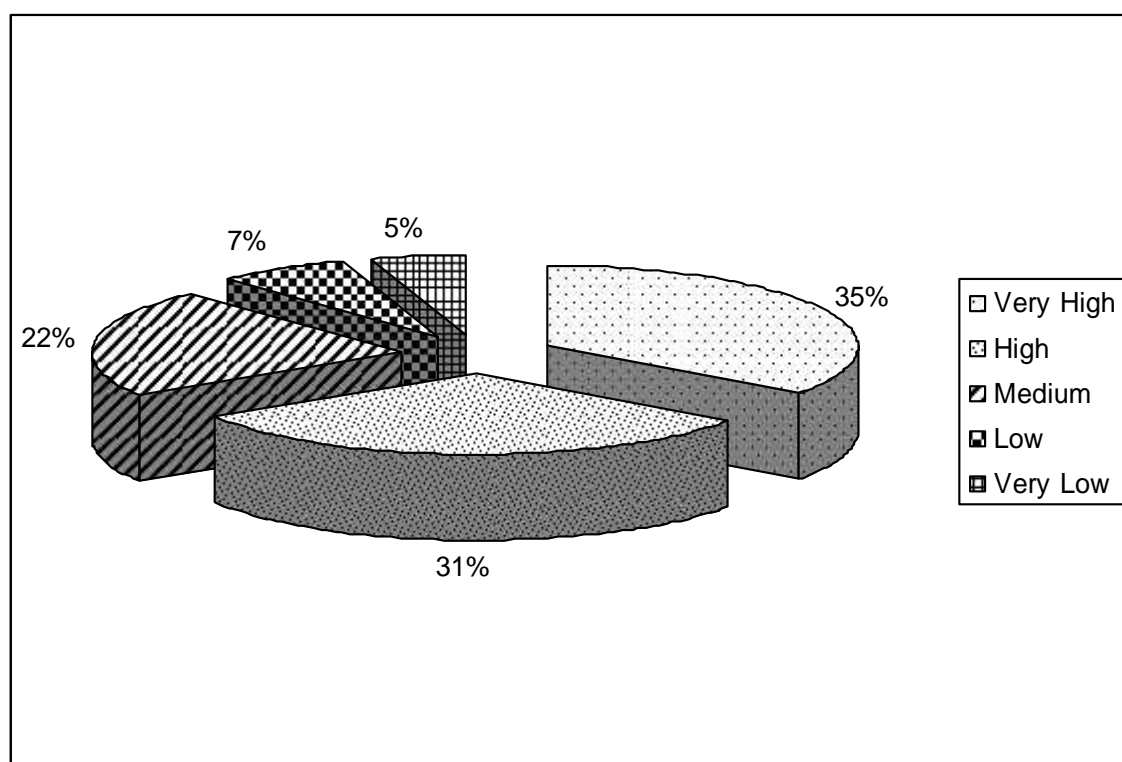
another brand of soap. Similarly, 39 percent (31% brand loyal and 8% non-brand loyal) respondents of shampoo are affected by advertisement to switch the brand. Advertising has effected dominantly for brand switching in the product instant noodles too. 34, percent (22% brand loyal and 12% non-loyal) respondents 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 one 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.

4.6 Effects of Incentives in Brand Choice

Table 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 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 effects of the incentives are low and very low. According to respondents received from consumer we can conclude that majority of consumer are effected by incentives like free sample, price off, free coupon, prize, bumper, discount etc. for brand choice.

4.7 Major Findings of the Study

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. 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 different in brand loyalty between male and female.

Age Variable

1. Under age group 15.20, greater percentages 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 statistics 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 then other group. The test statistics shows that there is no relation between age and brand loyalty.

Income Variable

1. Under income group 20000 and above greater percentage 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 loyal. And test statistics show that there is 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 age and brand loyalty.
4. In the case of toothpaste, most of respondents or greater percentages of respondent 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 indicates that greater income group has brand loyal in case of Tea.

Marital Status

1. The greater percentage 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 difference 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 unmarried.

3. In case of instant noodles greater percentage of married are found to have loyal and same in unmarried too. But second greater parentage of unmarried dare divided loyalty than that of married one. Test shows that thee is no significant different between unmarried and married.
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.

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-V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the effort has been made first to present summary and conclusion drawn from the analysis. The last steps proceeds with the recommendation.

5.1 Summary

Intend of this study is to analyze the brand loyalty of consumer product in Bharatpur City. 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 dissertations related to brand loyalty have been reviewed. Research methodology has been described in chapter three, which describes the methods and techniques used to analyze the data and information in this study have been clearly defined. Chapter four is the main body where all the information and data obtained from different sources have been analyzed and interpreted using different tools and techniques of statistics. Which has made the study more fruitful and reliable. At the end of the chapter four, major findings obtained from the research have been incorporated. Chapter five is the last chapter where summary, conclusion and recommendations have been drawn on the basis of analysis of the study.

5.2 Conclusions

As per the analysis and interpretation of relevant data obtained from the costumer responses, following conclusion have been drawn:

-) Consumers of Bharatpur City give high importance to brand. They purchase the products based on brand.
-) Most of consumers have good knowledge about all the brands available in the market.
-) Brand loyalty varies also product to product and loyalty towards brand is relatively higher in the product that is more frequency needed as compared to those needed or used less frequency.
-) Brand loyalty varies consumer to consumer. Some consumers are more brands loyal than other and vice versa.
-) No relation between consumers age and brand loyalty was established.
-) Only in case of Instant Noodles, male and female are varies in loyalty.
-) In case of Tea, higher income group is more loyal on brand.
-) Most of respondent are influenced by incentive for their brand choice.
-) Most of consumers of Bharatpur City are found undividedly loyal in specific brand of chosen products categories except in instant noodles.

-) Greater percentage of consumer switches the brand in cause of advertising in products soap, shampoo and instant noodle.
-) In case of toothpaste and tea greater percentage of consumer switches the brand in case of price-off.

5.3 Recommendations

From the in-depth analysis of costumer's responses regarding brand loyalty of consumer products in Bharatpur city, some weaknesses and drawbacks have been found. So, to improve the weaknesses following recommendations have been made:

-) Studies on 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.
-) Attention should be given in branding the product, Brand is necessary in almost all type of product.
-) Brand should be distinctive or unique in every type of product. The distinct brand will be very much helpful to differentiate the desire product of the consumer from the other products.
-) The product line of the same brand should be increased according to preference of consumers. So that brand switching is discouraged. The quality of product should also be maintained.

-) The following recommendations are made for the future researchers:
-) 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 products is very large, therefore small of sample cannot accurately resemble the population.
-) The questionnaire used in study should be as short and simple as possible.
-) Effective statistical tools should be used to analyze and interpret collected data.
-) 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.

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APPENDIX-I
QUESTIONNAIRE SCHEDULE
Central Department of Management

Dear sir/madam,

I am Devendra Dawadi, MBS students at Tribhuvan University. I am conducting a research study on brand loyalty of consumer products in Bharatpur city. 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.

This questionnaire has been prepared just for the partial fulfillment of MBS, entitled "**Brand Loyalty of Consumer Products in Nepal: A Case Study of Bharatpur City, Chitwan.**"

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.

Personal profile of the respondent:

Name:

Sex: Male

Female

Age:

Marital status:

Family monthly income:

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

1. Which product do you regularly use?

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

1.1 For soap

a) Do you already decide upon which brand to buy before going t 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 Shampoo

a) Do you already decide upon which brand to buy before going t 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 Vatica.....
- 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 Toothpaste

a) Do you already decide upon which brand to buy before going to 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) Dabur red.....
- 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.....

1.4 Instant noodles

a) Do you already decide upon which brand to buy before going to 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 eat for the breakfast?

- i) Mayos..... ii) Wai wai.....
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 Tea

a) Do you already decide upon which brand to buy before going to 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 alternatives?

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.....

Instant 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 incentives (price off, free goodsetc.) affect your brand choice?

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

ANNEX-II

CHI-SQUARE TEST

Chi- square χ^2 test is calculated in the following steps.

Step I : Formulation of hypothesis

H_0 : Null hypothesis

H_1 : Alternative hypothesis

Step II : Set $\alpha = 0.05$

$$= f_{r-1, c-1, \alpha}$$

Table value of $\chi^2_{0.05, f_{r-1, c-1, \alpha}}$ = χ^2 table value

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

Step III: Compute $\chi^2 = \frac{\sum (f_0 - E)^2}{E}$

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 Brand Loyalty on shampoo

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. C. Computation of Chi-square χ^2 , Sex and Brand Loyalty on Instant noodle

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. D. Computation of Chi-square $f^2 A$, Sex and Brand Loyalty on Toothpaste

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

1. E. Computation of Chi-square $f^2 A$, Sex and Brand Loyalty on Tea

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

2. Income and Brand Loyalty

2. A. Computation of Chi-square $f^2 A$, Income and Brand Loyalty on shop

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

2. B. Computation of Chi-square f^2_A , 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

2. C Computation of Chi-square $f^2 A$, income and Brand Loyalty on Toothpaste

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	1.4674
5	4.8	0.2	0.04	0.0083
				9.0035

2. D. Computation of Chi-square f^2_A , income and Brand Loyalty on Instant noodle

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
15	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	0.0208
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	0.0005
2	1.8	0.20	0.04	0.0222
1	1.05	-0.05	0.0025	0.0023
				4.8755

2. E. Computation of Chi-square f^2_A , 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	2.07	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

3. Marital Status and Brand Loyalty

3. A. Computation of Chi-square $f^2 A$, 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	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	0.1	0.5	0.0909
				1.705

3. B. Computation of Chi-square $f^2 A$, marital status and Brand Loyalty shampoo

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	0.1418
11	10.5	0.5	0.25	0.238
				0.7716

3. C. Computation of Chi-square f^2_A , marital status and Brand Loyalty on Instant noodle

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	0.25	0.0172
9	8	1	1	0.125
12	10	2	4	0.125
				1.7986

3. D. Computation of Chi-square f^2_A , 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	14	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

3. E. Computation of Chi-square $f^2 A$, marital status and Brand

Loyalty on Tea

OF	EF	(O-E)	(O-E) ²	(O-E) ² /E
28	26	2	4	0.1538
14	12	2	4	0.3333
3	55	-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	0.3333
8	5.5	2.5	6.25	1.1363
8	6.5	1.5	2.25	0.3461
				3.939

4. Age and Brand Loyalty

4. A. Computation of Chi-square $f^2 A$, Income and Brand

Loyalty on soap

OF	EF	(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	5.7121	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

4. B. Computation of Chi-square, Income and Brand Loyalty on shampoo

OF	EF	(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	0.6391
3	3.22	-0.220	0.04840	0.0150
4	4.60	-0.60	0.360	0.0782
				3.3353

4. C. Computation of Chi-square, Income and Brand Loyalty on Instant noodle

OF	EF	(O-E)	(O-E) ²	(O-E) ² /E
3	4.56	-1.56	2.4336	0.5336
5	3.99	101	1.0201	0.2556
3	4.18	-1.18	1.3924	0.3331
8	6.27	173	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
3	5.88	-2.88	8.2944	1.4106
6	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

4. D. Computation of Chi-square, Income and Brand Loyalty on Toothpaste

OF	EF	(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

4. E. Computation of Chi-square, Income and Brand Loyalty on Tea

OF	EF	(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	5.1984	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