# CUSTOMER PERCEPTION OF BRAND EXTENSION AND ITS IMPACT ON BRAND EQUITY: A STUDY ON INDIAN FMCG SECTOR

### A THESIS Submitted to the Delhi Technological University For the award of the degree of

#### DOCTOR OF PHILOSOPHY

By

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**FEBRUARY 2019** 

**CANDIDATE'S DECLARATION** 

I, hereby certify that the thesis titled "Customer Perception of Brand Extension

and Its Impact On Brand Equity: A Study On Indian FMCG Sector" submitted

in fulfilment of the requirements for the award of the degree of Doctor of Philosophy

is an authentic record of my research work carried out under the guidance of

Prof. Rajan Yadav. Any material borrowed or referred is duly acknowledged.

The matter presented in the thesis has not been submitted elsewhere in part or fully to

any other University or Institute for the award of any degree.

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#### SUPERVISOR'S CERTIFICATE

This is to certify that the thesis titled "Customer Perception of Brand Extension and Its Impact On Brand Equity: A Study On Indian FMCG Sector", submitted in fulfilment of the requirement for the award of the degree of Doctor of Philosophy is an original research work carried out by Ms. Richa Joshi, under my supervision. The matter presented in this thesis is not present elsewhere in part or fully to any other University or Institute for the award of any degree, to the best of our knowledge.

**Dr. Rajan Yadav**Professor
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Richa Joshi

#### **ABSTRACT**

Brand is an important notion for marketers. It signifies the differentiation of products to the consumers and facilitates the decision making process for the consumers. Brands help in reducing dissonance and decision making conflicts. It is therefore significant to understand the related concepts of brand. Brand equity is an essential element to define the valuation of brand in the market. It dictates the monetary value and the associations related to the brand. The revenue generation for a firm is based on the amount of brand equity enjoyed by its brands. It helps to take advantage of premium pricing for the products. Established brands in the market adopt various strategies to increase sales, visibility and growth in the market, out of which brand extension is the most common. Brand extension helps in capitalizing the existing image of the brand and reduces the marketing and communication costs for the firm. Brand extension of the well known brand in the market promises the risk reduction and ensures less chances of failure. However, the idea of brand extension is difficult to understand since the extension can also dilute the equity of the parent brand. Brand extension may also cause cannibalization for the parent brand. Hence, the concept of brand extension in branding is an area of research for researchers since 1988 (when for the first time the idea was discussed by Edward M. Tauber). The factors which affect brand extension are of utmost importance for the researchers. Brand extension is studied with the help of several factors which determine their impact on the same. Several new variables were added over time for the better understanding of such a complex strategy. This study is an attempt to carry forward the research done in the sphere of branding. It determines the role of several factors in defining brand

extension; also the study proposes a framework which demonstrates the subsequent effect of brand extension on brand equity. The brand which is undertaken for the study is a popular Indian brand called Fortune. Since the studies available in literature are done in western countries therefore the implications of such studies are not applicable in the Indian context. This study focuses on FMCG sector and real brand extension experienced by Indian market. The results of the study show that brand extension does impact brand equity and the study confirms the fitness of the proposed framework. In addition to this the study identifies Parent Brand Reputation to be the most important factor which affects brand extension. Marketers can therefore use this as an input for the better understanding of Indian market and the consumers.

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#### LIST OF ABBREVIATIONS

ANN : Artificial Neural Networks

ANOVA : Analysis of Variance

ASV : Average Shared Variance

AVE : Average Variance Extracted

BCM : Brand Concept Framework

CBBE : Consumer Based Brand Equity

CFA : Confirmatory Factor Analysis

CFI : Comparative Fit Index

eWOM : Electronic Word of Mouth

FBBE : Firm Based Brand Equity

FMCG : Fast Moving Consumer Goods

FY : Fiscal Year

GDP : Gross Domestic Product

GFI : Goodness of Fit Index

IBEF : Indian Brand Equity Foundation

MSV : Maximum Shared Variance

NCR : National Capital Region

NFI : Normed Fit Index

NN : Neural Networks

R & D : Research and Development

RMSEA : Root Mean Square Error of Approximation

RMSE : Root Mean Square Error

SPSS : Statistical Package for Social Sciences

SEM : Structural Equation Modeling

TLI : Tucker Lewis Index

VIF : Variance Inflation Factor

#### **CHAPTER-1**

#### **INTRODUCTION**

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#### 1.1 Branding

A consumer today cannot imagine himself without brands; they have created an indispensable place in the market. Presence of brands around changes the shopping experience for the customer. They provide them delight and helps in reduction of cognitive dissonance. Consumer decision making today is ruled by the value of a brand in their perception. In the clutter of numerous products and services; brands create the space for themselves, they grow with customer satisfaction and repeat purchase. At times the strong position of brand challenges the product life cycle and assists the stay of product in market for a very long time.

Branding is an ancient practice and it can be explored from the way back in 2000 B.C where slaves and cattle were branded with the markings of the owner. The practice was to show ownership associated with them. After 1800 A.D the idea of branding evolved from ownership to creation and selling of products. Branding has undergone several changes in past few decades; firms today are striving hard to mark their presence in the market. And branding is the only way to differentiate a product or service from the other competitors in the market. Branding is a complex term and encapsulates different aspects. Brand is the customer perception of a firm; it is a promise to the customer. It is the sum of experience of the customer out of which some part can be influenced whereas other cannot. A brand is not only restricted to a name, symbol or a sign rather it holds the entire concept on which the firm is standing.

Branding has observed various challenges in the era of Facebook, Twitter and YouTube. Technology has engulfed branding, brands are breathing in digital universe. It has paved way for marketing through digital media and technology, memes, viral

and buzz have become new language of branding. Digital technologies have altogether changed the culture in which brands prevail. Though Branding is not a new term, still the kind of revamping it has attained in the couple of decades is incredible. Marketers are trying hard to find ways to penetrate the tab, mobile, laptop and desktop of the customer. Different models for branding are required in the chaotic world of social media, creating distinct presence is difficult. With the help of technology today consumer can opt out for the unnecessary advertisements. Therefore, marketers are struggling to create spaces for themselves; they are hiring known film directors to create short movies for the brands so that the same can be shared with the help of social media. A good example is the launch of portable music player Saregama Caravaan which repackaged old music player with the blend of technology. It was promoted with a short film by director Amit Sharma, the film was shared through Facebook, YouTube and Whatsapp.

#### 1.2 Opportunities and Challenges in Branding

Brands today are prevailing in dynamic environment where switching costs are low for the customer. Therefore, creating loyalty among them becomes difficult; it has posed several challenges for the marketer. However increasing use of Information Technology and various softwares have given an opportunity for a marketer to build his brand. Increase in number of brands has caused threats to existing giants who have enjoyed noticeable market share since long.

#### Challenges for brands

Online Shopping- Online shopping has changed shopping experiences of the customer, it has helped customer in saving time and comparison of the products can

be done more easily. But such ease for customer has caused marketer to update product information and to make payment gateways easy to operate. Also security aspect has become important since the information about credit cards, debit cards and accounts are shared online.

*Increase in Expectations of Buyers*-Expectations of buyers have tremendously increased over time. Since they are well equipped with the information regarding the product and the competitors therefore, they look for additional advantages with the product along with the functional attributes of the product.

Electronic Word of Mouth – With digitization of everything word of mouth has also taken a different form. It is now called as eWOM or electronic word of mouth. eWOM can be defined "as all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services, or their sellers" (Westbrook, 1987). eWOM has increased the access to word of mouth information which is now not only restricted to family members, friends and relatives but few other people also with whom customers are connected online.

Globalisation – Expanding brands across nations gives strategic benefit to the marketers, but there are some challenges inherent with such expansion. Biggest challenge for globalised brands is the presence of intense competition. Brands when enter new markets have to compete with local and regional brands. Integration of world markets has raised standards of manufacturing and functional attributes for the product. Hence brands have to work hard in order to maintain the quality standards

which could meet the expectations of the customers who belong to different regions of the world and who have different socio-economic status.

Creation of New Subcategories – Creation of new sub categories is one of the ways to grow in the market. Such creation of sub categories requires continuous innovation. Such innovation would be able to out shadow the competitors and would be able to give customer better choices and classes to choose from.

Integrated Marketing Communication – Integrated market communication has become more difficult than ever. The presence of several communication tools like advertising, sales promotion, personal selling, sponsorships, digital marketing and social media marketing have created a scenario where these tools instead of complementing compete with each other. Therefore, choosing a tool which can foster the growth of the firm has become altogether complicated for the marketer.

#### **Opportunities for brands**

Technological Change – Changes in technology has caused huge transformation in the environment where product is created and developed. Technological change has occurred due to globalization, it has increased the size of markets. Computer Aided Manufacturing (CAM) and Computer Aided Design (CAD) have reduced product development cycles. Time required for designing testing and manufacturing has reduced which has resulted in reduction of costs. Advanced technologies have also improved quality standards of products.

**Product Innovation** – Innovation in technology has resulted in new ways to solve the problems associated with the designing and functioning of product. It has also helped

to introduce various kinds of complementary products in the market. These innovative products have relatively better functionality and the cost of manufacturing is also low. Innovation in non product dimensions such as creative price, distribution and service can create differentiation. Such opportunities could be identified by the brand managers.

Online Presence – Online presence of brands today serves as an opportunity for a brand to grow and expand. Brands can create websites which increases visibility of the brand. Web-space today serves as a platform for brands to communicate with the customer in the form of blogs and chat rooms. Brands advertisements are placed on social media websites like Twitter Facebook and LinkedIn which enhances the image of the brands.

**Email Marketing** - Email marketing is used as one the popular medium of direct marketing to the customer by brands. A database of customer email id can be made by asking it during their exit from the website or the physical store. Such repository can be utilized for sending them discount, offers, coupons and information about new extensions done by the brand. It is a cost effective method to increase sales and to increase brand awareness.

Channel Integration – Growth and development in overall infrastructure of the country has given an opportunity for the firms to develop their distribution channels. As the production concept of marketing management goes – "consumer will prefer products that are widely available and inexpensive" the efficient distribution channel promises superior sales. Firms today are investing huge sum of money for making their distribution channels effective. Such effectiveness becomes more useful when

firm's plan to extend their brand in new category where the existing distribution channels is utilized to a fuller extent. Companies today are not limited to just one distribution channel rather they are working on the strategy called 'omnichannel' where they utilize every possible means to reach their customer.

Preference for Branded Products over Generic Ones - Consumer preference has tremendously changed over the years. Now there is an increase in demand for branded product over the generic ones. Branded products are perceived to be superior in quality and functionality as compared to generic ones. Communication media has enhanced awareness of customer; today customers are aware of various brands and variants present in the market. From apparels to toothpaste and soap, consumers know the brand and have strong preference towards the brand they like.

Increase in Disposable Incomes – India has witnessed a surge in income level of the customers during last couple of years. Such rise in income has caused increase in purchasing power of the customer. Hence they are willing to pay more for innovative product and premium services. An enormous transformation in the entire lifestyle has resulted in the preference of Indian customer for better houses, apparels, cars and vacations abroad. For availing such goods and services they seek branded products. India is a developing market therefore countries like China and U.S are eyeing Indian rural and urban market for diversification.

Changes in Consumer Demographics – Consumer demographics in India have transformed the purchase behaviour. The age group from 18-35 are millennials; they have refined the consumptions patterns of Indian market. They are digitally connected consumers and frequently visit Facebook, Twitter, Instagram and YouTube. They

have a high awareness level about markets and brands. They have a considerable share in the working population; their incomes are high and therefore, they prefer premium goods. They are the largest demographic group in the country.

Evolution in Retail Structure – Retail structure in India has evolved to an extent where there is a substantial share of organized retail. It has created space for brands, unlike unorganized market which is flooded with non-branded variants. Multi-brand retail in India has exposed consumer towards various national and international brands. Therefore, today a customer is able to recall and compare brands in physical stores as well as virtual stores. Firms today are working towards 'omni-channel' strategy wherein they make use of every possible channel to reach customer (i.e. online and offline stores).

#### 1.3 Brand Equity

Brands are a vehicle for firm's success; iconic brands pave way for the success and survival of the firm in market. However, iconic brands are not created overnight. They are moulded through a process of continuous innovation and improvement. For customers, brands are merely a choice and established brands simplify their decision making in terms of risk reduction. They reflect the experience of the customer with the product. A brand defines the effectiveness of advertising, sales promotion, direct marketing and other promotional tools. Brands are intangible assets which can be measured by brand equity of the brand.

Brand equity originates from the confidence which customer carry for a brand in relation to its competitors (Lassar, Mittal & Sharma, 1995) and the consumer is

willing to pay a premium price for acquiring that confidence again and again, which gives rise to customer loyalty. A good example could be of Apple Inc. where the firm is offering innovative products at a high price but the price does not act as a barrier for significant percent customers. Instead they have created a market for themselves. Rising importance of brand equity has resulted in the development of several scales to measure brand equity. However brand equity is not confined to measurement of customer perspective of the brand. It can also be measured by the financial asset value of the firm. There are several financial/ accounting methods/models to appraise the asset value of the brand name (Simon & Sullivan, 1992; Farquhar et al. 1991). However financial brand equity is the outcome of brand equity created by customers. It is vital for marketers to track and measure equity at the level of the customer, but they do not have access to customer based measures. Therefore, the purpose of this research is to understand customer based brand equity.

Views for customer based brand equity vary in literature, it is observed as tangible and intangible quality perception about the brand (Kamakura and Russell, 1991). It is also a multi dimensional construct which consists of components like brand association, brand awareness, brand loyalty and perceived quality (Aaker, 1991; Yoo & Donthu, 2001; Yoo & Donthu, 2000).

#### 1.4 Brand Extension

Brand extension is termed as "the use of a familiar brand name to launch a new product in the market (Aaker & Keller, 1990)." It is widely used strategy for attaining competitive advantage in the developing markets. It is a tool to minimize the advertising costs and to

capitalize the existing brand image. Consumer acquaintance with the parent brand name supports new product entry and helps the brand extensions to penetrate market quickly (Kim & Lavack, 1996). Brand extension as a marketing strategy that reduces the risk of failure for a new product and expenditure on marketing is also minimized (Tauber, 1988). Since the cost of launching new products is usually very high brand extensions helps in national and international expansion and strategic growth for companies. Brand extensions also reduces fixed costs relating to distribution since the previously established distribution channels are utilized, it also increases the effectiveness of promotional strategies and make them more useful (Kaur & Pandit, 2014).

Brand extension strategy decisions are of two types: Brand Extension Naming and Categorical Fit. Naming strategy for extension is the way to assign brand name for the brand extension. Extension naming strategies consists of direct and indirect naming. Two types of strategies are used for naming; direct naming strategy is the use of full parent brand name for new product. However indirect naming strategy uses parent brand names as sub brands to name the extension product. Categorical fit is defined as the resemblance between brand extension and the parent brand (Hanh Le, 2012).

Brand extensions have been identified with kinds of classifications such as vertical extensions (extensions in same product category) and horizontal extension (extensions in unrelated product category). Vertical extensions on the other hand are divided into upward and downward extensions which are defined according to technology more or less advanced (He & Li, 2010). Extensions although are not limited to development from good to good offering and service to service offering. Typology of extensions could also extend from good to service and service to good (Ramanathan, 2013) as mentioned in Table I below.

**Table 1.1:** Typology of Brand Extension

pı	Extension		
Brand		Goods Offering	Service Offering
Parent	Goods Offering	Good to Good Brand Extension	Goods to Service Brand Extension
Pg	Service Offering	Service to Good Brand Extension	Service to Service Brand Extension

Source: Ramanathan, (2013)

The concept of brand extension was popularized way back in late 1970's. At that time the idea of new product introduction was prevalent in marketing. It was believed that in order to grow a firm has to continuously develop new products. The idea was so strongly penetrated that marketers presumed that without new products a firm would eventually die. In early 1980's, Edward M. Tauber presented a study which comprised of the brands of major food companies. The study analyzed around 7000 new products which were introduced over 10 year period in 70s. The results were unexpected only 93 out of 7000 product gave the minimal revenue of 15 million \$, though the cost of developing a new product was around 150 million \$. As a result the brand leverage was the choice of strategy adopted in 1980's. It gave several significant advantages, the expenses for creating extension product awareness are minimal, the introduction of new product can increase sales for parent brand and advertising & awareness of new extension can have a synergised effect on parent brand.

#### 1.5 Importance of Brand Extension

Brand extension helps in expanding the horizon of the brand therefore, it is important for marketers. It helps in positioning of brand and communicates that a particular brand is not only good in one product or service but in several. Wipro, for instance

has extended from computers into detergent powder, soap and shampoo. Another example is of Mars which has capitalized its image of a famous chocolate bar to a famous chocolate drink and ice-cream. Different products under one brand name helps in creation of brand equity, and it assists in easy articulation of quality and trust aspects to the customer.

Table 1.2: Major Advantages and Disadvantages of Brand Extension

# Advantages of Brand Extension to Consumers Consumers get variety of options to choose from. Decision making is quick as the brand is already known for them. Willingness to buy the product is increased. Promotional expenditure is reduced. Cost of building a new brand is saved. Parent brand image is enhanced. Multiple capabilities of brand can be shown to customer. Helps in revival of brand. Enhances brand equity of the parent brand.

Source: Literature on Brand Extension

#### 1.6 Research Background

Brand extensions are explained and defined with the help of several variables in existing literature. Brand extensions were analyzed with the help of perceived quality , perceived fit and difficulty of making the extension (Sunde & Brodie , 1993), (Nijssen & Jhartman , 1994), (Bottomley & Doyle , 1996) and (Rajasekar D. , 2014). It has been shown with the help of several brands that brand extensions cannot be used without the proper evaluation of parent brand and the related aspects. Sometimes extensions do dilute the image of parent brand. Categorization theory has been used to identify the relationship of core brand and extension product (Kim & Lavack, 1996). Bookkeeping model of this theory propose that information about extension product

updates the beliefs and knowledge of customers about the parent brand. In few extensions the extension product differs in terms of quality and price from the core brand. This deviation in the original associations causes reassessment of the parent brand which in turn dilutes the image of core brand. (e.g. Tata Nano was a failed extension for Tata motors and it has affected the quality perception of masses about Tata (Why Nano failed, 2016).

Brand extensions generate several benefits for firm. It is a strategy to assist parent brand in several ways. With the growing popularity of brand extensions there is a need to inspect the manner in which brand extension strategies affect core brand (Buil, Chernatony & Hem, 2009). The impact caused by brand extension on the brand equity of parent brand is called as Feedback Effects. The studies and the current extent of research on brand extension is divided in two categories i.e. researches which are done to study consumer evaluation of brand extension which focus on factors affecting brand extension and the studies which are focussed on the understanding of feedback effects on brand extension on parent brand ( Dwivedi & Merrilees, 2013a). Brand equity is the additional value acquired by giving a brand name to a product (Farquhar, 1989). When a standard quality parent brand introduces a successful brand extension positive reciprocal effect is observed (Chen & Liu, 2004). It has been established that some of the effect caused by brand extension on the brand equity of parent brand is due to the change in customer perception regarding brand associations. Change in parent value equity influences the parent brand equity. There are few empirical studies which have shown that successful extensions helps to improve the valuation of standard quality parent brand but do not cause any change in the valuation of high quality parent brand. Also an unsuccessful brand extension did not decrease the valuation of good quality or regular quality parent brand (Zimmer & Bhat, 2004).

The previous work on brand extension is limited to consumer evaluation of brand extensions and the study of variables which affect the attitude towards brand extensions. Especially in India the work in this area is restricted to evaluation of brand extensions in FMCG products (Kaur & Pandit, 2015). Very few studies (Dwivedi & Merrilees, 2013a; Dwivedi & Merrilees, 2013b) have focussed on the reciprocal effects of brand extension on parent brand equity.

There is also a dearth of literature where consumer evaluation of brand extension is done in respect of demographic variables such as gender, marital status, age, income, profession and qualification.

Another key limitation is that the prior work done on brand extension have only taken student samples (Aaker & Keller , 1990 ; Kaur & Pandit , 2014 ; Dwivedi & Merrilees , 2013b; Sunde & Brodie , 1993; Buil , Chernatony & Hem , 2009 ; Martinez & Chernatony , 2004; Bottomley & Doyle , 1996) . Hence there are issues in the generalization. By conducting research in other data sets we can increase the chances of generalizability of results. Majority of the studies analyzing brand extension and its feedback effects on brand equity are based on hypothetical extension of parent brand (Dwivedi & Merrilees, 2013b) which may suffer from the limitation of weak brand association. Relative importance of factors which affect consumer evaluation of brand extension is yet to be analyzed.

#### 1.7 Focus of the study

Majority of the studies on brand extensions were only limited to western countries which may have fewer applications in Indian context. This study focuses on

understanding consumer evaluation of brand extension in Indian FMCG sector. The research is one of its kinds because it has focussed on analyzing the factors which affect brand extension and simultaneously the impact of brand extension on brand equity is also evaluated. Framework presented in this study has tried to overcome the shortcomings and limitations of previous frameworks. Also the focus is on Indian FMCG sector which is growing sector in India. Study has also tried to analyze the relative importance of factors which effect evaluation of brand extension by the consumer.

The variables which are taken in the study to evaluate brand extension are:

- 1. Consumer Innovativeness
- 2. Perceived Risk
- 3. Parent Brand Reputation,
- 4. Perceived Fit &,
- 5. Brand Extension Advertisements

Brand equity is taken as a dependent variable. There are two schools of thought for measurement of brand equity i.e. consumer based brand equity (CBBE) and financial brand equity which is also called as firm based brand equity (FBBE). This research is focussed on measurement of consumer based brand equity. Consumer based brand equity is "the differential impact of brand awareness and brand knowledge on the consumer response to its marketing (Keller, 1993)." Customer based brand equity is developed in response to the familiarity of the brand, favourable and unique brand associations regarding the brand.

The brand and the extension which is included in the study is:

#### Fortune-Fortune Rice

Adani Wilmar introduced 'soyabean oil' in India with brand name Fortune. It was launched in the year 2000. The positioning of brand was done in such a manner so as to create awareness for health consciousness among Indian consumers. The brand was re-positioned in 2009 and the idea of "the joy of eating with loved ones" was introduced and the packaging of the entire brand was also overhauled.



Figure 1.1: Fortune Edible Oil and Fortune Rice

Source: Adani Wilmar website

The company extended its offering by launching diverse collection of Fortune Basmati Rice. It has been launched with its several variants like fortune super basmati rice, fortune traditional basmati rice, fortune everyday basmati rice, fortune biryani special basmati rice and fortune jubilee long grain aromatic rice. It is claimed to have high quality and is hygienically packed.

#### 1.8 Contribution and significance of study

Despite substantial investigation in the field of brand extensions there remains lack of empirical studies that examines its impact on parent brand equity. The study

considerably emphasizes the consumer evaluation of brand extension in Indian context and its effect on parent brand equity. The research is substantial in analyzing various factors which affect brand extension. Advertising of extension products is taken as one factor for evaluating brand extensions unlike prior researches (Aaker & Keller, 1990; Dwivedi & Merrilees, 2013a; Sunde & Brodie, 1993; Buil, Chernatony & Hem, 2009; Bottomley & Doyle, 1996). The incorporation of advertising as a factor in present research has demonstrated additional benefits for marketers. There are few studies which have analyzed the role of advertising in brand extensions (Volckner et al. 2008; Martinez, 2009; Kaur & Pandit, 2015).

Study has focussed on a recent brand extension of Indian FMCG brand. Since the extension product taken has very high brand recall the study is able to gather the advantage of giving the enhanced description of brand extension.

Another key contribution of the study is the feedback effects on brand equity are demonstrated with the help of real brand extensions of Indian market. Emergence of Asian region of the world as an economic power house has enthused the interest of researchers into the investigation of behaviour of Asian consumer towards Asian brands (Dwivedi & Merrilees, 2013b). The sample of the study is also diverse. Such samples help to provide generalizability to the results.

The study has addressed various prior research gaps by proposing and testing the framework for brand extension evaluation and its impact on brand equity.

#### 1.9 Key Terms Defined

The following definitions guided the study:

**Brand Extensions:** "Using the current brand name to enter a new product class" (Aaker & Keller, 1990).

**Perceived Fit:** "The consistency between extension product and parent brand as perceived by the consumer" (Aaker & Keller, 1990).

**Consumer Innovativeness:** "Consumer innovativeness is one's propensity to adopt new ideas or products relatively earlier than other members of a social system" (Klink & Athaide, 2010).

**Perceived Risk:** "It is consumer experience pre – purchase uncertainty regarding the type and degree of expected loss resulting from the purchase and use of the product" (Cox, 1967).

**Parent Brand:** "Company's original or core brand which is extended" (Aaker & Keller, 1990).

**Advertising:** "Any paid form of non personal presentation and promotion of ideas, goods, or services by an identified sponsor" (Armstrong and Kotler, 2000).

**Brand Equity:** "Brand equity is the set of brand assets and liabilities linked to the brand that add or subtract from the value provided by a product or service to a firm and to that firm's customers" (Aaker, 1991).

#### 1.10 Need for Research

Very limited studies have been conducted in the area of brand extension which examines the role of multiple factors in the evaluation of brand extension. Moreover, there is almost absence of such studies especially in Indian FMCG sector context.

Furthermore, the present study also analyzes the role of key demographic variables in the process of brand extension evaluation.

#### 1.11 Research Objectives

- To understand customer perception for Brand Equity.
- To examine the effect of various factors on Brand Extension.
- To analyze the impact of Brand Extension on Brand Equity.
- To identify the relative importance of factors which affect brand extension.
- To examine the role of demographic variables in evaluation of brand extension.
- To propose a framework/model to analyze the impact of Brand Extension on Brand Equity in context of Indian FMCG industry.

#### 1.12 Scope of the Study

The scope of this study is limited to the Consumer Based Brand Equity (CBBE) in the process of evaluation of brand extension. The primary data has been collected from the respondents of the National Capital Region of Delhi during the four months period in 2016-17. Being the National Capital Delhi NCR attracts people of diverse socioeconomic background from all over India.

#### 1.13 Organization of Thesis

Chapter 1 provides a detailed discussion about the research topic, the background and nature of the study. It also comprises of focus of the study in which there is a detailed discussion about the brand chosen for the study and its respective extension.

Chapter 2 gives a brief overview of FMCG sector with special emphasis to India, different segments prevailing in Indian FMCG along with drivers of FMCG in India. Lastly there is a discussion of innovation in Indian FMCG and few latest brand extensions in Indian market.

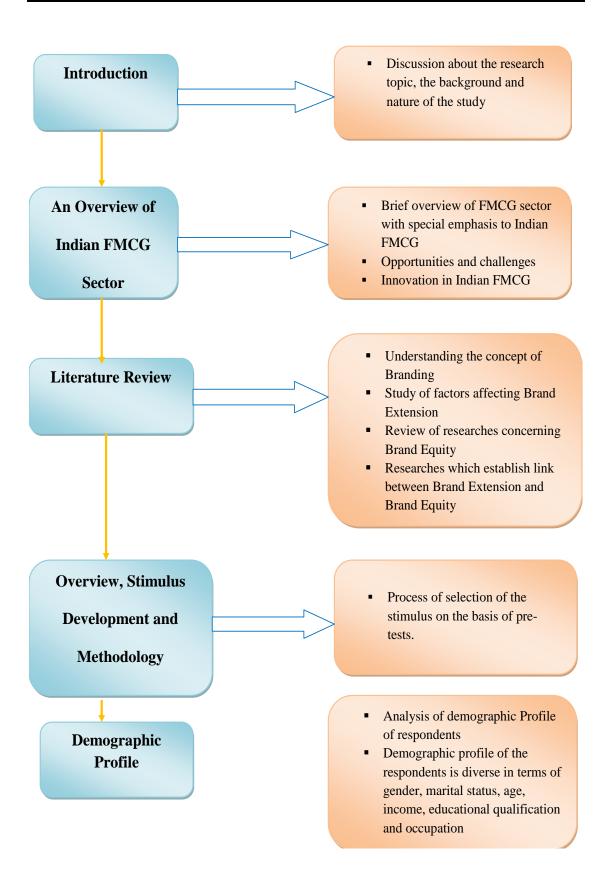
Chapter 3 gives an extensive review of the literature in the area of brand extension and brand equity. It systematically identifies various variables to analyze the impact of brand extension on brand equity.

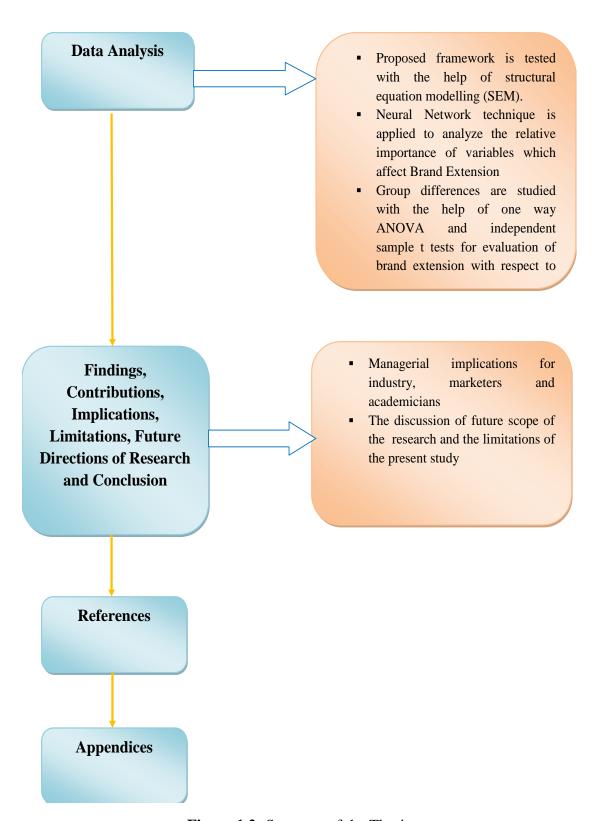
Chapter 4 presents process of stimulus development and methodology. Stimulus of our study is brand Fortune. It explains in detail the process used to arrive at the selected stimulus.

Chapter 5 analyzes the demographic profile of respondents where the gender, marital status, age, income, occupation and educational qualification have been presented. Demographic profile of the respondents is diverse in nature which helps to improve the applicability of results.

Chapter 6 gives a detailed discussion on data analysis and results. It also explains the process of data screening, reliability and validity testing of Independent sample T-Test and Analysis of Variance (ANOVA). Proposed framework is tested with the help of Structural Equation Modeling (SEM) which is applied using AMOS software and Neural Networks in SPSS.

Chapter 7 consists of the conclusion, managerial implications which cover the implication for industry, marketers and academicians followed by the discussion of limitations of the study and future directions of the research.





**Figure 1.2:** Structure of the Thesis

Chapter -1 Introduction

# 1.14 Summary

Brands are omnipresent and pervasive. They have become the essential and the core component in the marketing strategy of the firm. The successful brands constitute a link between the company and the customer. Worldwide brand extension strategy is followed to gain a competitive advantage and may have significant negative or positive effect on the brand equity of a firm. It is one such strategy which exploits the fame created by the parent brand in the market. Therefore, it is beneficial for firms to capitalise on the existing channels, communication mediums and positioning done by the parent brand.

In today's marketing environment there are various challenges and opportunities in branding. Since messages are quickly spread with the help of social media and various other digital platforms, word of mouth has modified its presence by transforming itself into electronic word of mouth, thus becoming a challenge for brands. However factors like online presence and e-mail marketing have also created opportunities for brands. Disposable incomes of consumers have increased in the past few years which serve as an opportunity for brands to grow. Family structures have evolved; more of nuclear families have emerged from the traditional joint family structure it has given rise to demand for more products. Consumer's today have more preference for branded products; it has lead to an enhanced market for the brands to grow.

# **CHAPTER -2**

# AN OVERVIEW OF FMCG SECTOR IN INDIA

- 2.1 FMCG an Overview
- 2.2 Indian FMCG Sector
- 2.3 Innovation in Indian FMCG
- 2.4 Brand Extension in Indian FMCG
- 2.5 Summary

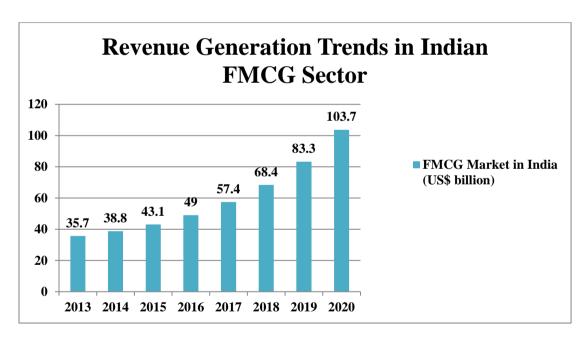
# 2.1 FMCG an Overview

Fast moving consumer goods (FMCG) sector is also known as consumer packaged goods sector. FMCG include those goods which are purchased and consumed frequently such as toiletries, packaged food products and pharmaceuticals. These goods are marketed, packed and distributed in short duration of time usually the life span is less than a year. Various categories included in FMCG are personal care, food and beverages, tobacco and clothing and apparel. These categories observe frequent purchases with recurrent expenditure. In comparison to slow moving consumer goods, FMCG are low in cost and are sold in volumes.

The environment in which FMCG prevail is highly competitive therefore FMCG companies focus on new products introduction or innovation in the existing products in order to save the existing market share. However innovation in FMCG is not limited to marketing and creating new products but it also includes improvements in the shopping process and the ultimate goal is to improve the ultimate shopping experience of the customer. Product life cycles are getting smaller, firms are launching new products and there is a pressure on marketers to quickly introduce new products. Therefore Innovation serves to be the survival tactics for the firms in this market. FMCG brands which rely on innovation and R&D as the means for their growth have a culture to take customer options for the creation of new product categories. Marketers believe that growth and demand are significant in emerging markets like India, Russia and Brazil.

# 2.2 Indian FMCG Sector

FMCG sector is identified as the fourth largest sector in Indian economy. Changing lifestyles, increasing per capita income and urbanization has given rise to the accelerated growth in this sector. Urban consumers contribute a significant portion of revenue generated by FMCG market in India which was around US\$ 29.4 billion in the year 2016-17(Fast Moving Consumer Goods, 2018). However in the recent years rural and semi-urban markets are also growing at a faster pace accounting for a significant portion of the industry. FMCG market in India is supposed to grow at a compounded annual growth rate (CAGR) of 20.6 per cent and therefore is expected to reach US\$ 103.7 billion by 2020 from US\$ 49 billion in 2016 (Fast Moving Consumer Goods, 2018).



**Figure 2.1:** Trends of Revenue generated by FMCG over the years

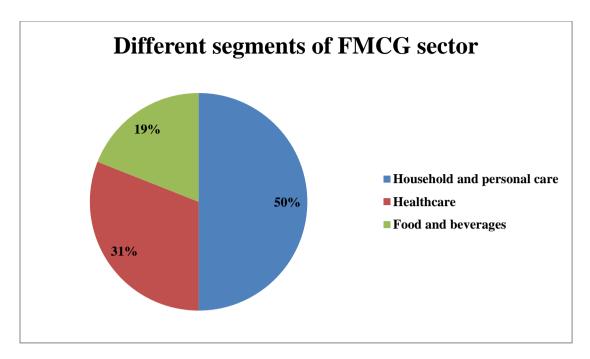
Source: Fast Moving Consumer Goods (2018) published by ibef.org

# Major segments of FMCG in India

FMCG sector comprises of packaged products, dairy and food products, drinks and household products. They are broadly divided in three product categories which

witness low price and high sales. Food and beverages consists of 19%, health care comprises of 31% and house hold and personal care accounts for 50% share of the sector (Indian FMCG Industry Analysis, 2018).

- Household & Personal care: Household and personal care goods states highest consumption among the customers. These products include detergents, soaps, hand washes, dish cleaners, toilet cleaners, floor cleaners, mosquito repellents and polishes. Detergents have shown a considerable increase in by growing at a rate of 10 to 11 percent annually (Saqib, 2017). This segment also consists of personal care which consists of perfumes, oral hygiene, hair care and skin care products.
- Healthcare: The second largest sub-segment in FMCG is healthcare which includes pharmaceutical products and other related equipments used by customer like glucometers, thermometers, and sphygmomanometer. Customers are more aware about various health problems and in order to avoid them the significant amount of income earned is spend on healthcare products.
- Food and beverages: This sub-segment is a large one which consists of processed foods like biscuits, chocolates and confectionaries and hot and cold beverages. An increase in the consumption of ready to eat foods is observed in last five years and they contribute to over \$1.1 billion of the food processing industry. In hot beverages tea dominates the preference of consumers however southern states of India prefer coffee over tea (Saqib, 2017).



**Figure 2.2:** Composition of FMCG sector in India as per Market Share Source: Fast Moving Consumer Goods (2018) published by ibef.org

FMCG sector contributes to a significant portion in India's GDP. This sector is illustrated by the presence of leading multinational firms. There is an amalgamation of organized and unorganized players. Growth in this sector is stimulated by increase in supply and demand. There are many growth drivers which have contributed to accelerate the growth of this sector. Prominent among them are:

1. Increase in Disposable Income: Rural market in India has witnessed a tremendous increase in disposable income which has created an increase in the demand for FMCG products. In the last two budgets government has focused on improvements in rural income levels which have caused a multiplier effect in the demand for FMCG goods in rural and semi-urban sector. These markets are believed to be a game changer for FMCG giants.

- 2. Use Of Smart Phones in Urban And Rural Areas In India: Smart phone in both rural and urban parts of the country has shown a remarkable increase from 389 million in 2016 to 420 million by 2017. Therefore FMCG companies are strengthening their business by offering their products online. Companies like Patanjali have launched their products online in January 2018 in order to take an advantage of this platform. FMCG brands have also used mobile phones for creative promotions in rural markets like Colgate has low unit packs for its mass sub-brands such as Cibaca that organized "Pocket Dentist Initiative" (July 2016 December 2017). In this scheme customer gives a missed call and the service provider in turn gives an access to dental care information.
- 3. GST is Favorable for FMCG Companies: Announcement of goods and services tax(GST) in five standard tax states i.e. 0%, 5%, 12%, 18% & 28% have caused a huge buzz in the industry. In this new regime the average taxes lie in the range of 18% to 20% which is relatively lower than previous taxes. Though there is a mixed effect with increase in taxes and decrease in taxes in different commodities. Taxes on edible oil, hair oil toothpaste and soap is reduced for detergents it has increased however few commodities like egg, milk, and curd, vegetable are kept free from taxes. Since taxes are lower for many commodities manufacturers have benefitted and they have passed on the benefits to their consumers in the form of reduced cost. Lower taxes in logistics have also helped manufacturers to improve their distribution system and it has given rise to boost in sales.
- **4.** *No More Price Wars:* There is a considerable decrease in price wars in FMCG sector unlike few years back where the firms like HUL and P&G were able to

articulate a clear price battle. Now the FMCG giants have assimilated the fact that consumers are literate enough to understand the non price aspects of the product such as quality, durability, variety and range of the product. This is fruitful in expanding the sector in terms of new options for the consumer and firms like Patanjali have entered the market with all together different positioning.

- 5. Changing Lifestyles: With the shift in the preferences of the consumers there is a transformation in the lifestyles which they aspire to lead. Health and wellness has emerged as a huge driver for growth of FMCG, today consumer is more conscious about lifestyle diseases such as obesity, hypertension, heart ailments and diabetes. Therefore consumers have changed their food preferences and they are more inclined to buy olive oil, light oils, low sodium salt, sugar free eatables and fiber rich food.
- 6. Availability and Accessibility: FMCG products are more available today than ever companies have invested a huge amount of money for building distribution channels. And the practice of a new strategy –"omnichannel strategy" has caused enormous increase in the purchase of these products. Increasing availability of FMCG products online has helped to increase their penetration. Online stores like Grofers, Big Basket and Amazon provides easy purchase & delivery options for the customers.

# Leading players of FMCG in India

FMCG market is a big market in India which is characterized by the presence of giant firms which occupy a considerable portion in the market with a good amount of market share. These firms include HUL, P&G, ITC, Nestle, Parle Agro, Amul and Patanjali.

- Hindustan Unilever Limited (HUL) is one of the top ten FMCG firms in India. It was incepted in 1933 with head office in Mumbai. The product portfolio of the company spans across food & beverages, household and personal care products. It has over 17000 employees; over 2 million shops have presence of HUL products.
- Procter and gamble is popularly known as P&G is a U.S based multinational company; it is listed in the stock exchange. Company is manufacturing products from food & beverages to personal care and has worked tremendously towards social causes by promotion of their 'shiksha' campaign.
- Tobacco Company and was later named as Indian Tobacco Company. Major source of revenue is tobacco and related products. However it has diversified in food products, personal care products and has entered into service industry through the chain of ITC hotels. It corporate office is in Kolkata, around 26000 employees are working for it and the company is listed in stock exchange.
- Nestle is another leading multinational giant in India with its headquarters in Switzerland. They are selling 2000 different brands under food and beverages categories across the globe. The company has eight manufacturing units in India and all are ISO certified. They are also working towards social cause and have helped around 15 million children to make their lives better.
- Parle Agro is also another firm with significant portion of market share in Indian FMCG industry; it was started in 1984 by chauhan family. Company has launched few best-selling products like Appy Fizz (apple drink), Frooti(mango drink) and

Bailley (packet drinking water). Company has a network of around 4000 channel partners.

- Amul has made strong presence in Indian market, with its intensive distribution channel and presence of various Amul authorized outlets which are allotted under franchise agreement. It was started in the year 1946, and is managed by Gujarat Co-operative Milk Marketing Federation Ltd. Product categories offered by Amul includes mainly food and beverages where in it is a leader in perishable products like milk, cheese, butter and ice creams.
- Patanjali is an Indian FMCG marketer which is headquartered in Haridwar. It has an interesting success story which articulates the quick growth of the firm in last 3-4 years. The firm has entered in almost all categories of FMCG and they also have widened their range of products by offering different varieties. Firm was founded by baba Ramdev in the year 2006. Ayurvedic nature of products is the USP (Unique selling proposition) of the firm. Also they have focussed on the slogan "Bharat Mein Nirmit" which means made in India. They are offering 444 products out of which 30 are food products and 45 products are cosmetic products.

### 2.3 Innovation in Indian FMCG

Indian FMCG sector in the past few years have witnessed the remarkable changes in the products being introduced in the market. Such change is attributed to the fact that the taste and preferences of Indian consumer are changing. There is an increase in FMCG brands who all are investing in health and wellness. Health and wellness is the emerging popular trend which has caused transformation in the shopping habits of

Indian consumer. Leading brands in FMCG have embraced this change and are reflecting such change in the product categories offered by them.

According to a report by Price Waterhouse Coopers (PWC) in February 2013, emerging health and wellness category is further divided into the following:

- 1. Better for You Products: are defined as those products which are healthy for consumption and are consumed in the form of various snacks like soups, biscuits and dairy products.
- 2. Naturally Healthy Products: include such products which are claimed to be kept fresh in their production process. Many FMCG marketers create their marketing and communication strategies in such form that they focus on 100 percent natural or farm fresh nature of these products. Example olive oil, soya-bean oil, fruit juices and green tea.
- 3. *Dietary Supplements*: This category of wellness products includes vitamin, mineral and protein supplements along with few ayurvedic product. These are intended to supplement the daily dietary requirements of an individual. Therefore they are available in the form of tablets, capsules and liquids.
- 4. Fortified Foods and Beverages: such foods and beverages contain few micronutrients. According to the definition of Food and Agricultural Organization of the United Nations (FAO) and the World Health Organization (WHO) fortification is "the practice of deliberately increasing the content of an essential micronutrient, i.e. vitamins and minerals (including trace elements) in a food irrespective of whether the nutrients were originally in the food before processing

or not, so as to improve the nutritional quality of the food supply and to provide a public health benefit with minimal risk to health". These include bread, tea, mineral water etc.

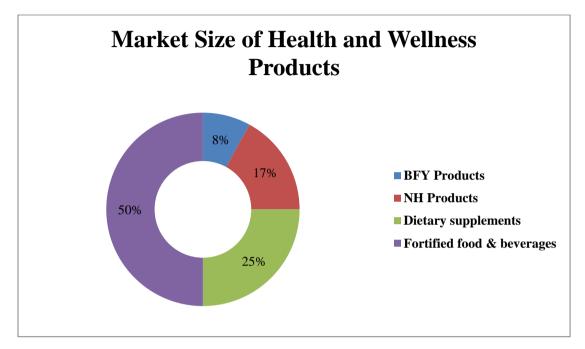


Figure 2.3: Market Size of Health and Wellness Products in percentage

Source: PwC-FICCI report Winds of change: the wellness consumer

# 2.4 Brand Extension in Indian FMCG

FMCG sector in last few years have shown tremendous increase in the launch of brand extensions. According to a report by Nielsen brand extensions in FMCG are five times more successful in comparison to new product launch. The study included 82 brand extensions in various FMCG categories and it was observed that brand extension caused 38% sales increase. Brand extensions are easily adopted by the market. FMCG giants like Nestle, Coca cola, Dabur, Marico and Godrej have launched various extensions in the last few years which are successful in Indian market. Nestle has launched Maggi Cuppa Mania and Maggi Bhuna masala under its

famous brand name Maggi. Edible oils companies like Saffola had launched Saffola oats (a healthy breakfast option for health conscious customers). Few latest brand extensions launched (in February-June 2018) as per the reports in India are:

 Table 2.1: Latest Brand Extensions Indian Market (February-June 2018)

Parent Brand/ Firm	Extension	Month of Launch
Parag Milk Foods	Entered into the category of deserts by the launch of misthi doi under Gowardhan brand.	June, 2018
ITC	Extended into liquid milk pouches segment under the brand Aashirvaad Svasti with the launch of Aashirvaad Svasti Milk.	March, 2018
Amul	First irish drink mocktail in various flavours coffee, caramel. Hazelnut, milk cream and chocolate.	March, 2018
Big Basket India's	Leading online supermarket chain has launched sunflower, coconut, peanut, sesame and safflower oils under its Gooddiet range.	February, 2018

Source: Newspaper reports February-June 2018

# 2.5 Summary

FMCG sector is a significant sector in terms of GDP contribution to Indian economy. It is characterized by thousands of products which are consumed daily by the consumer. Firms like P&G, Nestle, ITC, Parle Agro, Amul and Patanjali have captured a considerable amount of market share in Indian market. There are several growth drivers for such tremendous increase in the interest of big business giants who have expanded their operations in FMCG sector. The sector has promised continuous growth over the last few years. Rural market in India is still considered as an untapped market which gives firms a huge potential for further expansion and diversification.

FMCG sector in India has shown tremendous intensification in terms of the innovation and introduction of new categories like fortified foods and dietary supplements. Standard of living of the Indian consumer has changed which has given rise to the needs of such products which assure them a healthy lifestyle. The sector is also characterized with the use of brand extension strategy by many of the firms. Almost every successful firm has introduced brand extension in some or the other form (e.g Parle Agro introduced Frooti Fizz as an aerated drink in their beverages category, Amul has launched mocktails in coffee and caramel flavours and ITC has launched milk in the brand name of Aashrivad Svasti Milk etc). The effect of brand extension strategy is easily observed in fast moving consumer goods, since the shelf life of product is low and the volume of consumption is more. However, the success of the extension product in FMCG relies on the popularity of the parent brand and the quality perceptions associated with the parent brand.

# **CHAPTER -3**

# LITERATURE REVIEW

3.1	Branc	J

- 3.2 Factors Affecting Brand Extension
  - 3.2.1 Consumer Innovativeness
  - 3.2.2 Perceived Risk
  - 3.2.3 Parent Brand Reputation
  - 3.2.4 Perceived Fit
  - 3.2.5 Brand Extension Advertisements
- 3.3 Brand Equity
- 3.4 Brand Loyalty
- 3.5 Brand Association
- 3.6 Brand Awareness
- 3.7 Perceived Quality
- 3.8 Brand Extension and Brand Equity
- 3.9 Summary

### 3.1 Brand

"A brand is not just a name, sign or symbol of a product but it's an invaluable asset to a company. A strong brand helps in escalating loyalty of customers which results in increased profits for the company" (Aaker, 1990). Brands offer a prospect for organizations to exploit their corporate competencies and engrave a unique identity in the heart and mind of a customer. Brand's identity is created by the characteristics and traits that hit the customer's mind when he/she is exposed to a particular brand name (Rein et al. 2006). Brands are the bundle of emotional and functional values which assure unique experience to the customers. A brand is not a product rather it gives identity to the product in space and time (Kapferer, 1997). Marketer initiates the branding process however it is argued that branding is not something which is done to the consumers. Consumers are the receivers of marketing information passively and they provide meaning to the marketing messages, therefore they are the co-creators of meaning of the brand. The mental vision which is created by the customer is termed as brand image (Abosag, Roper & Hind, 2012).

The birth of branding is attributed to providing differentiation to the products and services offered by the organization. In the clutter of competitors, brand name helps to recognize a product along with adaption of marketing orientation instead of sales orientation (Pike & Bianchi, 2016). Creation of brand occurs primarily through various types of communication which include several strategies that transfer meaning from product to customer and also from one person to other. Successful brand management orbits around selected meaning of the brand and reinforcing that meaning. The idea is based on the fact that consumer learning process is aided when the communication which concerns brand delivers a clear and steady message of

brand's meaning and identity. Successful brands carry an identical perception of consumer and firm about the brand. In the modern era the brands are not managed alone by marketers but they are co-created by the interaction with the consumers (Pitt et al. 2006). Consumers are in constant state of dialogue with the organization and create a beneficial association with the company by demonstrating loyalty. Digital era has changed the communication altogether, internet heightens the complexities of brand meaning and such connectivity increases the importance of brand for consumers (Campbell & Keller, 2003).

Brand image is explained with the help of brand concept framework (BCM) given by Park et.al (1986). The framework guides the manner in which brand image is selected, implemented and controlled during the course of time. The framework defines that there should be a specific abstract concept on which the brand should be built and promoted. Researchers have suggested three types of brand concepts i.e. symbolic, experiential and functional. Symbolic concept brands fulfil internally generated needs, membership in groups and ego identification. Experiential concept brands fulfil the needs of pleasure and variety or cognitive motivation. Lastly functional concept brands are mainly focussed on consumption related needs and solving consumption linked problems. It also has been suggested that once a concept is selected for a brand it should be maintained throughout the life of a brand (Park et al. 1986). According to brand concept framework (BCM), a brand moves through three stages i.e. introduction, elaboration and fortification. First stage is concerned with introduction of brand concept in the market followed by elaboration wherein the concept of brand is positioned properly by articulating the concept in more elaborate manner. Last stage comprises of reinforcement of the brand and the image communicated in the previous two stages is strengthened. It also is accompanied by extending the brand

concept to the products outside the initial product class which can be done through brand extension. Brands must be extended within the frames of their initial brand concepts (Thorbjornsen, 2005).

The level of consumer attachment with the brand is measured by a concept called as brand strength (Wood, 2000). Brand strength is one of the approaches to articulate brand equity. It is defined as behavioural significance for internal and external stakeholders. In the perspective of internal and external brand strength, a fourfold matrix has been proposed by Burmann and Riley (2009). It shows there are four types of brand strength i.e. potentially winning brands, champion brands, endangered brands and loser brands (Figure 3.1).



Figure 3.1: Types of Brand Strength

Source: Burmann and Riley, 2009

**Potentially winning brands:** are the brands which carry higher levels of internal strength and lower levels of external strength. Such situation is often a starting point for the firms which are trying to create brand equity. Though the employees of the firm are highly committed it is not reflected in the market. A good example is Apple, the brand was not successful in its initial phase even though it carried a good internal essence but still had limited market acceptance.

**Champion brands:** These are the brands which carry high levels of external and internal brand strength. They are the brands with high internal competence and consumers have a strong and attractive mental positioning of the brand. Such brand offers exceptional growth potential.

Endangered brands: Endangered brands are the brands with low internal strength and high external strength. Therefore these brands have good acceptance in the market but inner substance is weak i.e. employees are not committed towards brand. Thus in long run it affects the external brand strength therefore the sales of the brand are diminished.

Loser Brands: These are the brands with low levels of external and internal brand strength. The brand has limited acceptance in the market, and it has very low growth potential. Older brands with inconsistency in communication and product delivery fall in this category. A good example is Bata, it was a popular brand in 90's but after 2000 the brand had lost focus and was suffering from low market acceptance as well as the quality issues in the product through the company changed their pricing and promotion strategies and somehow regained a sizeable recognition in the market.

Recognized brands in the market also carry a risk of becoming tired as the marketing environment changes. These changes require strategic decision making to uphold long-term brand equity for firm. Brand life cycle (BLC) is used to describe timeline of a brand. The life of profitable brands can be extended by employing various strategies. Another model was developed by Young and Rubicam (1991) to comprehend brands. The model emphasizes the importance of differentiation in branding. Both the models are significant in understanding brands. There are two strategies to revitalize brands (Munthree, Bick & Abratt, 2006):

# 1. Repositioning of brand

### 2. Line Extensions

Business organizations take advantage of well-known brand names by practicing brand extension. Therefore to understand such essential concept researchers have developed several theories (Wu & Yen, 2007). Organisations constantly launch products in new product categories since it offers opportunities for organizations to grow. However this also brings the danger of failure of new products. Brand extension is viewed as a strategy to reduce such chances of failure. Firms attach logos, images and brand names to the extension products to ascertain that familiar branding facilitates consumers to integrate such associations with the already known associations of the parent brand. Transfer of such associations to the external product increases the acceptance and trial of the brand by the consumer.

The product launch would be cheaper for the company in such situation and company can charge a higher price because of the utilization of existing brand equity of the parent brand (Ferguson, 2016). Hence the marketers who strive to achieve the transfer

of positive brand associations to the extension products are less likely to be unsuccessful in new product categories (Volckner & Sattler, 2006).

# 3.2 Factors Affecting Brand Extension

A brand name is the long lasting asset for the firm. Several ways are looked upon by marketing managers to leverage the value of brand through brand extension and some other means. The leveraging of brand's name and meaning results in the transfer of attitude, Knowledge, awareness, knowledge and behavioural intentions linked with the core brand to the extension product. And such transfer reduces the cost of extension (Martin, Stewart & Matta, 2005). Capitalizing popular brand name for new product categories was seen as a new strategy in the early 1980s. In 1979 Edward Tauber introduced the term brand extension .It was defined as using the brand of one product category to introduce a different product in another category (Tauber, 1988). Brand extension is therefore, a situation where a well-known brand name is used by a new product either in the same category or unrelated category (Kim & Lavack, 1996). It has been established that in India, more than eighty percent of new product additions are done with the help of brand extensions (Thamaraiselvan & Raja, 2008). Successful brands serve as resources for the firm which builds value for the firm. Different strategies are deployed by companies to extend their brand. Sometimes firms use individual brand names for different products offered by them which do not include the brand name of parent company e.g various brands of HUL. Umbrella branding is another strategy wherein single name is used for all the offered products.

Few firms use both the strategies by combining parent brand and an individual brand name by creating a sub-brand category like Cadbury Dairy Milk and Cadbury Oreo (Pitta & Katsanis, 1995). Tauber (1988) discussed that to grow and expand company enters new markets with new product launch otherwise the firm would no longer be able to survive. Therefore brand extension strategy can be utilized.

The concept of a brand extension was popularized way back in late 1970's. At that time the idea of new product introduction was prevalent in marketing. Marketers believed that to grow and expand a firm has to develop new products continuously. This idea was so strongly penetrated that marketers presumed that without new products a firm would eventually die. However, in 1980's Edward M. Tauber presented a study which comprised of the brands of major food companies. Results of the study inferred that the brand leverage was the successful choice of the strategy. It gave several significant advantages, i.e. the expenses for creating extension product awareness are minimal, the introduction of the new product increased sales for the parent brand, and advertising & awareness of an extension product can have a synergized effect on the core brand.

Line extensions is another category of brand extension. "Brand extensions involve the use of an established brand name to enter a new product category (Aaker & Keller, 1990)". However, line extensions involve the "use of an established brand name for a new offering in the same product category (Reddy et al., 1994)". Styles & Ambler, (1996) have modified the matrix given by Tauber, (1981) and have represented the two concepts in the form of a matrix.

**Product Category** 

# New Brand Flanker New Brand Name Brand Extension Line Extension New Existing

Figure 3.2: Growth Matrix

Source: Styles and Ambler, (1996)

Brand extensions are of two types:

### 1. Horizontal Extensions

# 2. Vertical Extensions

The horizontal brand extension involves using existing brand name into a product category entirely new for the firm (Kim et al. 2001; Joshi & Yadav, 2018). The example could be Fair and Lovely fairness cream introducing brand extension as Fair and Lovely face wash. In last couple of years many kinds of research have been carried out to understand the horizontal brand extension. Marketers are interested to know, how a horizontal brand extension emerge and succeed in the market.

Vertical Brand extensions are the extensions in which the new extension is similar to the existing product but at different quality level and price. Vertical brand extensions can be further explained by two different types of vertical extensions. Step up brand extension

is a kind of vertical brand extension when the extension product is introduced at higher quality and price. In step down brand extension the new extension, product is launched with lesser cost and quality level (Kim & Lavack, 1996). Horizontal brand extensions are the extensions which are done in unrelated category.

He & Li, (2010) have discussed vertical extensions based on technology where technology direction was taken as the moderating variable. The study suggests that consumers tend to evaluate a downward extension in a much positive manner than the upward extension. For every upward extension consumers face more risk and uncertainty. Ramanathan, (2013) has explored a slightly different dimension of brand extension. He has emphasized on offerings which are combination of goods and services. Offerings can be goods dominant offerings to goods dominant offerings (goods to goods extension) and service dominant offerings to service dominant offerings (service to service extension). Also extensions can be in the form of goods to service extensions and service to goods extension.

Previous researches have focused on theories of schema change and cognitive categorisation to understand the effects of brand extension i.e. in order to interpret whether there is a positive transfer or negative transfer effect of brand extension (Gurhan Canli & Maheshwaran, 1998). Schema theory reveals the formation of schemata and the changes which have undergone during time. Brands are designated as schemata and brand extensions are new schemata or the changes which occur in existing schemata. This theory has a significant importance in explaining brand extensions. Three different models of changes in schema are put forward in previous studies (Weber & Crocker, 1983).

The sub typing model: explains that the extensions which move away from the
notions and ideas of parent brand are stored in a separate cognitive category.

Therefore the extensions which are inconsistent with the concept of parent brand
do not cause any effect on the parent brand. However, the extensions which have
less deviation from the parent brand or are similar to parent brand will affect
parent brand evaluation.

- 2. The book-keeping model: articulates that the extensions which are conflicting with parent brand image change the opinions of the consumer about the parent brand. The new information about the brand is integrated with the existing information about the parent brand. Hence inconsistent brand extension evaluations cause changes in the assessment of parent brand.
- 3. The conversion model: according to this model minor differences between extension product and parent brand do not change the consumer perception of the parent brand though significant differences can cause that. Therefore the model emphasizes that brand extension with a little difference in quality either higher or lower will not change consumer perception of the parent brand. However, an extension with higher and lower quality difference does shift consumer evaluation of parent brand (Supphellen, Eismann & Hem, 2004). Though conversion model has not received much attention in literature and sub-typing and bookkeeping model are relatively more popular in brand extension literature.

Several theories in psychology have explained the role of brand extension in brand image formulation. Associative network theory has explained that brand image is a mental scheme which is formed by various concepts which are interlinked by several

associations (Anderson, 1983; Morrin, 1999). It has been explained that the extensions which are consistent with brand representation will not cause image dilution. However the representation of brand will be modified when the extensions are far different from attitudes or beliefs of current brand. The modification of brand image would cause the formation of subcategory inside brand schema and can cause the changes in brand associations. Low perceived fit between the core brand and extension brand changes the brand association for a particular brand. The information about new brand also changes the attitudes and beliefs about the brand. It has been explained in the bookkeeping model that the updating belief about brand family and core brand causes customers to reassess the brand image (Martinez & Pina, 2009). Also, if there is conflicting information about the quality aspect of the extension it may cause dilution in the core brand (Chen & Liu, 2004)

More favourable response to extensions can be achieved for the extensions that fit parent brand perceptions. Many firms launch brand extensions which do not follow the rule of perception fit. Such brands are said to be more elastic because they launch brand extension in the categories which are far different and which carry less common attributes of the existing brand or the products are altogether new for a market. One example could be of Yamaha, the firm was originally into the production of music instruments. In the year 1900 the company launched their first piano and the first acoustic guitar was produced in the year 1942. Their extended brand is Yamaha motorbikes; first motorbike was launched in 1954. It has been observed that some brands are more elastic while others are less elastic the idea behind such distinction is based on the concept associated with parent brand which can be functional or prestige based. Brands which are positioned on the basis of luxury and prestige such as Rado

are more elastic and can successfully expand in to new categories of products. However the brand which are positioned on the basis of functional capacity or attributes such as Titan (reliability, quality) are less elastic and they can be successfully extended to the same functional category. In the recent literature it has been observed that elasticity of brands is also based on analytic style of thinking where a customer focus on specific attributes. Alternatively customers can focus on more holistic approach where they connect brand extension to parent brand by several ways. It has been observed that when consumers use holistic thinking they tend to evaluate extensions more positively and perceived a good extension fit. Therefore this concept of brand elasticity has been defined with the help of characteristics of parent brand (functional and prestige) and style of thinking of consumer. Holistic and analytical consumers respond in similar manner to the brand extensions. Brands are believed to have abstract concept which can be stretched to distant categories of extension. For functional brands the concept of brand is not readily transferable to the distant brand extension. Analytic thinkers are unable to relate to product attributes and connect them to the extension brand. However holistic thinkers have several ways to connect the parent brand to the extension brand therefore it helps in creating more favourable brand extensions (Monga & John, 2010).

Review of literature for past 20 -25 years has shown that there are certain factors / variables which influence brand extensions. Aaker & Keller, (1990) presented the first study in which brand extensions were analyzed with the help of perceived quality, perceived fit and difficulty of making the extension. After their study similar studies were done by Nijssen & Hartman, (1994); Rajasekar D., (2014); Sunde & Brodie, (1993) and Bottomley & Doyle, (1996). But these replication studies were not able to

generate the same results. Kaur & Pandit, (2014) had found that after correcting for multi - co -linearity, Aaker & Keller's hypotheses were supported with exclusion of the extent of difficulty associated with extensions. Hem et al. (2003) has focussed on consumer innovativeness, perceived similarity, perceived risk and reputation as the variables influencing brand extension in case of durable goods, FMCG and services. Afzal Sarwat, (2013) has taken consumer innovativeness, perceived similarity, perceived risk and reputation as the variables in FMCG products. Thanwarani et al. (2014) has explained brand extension with the help of various factors such as brand association, parent brand credibility, parent brand experience, perceived quality, brand loyalty, fit & brand awareness. Soomro et al. (2013) has done a study in Pakistani context where the independent variables are Innovativeness, Multiple brand extensions, Parent brand consistency and brand extensions fit. Buil, Chernatony & Hem, (2009) have studied brand extension across three European countries i.e. Spain, U.K & Norway. Parent brand equity and consumer attitude towards brand extension were the dependent variables. Attitude towards extension was explained with the help of perceived quality, favourability of extension and possibility of trying extension.

Very few studies have explored brand extension in the Indian context. Thamaraiselvan and Raja, (2008) have studied brand extensions with the help of hypothetical extensions of popular Indian brands. They have identified that for FMCG brands like Colgate and Dettol perceived fit, service quality, perceived risk and high brand reputation was found to be significant. Though brand extension is a popular strategy these days for any firm, the success and failure of brand extensions is an important area of research. According a study by Young and Nielsen (1999) around eighty percent of brand extensions in FMCG sector in European countries are a

failure. An extension failure is not only the failure of the new addition, but it also affects the image of the established brand. Sometimes cannibalization also creates the problem for the companies; it refers to decrease in sales of the original brand due to competition faced from the extension product. If the brand extension is eroding the sales of the existing brand then also it is not an advisable strategy for the firm.

On the basis of extensive literature review four variables were selected for our proposed framework. The variables which we have taken in this study are:

- 1. Consumer innovativeness
- 2. Perceived risk
- 3. Parent brand reputation,
- 4. Perceived fit and,
- 5. Brand extension advertisements

### 3.2.1 Consumer Innovativeness

Innovation is one of the important issues in management research and is the matter of numerous studies (Hauser, Tellis, & Griffin 2006). Several studies on innovation focus on characteristics of new products, organizational innovation and response of consumer towards innovations. Innovation is the important means for the success of business organizations that is why there is a constant cycle of innovation undergone by most organizations regarding product design, marketing of products service delivery and supply chain (Pauwels, 2004). Most of the products fail in their early stage of product life cycle (Srinivasan, 2009); the reason for such a failure is lack of marketer's ability to understand the needs and wants of consumers. In other words, it

can be said that they are not able to conceptualize the consumer innovativeness. The concept of consumer innovativeness came forward in the early 1970s. Since then it has become an important issue because of diffusion of new products and time taken for the adoption of new products. Consumer innovativeness is studied by several scholars and researchers in different fields. Many firms rely on the success of new products for their survival and profitability (Kaushik & Rahman, 2014).

Innovativeness is measured by two different perspectives in marketing literature i.e. cross-sectional method and time of adoption method. The first method explains that the individuals who purchase the product in first few weeks or months of product launch are called consumer innovators. It also comprises of the individuals who constitute the initial percentage of market share for the newly launched product. The time of adoption is specified differently by different researchers. Peat, Gentry, and Brown (1975) defined "innovators as those who purchased a product in the first three and four months, respectively" while Haines (1966) defined "purchasers as those who have been in the market for several months". Feldman and Armstrong (1975) defined "early buyers as the first 2,500 to purchase an automobile innovation". Robertson (1968), Robertson and Kennedy (1968) and Bell (1963) used a "ten percent market penetration definition". However, cross-sectional method explains consumer innovators from number of new products from the pre-specified list purchased by a consumer at the time of survey (Midgley & Dowling, 1978).

Traditionally it was assumed that innovativeness remains constant throughout a person's lifetime. This was termed as generalist perspective however, this approach was not accepted in explaining consumer innovativeness. Consumer innovativeness

can also be related to consumer's interest in the particular category of products; also it can be influenced by society (Hirschman, 1980) hence it is not the personality trait. Contrary to generalist perspective another perspective comes into picture which was called particularist perspective. It explained consumer innovativeness as a particular domain of consumer interest this was also termed as domain-specific innovativeness.

"Consumer innovativeness is a tendency to procure different products and brands instead of adhering to past choices and consumption pattern" (Steenkamp et al. 1999). Willingness to adopt innovations in latest products and services in the market is related to new product acceptance. Bartels and Reinders (2011) have given an approach to study consumer innovativeness, according to them innovativeness is of three types i.e. domain specific consumer innovativeness, innate consumer innovativeness and actualized innovative behaviour of a consumer. Domain-specific consumer innovativeness is explained in terms of product category, innate consumer innovativeness is a general personality trait and actualized innovative consumer behaviour refers to the early adoption of products ahead of other people. It is interesting to observe that, majority researches in marketing focus on domain specific innovativeness. Consumers showing actualized innovative consumer behaviour are younger, are open to change and they are not nostalgic and non-ethnocentric (Steenkamp et al. 1999). Tellis et al. (2009) have studied 15 major economies and have put forward four important antecedents of consumer innovativeness across several countries i.e. frugality, suspiciousness, nostalgia and reluctance to spend effort and time for adoption of new products. It was also reported that innovative consumers are wealthier and are more educated. Specific psychological and social variables also

helps in explaining consumer innovativeness such as market mavenism, need for uniqueness, social identification and cultural values.

"Consumer innovativeness is the propensity of an individual to adopt new products, services and ideas relatively earlier than other members of a social system" (Klink & Athaide, 2010). If there were the absence of innovativeness, consumer behaviour would consist of routinized buying of a certain set of products. The willingness of a population of consumers to innovate provides dynamic nature to the markets. Rogers (1983) claims that consumer innovators feel a sense of comfort by taking the risk and this peculiar characteristic differentiates them from other individuals. Each one of us in our lives adopts new ideas or objects hence it can be said that up to some extent every consumer is an innovator (Hirschman, 1980). It is one of the important variables in brand extension study Hem et al. (2003) in their study have used consumer innovativeness and out of FMCG, durable goods and service it was significant for services. Innovative people are more risk averse therefore they show a positive attitude towards the brand extensions.

Relationship between acceptance of new products and domain-specific innovativeness is discussed in previous studies. Both brand extensions and new brands represent new product to a consumer therefore, as the innovative tendency of consumer increases, consumer evaluation of new product or the product with extended brand name also increases.

Klink & Athaide, (2010) demonstrated that brand extension is not favoured by innovative consumer. Also they discussed consumer tend to favour new brands as innovativeness increase. Consumer innovativeness does not play much role in

evaluation of product by the consumer but it reveals the response of innovators. Innovators are favourable towards new brands as compared to brand extension.

### 3.2.2 Perceived Risk

The concept of risk was discussed in 1920's in economics. It was used in decision making theories of finance, economics and decision sciences (Dowling & Staelin, 1994). Raymond Bauer in 1960 for the first time discussed the risk-taking behaviour of consumer in marketing, since then the risk aspect in purchase has explained consumer behaviour from altogether different perspective. Marketing managers now can strategize and can use elements of marketing mix with more precision (Bauer, 1960).

The risk in literature is defined through different perspectives. It has been said that risk is of two types' objective risk and subjective risk. Bauer (1960) has only emphasized on subjective risk (perceived risk). Since an average consumer has limited information about the product the number of trials of the product is also limited. Therefore unlike the areas where the vast amount of historical data is available the risk cannot be very well quantified or assessed. Even if we say that consumer has calculated the risk it is not the objective risk when he/she asses but it's the subjective impression associated with it. Objective and subjective risk raises a debate over a researcher's philosophical perspective.

Researchers believe that objective risk exists in theory but it cannot be measured. Money, time and physical harm can be estimated up to a level by researchers but psychological risk cannot be easily measured. Hence it is difficult to measure risk objectively; however subjectivity of risk or perceived risk is easy to measure, interpret and explain (Mitchell, 1999).

**Table 3.1:** Types of Risk in Consumer Behaviour

	Relativism	Positivism
Subjective Risk	It is the only risk that can be measured and which exists	Willing to accept its existence that can be measured and the need to measure it
Objective Risk	Not willing to admit the existence of risk	Attempts should be directed at measuring and conceptualising such kind of risk where possible

Source: Mitchell, (1999)

"Choice is the central problem of consumer behaviour" (Taylor, 1974). Since the outcome of choice is determined in future, it creates a sense of risk and uncertainty in the consumer. Any situation of choice making always involves two aspects of risk:

- 1. Uncertainty about the outcome
- 2. Uncertainty about the consequences of making mistake.

Acquiring more information about the product reduces the uncertainty about the outcome associated with the product. However reduction of amount at stake or choice put off reduces the uncertainty regarding consequences (Bauer, 1960).

"Risk is the individual perception or judgement of the likelihood that a probable loss could occur and the seriousness of the outcomes associated with such loss" (Turhan, 2014). Perceived risk encompasses various types of losses which makes it a multidimensional construct (Bauer, 1960; Taylor, 1974).

 Time risk: The risk associated with time spent in searching the product would be lost if the product does not perform well also additional amount of time wasted in repair or replacement of the product.

Financial risk: Monetary losses are incurred when product fails. It also contains a
risk that consumer pays more in anticipation of more benefits and the amount of
money wasted in return or exchange of the product if the customer is not satisfied
with it (Turhan, 2014).

- Physical risk: Sometimes when product fail their consumption and use may be dangerous to health.
- Social Risk: the risk that the purchase consumers make is not approved by their partner, relatives or friends (Turhan, 2014).
- Performance Risk: The performance of the product is not as expected by the customer.
- Psychological Risk: The discomfort, dissatisfaction, anxiety, worry and regret experienced by the customer as a result of purchasing and using the product.

Major studies focus on the two dimensions of risk which are relatively important and also are interdependent on each other i.e. financial and performance risk (Sweeney et al. 1999). Financial risk is the financial loss encountered by the individual when the product does not work properly. Performance risk is the failure to perform intended function or repair or additional expenditure required. Hence if the product faces performance failure the outcome is associated with financial risk. Firms try to reduce perceived risk in durable products by offering warranties. Though the existence of warranty does not nullify financial risk and it does not have any effect on perceived risk (Dowling, 1986).

The types or components of risk are perceived differently concerning importance in different products. Perception of risk for a person may differ in terms of particular product category for example a person may perceived that the purchase of air conditioner is risky while at the same time another person may perceived the purchase of air conditioner is not risky. It is termed as product category risk (PCR). On the other hand when consumer perceives few products relatively safer as compared to other products in a particular product class, such phenomenon is termed as product specific risk (PSR) (Dowling & Staelin, 1994).

In order to explain perceived risk the concept of involvement is significant to understand. Perceived risk is the consequence of product involvement. Involvement is the internal state that causes interest in a particular class. Involvement in literature is defined in two forms: enduring involvement and situational involvement. Enduring involvement is the ongoing interest for a particular product class irrespective of situation however situational involvement is increased the level of interest due to particular occasion (Dholakia, 2001). And the perceived risk in the form of social, functional and psychological risk is derived from the two types of involvement.

Perceived risk is different for goods and services. Services have inherent intangibility, provider consumer contact, and non standardisation. Therefore the quality and amount of information available to consumers are reduced consequently the perceived risk is amplified (Hem et al. 2003). Therefore it is evident that perceived risk is more in services as compared to goods (Zeithaml 1981). Also for durable goods the amount of financial risk associated is more; hence it can be said that perceived risk is high.

Peter and Ryan in 1976 discussed that multiplication of two components gives an overall indication of perceived risk:

# "Risk = probability of negative consequences occurring x Importance of negative consequences"

The degree of risk is not same for every consumer because it is the outcome of his or her thoughts and perceptions. Like risk the importance of loss will also weigh differently for every consumer. The equation is rather subjective for every consumer (Turhan, 2014).

Perceived risk in brand extension is distinct and is an important aspect of research. It is evaluated by the two components uncertainty of the outcome and uncertainty about consequences of making a mistake (Bauer, 1960). Consequences of making mistake are relatively more important, since the uncertainty of outcome is not much considerable in FMCG products. According to the equation proposed by Peter and Ryan (1976) the perceived risk is the negative consequence expected by purchasing an extension product, consumer's risk perception of extension purchase is inversely related to willingness to buy. In other words, it can be said that more the perceived risk lesser would be the evaluation of brand extension by the consumer.

## 3.2.3 Parent Brand Reputation

If we analyze the product with a closer view, we observe it has three levels i.e. the first level includes the tangible aspect of the product, which is the product itself and includes features, packaging and design etc. Second level comprises the guarantee, warranty and after sale service. The third level consists of quality perception, brand name and brand reputation (Martinez, 2004). The brand name is most important out of all intangible aspect of product therefore, companies work on advertising brand name, sign and symbol to create assets for them in long run. Marketers wish to build such a

reputation of brand which can be materialized for making several business strategies in long run.

Parent brand reputation has a very significant role to play during evaluation of extensions by the consumers. The researches done in the context of brand extension are focussed on parent brand. Parent brand is considered significant for the understanding of brand extension. However the studies on brand extension about parent brand are divided in two categories (Padmanabhan & Chandirasekaran, 2016):

#### 1. Forward effects of Parent Brand

### 2. Backward effects of Parent Brand

Studies on the forward effects of parent brand explain the impact of parent brand or parent brand reputation on brand extension. The studies on backward effects/ feedback effects explain the effect of success or failure of brand extension on parent brand reputation.

A well-known parent brand when launches its extension, extension will be favourably received due to its association with the trusted brand (Dwivedi & Merrilees, 2013a). If the consumer already is familiar with the brand name publicized by the new extension, less efforts can be made to popularize it rather than for an entirely new brand. However, consumer perception about parent brand is built by their knowledge about the parent brand. Initial opinions about the brand extension are formed from parent brand reputation, till consumer becomes familiar with the brand extension (Bhat & Reddy, 2001). Brand extension attitude is profoundly influenced by reputation, prestige and consumer affection for the brand (Park et al. 1991). A

positive image of the brand generates favourable perceptions of the new products good initial image of the brand delivers positive consumers' response towards the extension (Martinez & Pina, 2010). A favourable attitude toward the brand extension is shaped by superior quality perception about the parent brand (Sunde & Brodie, 1993). Similar perception of quality and the attitude towards extension was shown in various other studies (Dacin & Smith, 1994; Bottomley & Doyle, 1996). Brand extensions carrying high parent brand reputation provide consumers with risk relief and encourage more positive assessment of the extension brands (Hem et al. 2003).

It has been discussed that whether customer satisfaction and brand reputation are similar constructs. And in literature, it is being suggested that brand reputation is long run measure to value a brand rather than customer satisfaction. Brand reputation is defined as the perception of quality associated with a particular name. Zeithaml (1988) suggested that the brand reputation is described in terms of the perceived quality associated with the brand name. It has been observed that sometimes consumer associate a particular product with a brand (ex. Coca Cola, Parker, Colgate, etc) while in other situations the bundle of products are identified with a specific brand (ex. Dabur, IBM, LG etc). Brand reputation is not always related to product or service it is also related to the overall reputation of the company (Selnes, 1993).

A brand which has favourable image in the market embrace more positive attitude among its customers. New product bearing parent brand name in the market is accepted in the market by the transfer of positive attitude from the parent brand to its extension. Cue utilization theory explains that the parent brand image serves as the extrinsic quality cue which affects the attitude of the customer towards extension

brand. When the product is entirely new to the consumer, parent brand image serve as an extrinsic cue for the quality of the new product (Dwivedi Abhishek, 2010).

## 3.2.4 Perceived Fit

According to Tauber, (1988) perceived fit is a critical dimension which determines the success of a new product. The consistency of new item with parent brand is termed as perceptual fit (Aaker & Keller, 1990). In the study of brand extension perceived fit plays an important role. Perceived fit is significant to consider; research shows that coherence of extension product with parent brand image lead to the transfer of positive associations to the new extension (Loken et al. 2010; Bhat & Reddy, 2001). Perceived fit can be established in two ways i.e. a fit between the product category of parent brand and product category of brand extension another is a fit between the parent brand image and the image of brand extension (Walsh & Williams, 2016).

The perceived fit is sometimes based on the brand extension in the similar category of products offered by the parent brand, or complements of the products provided by the parent brand. The perceived fit is also amplified by marketing communications which provide a link between brand extension and the core brand, which gives consumers the possibility to explore the associations. According to Volcker & Sattler, (2006) perceived fit is more significant than the quality of parent brand, retailer acceptance and marketing support. Perceived fit is thought to be more important than the moderating variables which moderate the relationship between brand extension and perceived fit (Kim & John, 2008).

Perceived fit has importance in two forms it has a significant role in the evaluation of extensions and its reciprocal effect on the parent brand. When a firm launches a new product which is coherent with the original brand, consumers tend to perceive a higher fit between the brand extension and the core brand. It creates the positive associations in the mind of the customer and they perceive the product as credible which inculcates the willingness to buy them (Buil, Chernatony & Hem, 2009).

Perceived fit is explained by several perspectives in context of brand extension. Congruency of extension product with parent brand helps marketer in achieving fit (Bhat & Reddy, 1998). New markets are more attractive they have different product categories, also less competition and they cause less cannibalization to the parent brand. Therefore it can be said that perceived fit do not always comprises of particular attributes such as features of product and product category. Though it has been observed that perceived fit often rely on abstract attributes such as brand image and brand personality. In brand extension of symbolic brands brand personality fit plays significant role, since consumers believe that symbolic brands are a projection of their own personality and helps to affirm their identity (Swaminathan et al. 2009). Therefore a strong brand personality evokes consumer to buy a brand which is congruent with his own personality. When a symbolic brand launches a new extension consumer reassess that whether the extension helps to build and maintain their self identity, if not they simply reject the brand extension. And rejection could cause negative consequences to the parent brand. Symbolic brands are recognized on the basis of consumer's selfmonitoring disposition. Self presentation is defined as: "It is the degree to which a person observes and controls their expressive behaviour and self-presentation in accordance with social cues (O' Cass 2000)." High self- monitoring consumers believe

that symbolic brands helps in shaping their self-identity and therefore they assess perceive fit more closely. It has been established in several studies (Nan, 2006; Bhat & Reddy, 2001) that positive effect towards brand extension increases the purchase intention and makes a brand extension successful. Personality fit of brand causes positive effect towards brand extension in symbolic brands and increases the purchase intention and shapes the overall success of brand extension. Poor fit hinders the favourable response of consumer towards the brand extension (Ferguson, 2016).

Brand extension with a good fit inherits associations of the parent brand which reinforce the existing image of parent brand and build a more favourable attitude for it. However, an extension with poor fit decreases parent brand credibility (Zimmer & Bhat, 2004). A high perceived fit between parent brand and extension product is required to take advantage of the equity of parent brand (Swaminathan, 2003). Evidence from previous extensions has show that higher fit is associated with positive evaluation of brand extension (Bhat & Reddy, 2001). Several studies shows that perceived fit positively effects brand extension (Aaker & Keller, 1990; Martinez & Chernatony, 2004; Buil et al. 2009; Park et al. 1991; Kaur & Pandit, 2014) and services (Hem et al. 2003; Dwivedi & Merrilees, 2013a; Dwivedi & Merrilees, 2013b).

It has been discussed in the literature that the negative consequence to the brand image would be high if the perceived fit is less. However if sometimes the fit is minimal the extension is perceived to be a sub-type of the brand which is distanced from the brand. There are several other variables which moderate the relationship of perceived fit with the brand extension such as accessibility of information and motivation of individuals (Martinez, 2003).

The perceived fit is viewed differently for vertical and horizontal brand extension. The consumer perceives a higher fit between the parent brand and extended brand. It has been argued that vertical extensions would always have a good fit regarding product category similarity but brand image similarity could differ and can have a major impact on the consumer evaluation of brand extension. On the other hand, Pitta and Katsanis (1995) observed that horizontal brand extensions are naturally more distant from parent brand when compared with vertical brand extensions because the category of the product differs. Also, the halo effect of core brand is reduced by brand extensions. Martinez and Pina (2009) observed that a negative impact on consumers' evaluations of brand extensions is caused by a lesser fit between brand extension and the parent brand in horizontal brand extension. However, if brand extension and the parent brand share a high perceived fit, it yields a positive impact on the consumer evaluation of horizontal brand extensions (Chung and Kim, 2014). Various studies in the literature have recommended that perceived fit shared by the parent the brand extension and the parent brand temperate the relationship between brand trust and brand extension evaluation. Boush and Loken (1991) examined vertical and horizontal extension with the help of brand trust. Since the consumer perceives vertical brand extensions to be more similar to the original brand, therefore it was discovered that brand trust had vital significance in vertical brand extension as compared to the horizontal brand extension. In another study by Musante (2007) it was empirically established that consumer perceives a similarity between the brand extension and the original/core brand in vertical brand extension. It indicates that similarity can act as moderator between brand trust and evaluation of brand extension by the consumer (Chung & Kim, 2014).

Perceived fit consist of brand concept consistency and perceived similarity. The association between core brand and the features of brand extension is termed as product similarity. "Concept consistency is the ability of extension product to accommodate the brand concept (Park .C, 1991)."

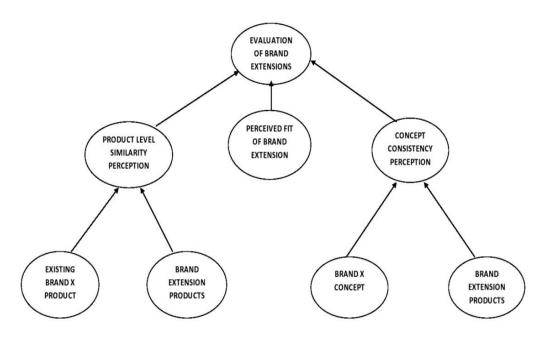


Figure 3.3: Brand Extension Evaluation

Source: Park .C, (1991)

**Product similarity** is termed as "the degree to which consumers perceive the extension as similar to the other products offered by the brand concerning situations in which they are used and the need they satisfy (Smith & Park, 1992)." Product feature similarity is the "identification of the relationships between product extensions and the brand's existing products, whether concrete (feature correlations, attribute matching) or abstract (shared usage situations) (Park et al. 1991)." Many other studies such as MacInnis & Nakamoto, (1990); Hem et al. (2003); Afzal Sarwat, (2013)

reported that the relationship between consumer evaluations of brand extensions and product feature similarity is positive and significant.

**Brand Concept consistency** is another essential component of perceived fit. Brand extension can hold the original brand concept. Whether an extension product is seen as consistent with the brand concept is on the basis of the brand associations and their desirability inherited by extension product from the parent brand (Park et al. 1991).

### 3.2.5 Brand Extension Advertisements

The first formal advertising model (AIDA) was given by St. Elmo Lewis in 1898. Since then literature has emphasized on frequency, scheduling and market response of advertisements. Vakratsas & Ambler, (1999) have explained the framework regarding working of advertisements. Various models are formulated to explain the effect of advertisements.

The measures of purchasing behaviour such as sales and market share are directly linked to advertising, price and promotion methods as explained in *Market response models*.

Cognitive informational model assumes that advertising does not change the preferences of consumers their decisions are rational. Advertising provides information and reduces search costs.

Pure effects model, states that the preferences of the consumer are formed on the basis of elements such as emotions, liking and feelings which are introduced by advertisement rather than the information attained from parent brand attributes (Vakratsas & Ambler, 1999). The concept of the hierarchy of effects is given by

Persuasive hierarchy model; theory of hierarchy of effects explains the advertising influence on the consumer behaviour toward brand extensions. It says that "the aim of advertising is not to sell a product but to create its awareness in the market." It is done by articulating the presence of the brand in market along with its features (Martinez et al. 2009). In addition to the theory of hierarchy of effects researchers consider dual mediation hypothesis (DMH) to understand the impact of marketing communication on consumer attitudes. DMH suggests that persuasive communication either follows a central route or peripheral route. Central route focus on the content of the message which builds up brand cognitions, that helps in mediating the impact of attitude towards advertisement on the attitude towards the brand. Since, consumers pay attention to cues like music and visual elements of advertisement, peripheral route proposes a direct connection of attitude towards advertisement and attitude towards the brand. Repeated communication about labeling and packaging positively influence moderately unrelated brand extensions however highly unrelated brand extensions are invoked by the central route of persuasion (Lane, 2000).

Advertising is the most visible form of marketing communication (Buil et al. 2013). Advertising does create awareness and enhances the chances of remembering the brand by a consumer but sometimes such effects are diluted by the competitive clutter. In such case, the familiarity of the product plays an important role in enhancing the effect of messages of advertisers. Established brands enjoy several advantages in marketplace advertising. Exposure to competitive advertising does not affect consumer's memory for advertising of familiar brands (Kent & Allen, 1994).

Advertising impacts the consumers by format and kind which helps in shaping consumer attitude. Advertising agencies have identified that there are two types of advertising formats emotional and informational. They are a useful tool for strategic advertising management. Emotional advertising is designed to appeal emotions of the customer by using various elements such as music, drama, story and other strategies which induce emotions. On the other hand, informational advertisements are designed to appeal to the cognition of the customer by using information and rational arguments supporting brand attributes and beliefs (Yoo & Macinnis, 2005). Advertising that elaborates the features of brand extension have distinct effects. Distancing the extension from parent brand reduces the problems associated with low perceived fit since the incongruence is eliminated. Therefore the extension is perceived by its own core benefits and attributes. It also helps in providing the information about the product. Such advertisements make the degree of fit less relevant and benefit extension evaluations (Dens & Pelsmacker, 2015).

Advertisements which are focussed on establishing link between the core brand and the extension brand helps the assimilation of brand extension in the existing brand category. Whenever a consumer evaluates a product, he/she does not collect all the possible information about the product but use some retrieval cues which helps in building links between brand extension and the core brand. Effects of cues on the evaluation of brand extensions were examined by several researchers (Schmitt & Dubé, 1992; Aaker & Keller, 1990).

Advertising messages are of two type's goal congruent and goal incongruent. They were analyzed, and it has been observed that in goal congruent advertising messages

the goal of brand extension which is common to the core brand is highlighted. On the other hand, the goal of brand extension which is not congruent with core brand is emphasized. The perceived fit is increased by using goal-congruent message (Bambauer et al. 2011). It has been observed that perceived fit tends to improve through the communication strategies which are used for brand extension. It helps in improving brand association. Advertising is one variable which allows the firms to manage brand associations. Chen and Liu (2004) discussed that advertising encourages consumers to try brand extensions as compared to sales promotions. The impact of marketing communications will certainly depend upon the kind of message and the investment. It has also been observed that brand extension helps in creating advertising effectiveness since the advertising effort for one product is spread over all the products related with the particular brand therefore, the demand is stimulated for all of them (Smith & Park, 1992).

The role of marketing communication differs in case of different products. It has been shown by Supphellen, Eismann and Hem, (2004) in context of flagship products these are products that consumers closely associate with the brand name. Flagship products carry strong association and beliefs these are highly resistant to change. Such associations are altered only when the extent of negative information is highly ambiguous which is true for line extensions. In case of concept extensions, the brands are not diluted by negatively inconsistent extension.

Advertising becomes strategically important when we understand it in terms of brand extension. Existing literature has shown that consumer attitude towards the extension product is affected by their attitude towards the advertising of parent brand and brand

extension advertising. It is also affected by the marketing support provided to the extension product (Kaur & Pandit, 2015). Advertising plays a vital role for creating awareness about the extensions. In order to understand such critical aspect of advertising, we need to understand its different forms i.e. advertising spillover occurs when two products are advertised separately but their brand name is same. In such situation advertising on one product can affect the other product since both carry a same brand name. Out of these two one act as a parent brand/ core brand and another can be an extension. When the advertising of parent brand (the brand initially launched by the firm) affects the extension it is called as forward spillover effect. And when the advertising of extension brand affects the core brand, it is called as reciprocal spillover effect. It has been observed that reciprocal spill over effect is likely to happen because of the presence of economies of information in advertising (Balachander & Ghose, 2003). Smith (1992) observed that advertising expenditures for umbrella-branded products are lower, which is again explained with economies of information. Aaker (1996) discussed such economies are recognized because "the fixed cost of sustaining a brand name can be spread across different businesses." The implication of this underlying principle is that umbrella-branded products assist each other for advertising purposes. Since the advertising of one product serve as an input for the information regarding other similar products hence it reduces the overall advertising expenditure for the firm. It has also been suggested that it helps in achieving economies of information because an advertised product produces a "halo effect" which enhances sales of other related products offered by that umbrella brand. Hence it can be said that positive spillover effects of advertising are observed both in the forward spillover and reciprocal

spill over (Balachander & Ghose, 2003). Advertising spill over in both the forms also increases the sales of other umbrella branded products. Since the advertising with the same brand name increases the customer awareness about the brand and it also reinforces the performance of the brand. Reinforcement increases the quality perception of the customer with respect to a particular brand. In this manner, even the products which are not advertised but are the part of a firm's umbrella branding portfolio does benefit and show increase in sales.

Relational advertising plays a very important role while advertising brand extensions. It helps customers to focus their attention on the cues from the parent brand. Relational advertising is useful when the perceived fit concerning the brand extension and parent brand is high. However when the fit is low then the brand extension will not be integrated into the existing cognitive structure (Dens & Pelsmacker, 2015). Repeated exposure to advertisements invokes strong brand associations of the parent brand and increases the likelihood for consumers to review their current brand beliefs and relate them to the extension brand (Lane & Jacobson, 1995). Advertising focussed on the brand extension makes consumers aware of the performance and therefore increases the perception of quality for parent brand and other umbrella brands (Volcker et al. 2008). Advertising is useful for extensions it not only induce favourable attitude towards new extension itself but, it also enhances parent brand attitudes. Companies with a weaker image can overcome the same by providing specific information about an extension with the help of advertisements (Dens & Pelsmacker, 2010).

Table 3.2: Summary of Major Researches on Brand Extension

Factor / Variable	Country	Author & Year	Findings	
Brand Extension	U.S	Tauber Edward M. (1988)	New product development was evaluated with the help of an observation of new products introduced over a period of 10 years. Out of 7000 new items introduced in this period only 93 items were able to generate minimal revenue.	
Brand Extension	-	Aaker and Keller , (1990)	Presented the first study in which brand extensions were analyzed and it was obtained that out of several independent variables Perceived quality and difficulty of making extension had strong positive effect on brand extension evaluation.	
Brand Extension	Norway	Hem, Chernatony and Iversen (2003)	Consumer innovatiness, perceived similarity, perceived risk and parent brand reputation as the variables influencing brand extension in case of durable goods, FMCG and services	
Brand Extension	India	Thamaraiselvan and Raja (2008)	Perceived fit, service quality, perceived risk and parent brand reputation were significant for brand extension evaluation.	
Brand Extension	Three European countries : Spain , U.K & Norway	Buil , Chernatony and Hem (2009)	Brand extension attitude was explained with the help of brand type, perceived fit and culture of the country. Perceived fit had significant effect on brand extension; brand type has no significant effect whereas there was difference in attitude of Spanish consumers towards brand extension as compared to U.K & Norway.	
Brand Extension	Karachi, Pakistan	Afzal Sarwat (2013)	Consumer innovativeness, perceived similarity, perceived risk and reputation of parent brand were taken as the variables which affect brand extension in FMCG products. Out of them Similarity, Brand Reputation and Consumer Innovativeness were found to be significant.	
Brand Extension	India	Kaur and Pandit (2014)	It was the replication of study done by Aaker and Keller (1990) in Indian context and This study observed that Quality was significant; The difficulty in making the extension was not significant.	
Brand Extension	India	Joshi and Yadav (2018)	Antecedents of brand extension was identified and their relative importance was evaluated with the help of ANN.	

Source: Author's compilation

## 3.3 Brand Equity

The literature on brand equity discusses customer perception and value creation by values, behaviour and beliefs of customer which is termed as customer-based brand equity (CBBE). Brand equity is a multi-construct variable. Reason for the focus on CBBE is that what customer think and feel about brand contribute to a much larger extent to brand equity (Anselmsson, Burt, & Tunca, 2017). David Aaker laid the ground for CBBE in early 90s who had suggested various measures for testing CBBE (Tasci, 2018). The recent development in marketing literature pertains to the identification of brands as intangible assets. Placing a brand in the financial statement has been a subject of ambiguity since the accounting treatment of brand valuation is not known in detail (Kapareliotis & Panopoulos, 2010). The idea of brand itself gives a view of creating differential effects compared to the generic alternatives available in the market (Swaminathan, 2016). Brand enable marketer to sell his products in more efficient manner. Brand equity though was understood and known was popularized and explained by David Aaker (1991) in the book titled – "Managing Brand Equity". The brand equity was outlined by Aaker with the help of a soap launched by P & G named ivory. This soap was articulated as soap free from impurities was white in colour and was positioned as the mild and gentle soap. This lead to the explanation about brand associations, the quality and awareness created by P & G by launching Ivory as a brand. Aaker defined –

"Brand equity is the set of brand assets and liabilities linked to the brand that add or subtract from the value provided by a product or service to a firm and to that firm's customers".

"Brand equity represents a condition where the consumer is familiar with the brand and recalls some favourable, strong, and distinctive brand associations (Pitta & Katsanis, 1995)."

Brand equity literature is primarily based on the perception of customer and value creation for the customer in the form of behavior and belief. The rationale behind such importance to the perception of a customer is based on the fact that what customer thinks and follows contributes to brand equity; therefore the motivation behind their action becomes essential. Within consumer based brand equity frameworks there are two different proposed models. In the first kind of model proposed by Aaker (1996) all the dimensions of brand equity run in the parallel manner whereas in the second kind of framework proposed by Keller (2001) is comparatively complex and consists of multistep process i.e. brand salience, brand image, performance, response and resonance (Anselmsson, 2017).

CBBE has been increasingly used in destination branding studies (Pike & Bianchi, 2016; Martin et al.2018) to measure the brand equity of tourist places. "Place branding" has created a new subject for researchers all over the world. Destination brand image has emerged as a new construct in this area but the existing CBBE constructs are equally important. CBBE includes brand quality, brand loyalty, brand image and brand awareness (Barnes et al.2014).

"Brand equity is a multidimensional concept. It consists of brand loyalty, brand association, perceived quality, brand awareness and other proprietary assets (Aaker 1991, 1996)." Several other researchers identified various dimensions of brand equity. Keller (1993) discussed brand knowledge which consisted of brand image and brand awareness, Shocker and Weitz (1988) proposed brand associations and brand loyalty.

There are two schools of thought for brand valuation. Qualitative variables and their measurements were specified in the first approach. It has gained popularity in early 90s when the researcher's like Keller (1991) and Aaker (1990) created models of brand equity. In these models consumer's point of view and his/ her perception was given importance. It was termed as customer-based brand equity. Though there were limitations in the qualitative aspects of brand valuation, but it was a breakthrough for the researchers all over the world and alternative approaches to study brand valuation were established. Another approach was financial brand equity; it is also called as firm based brand equity (FBBE) which evaluates the evaluation of the brand in terms of its share price. Market perceptions define consumer based brand equity (CBBE) (Christodoulides & Chernatony, 2010). Brand equity can also be measured through price elasticity of product. It was explained in the approach given by Feldwick (1993) that product's capability to attain premium pricing can be used to evaluate brand valuation. Accounting methodology for brands was proposed by Farquar and Ijiri (1993) their findings are based on separability between intangibles and tangibles. It was proposed by them that accounting for brands could be done in the same manner as other tangible assets. Motameni and Shahrokhi (1998) have given another brand equity approach, in this approach they have used several brand valuation methods reported in previous researches. They have taken in to account methods like replacement cost and corporate finance (DCF). They have considered valuation methods of companies like Interbrand, which calculate yearly brand equity for several brands. In this approach they have tried to combine quantitative and qualitative both kinds of variables for measurement of brand value. We in our frame work are evaluating customer-based view of brand equity.

Consumer based brand equity was explained by Kevin Keller (1993) he has defined it – "as the differential effect of brand knowledge on consumer response to the marketing of brand." For the purpose of measurement consumer based brand equity can be classified in direct and indirect approach. Direct approaches of brand equity measurement measure the consumer preferences or utilities. One of the direct approaches were given by Kamakura & Russel, (1993), they discussed the brand equity with the help of brand value. Decomposing brand value into tangible and intangible components results in two major sources of brand equity. Indirect approaches measure brand equity though various dimensions. Brand equity was measured by a scale developed by Lassar et al. (1995) the constructs which were taken for measurement were performance, social image, value, trustworthiness and attachment. Survey data was collected from the consumers for the two product categories i.e. Television monitors and watches. It was administered with the help of 17 item Likert scale with a convenience sample of 113 consumers which is inadequate for confirmatory factor analysis. Vazquez et. al. (2002) defines consumer based brand equity as the "overall utility that the consumer associates to the use and consumption of the brand including associations expressing both functional and symbolic utilities." Their empirical study involving consumer evaluations of athletic shoe brands verified the existence of four dimensions of brand utilities product functional utility, product symbolic utility, brand name functional utility and brand name symbolic utility (Christodoulides & Chernatony, 2010). With the further developments in brand equity area, Yoo & Donthu, (2001) developed a brand equity scale which was reliable and which expanded the theoretical dimensions given by Aaker, (1991) and Keller, (1993). They had collected data from American, Korean American and Korean consumers to validate the scale. The scale consisted of ten items reflecting three

dimensions of brand loyalty, perceived quality and brand awareness/ associations.

And a four-item scale to measure overall brand equity.

Brand equity is measured in the extensively in various studies (Yoo & Donthu, 2001; Washburn & Plank, 2002; Pappu et al.2005; Buil et al. 2008). According to the perspective of few major studies (Na et al., 1999; Taylor et al. 2003; Keller, 1993, 2007), brand equity is defined with the help of several variables such as:

- 1. Brand Loyalty
- 2. Brand association
- 3. Brand Awareness
- 4. Perceived Quality

## 3.4 Brand Loyalty

American marketing association has defined brand loyalty as "a situation in which consumer repeatedly buys the same manufacturer originated product or service over a period of time rather than buying from multiple suppliers within the category"

Brand loyalty pyramid given by David Aaker is divided into five levels. These levels group the consumers on the basis of loyalty shown by them towards a particular brand.

- 1. Brand Switchers/ Price sensitive buyers: is a group of consumers who are indifferent towards the brand and for them every brand is adequate if the price as perceived acceptable by them.
- 2. Habitual Buyer: is a group of consumers who are not dissatisfied with the brand but they are vulnerable to the competitors that can portray perceived benefits.

3. Satisfied Buyer: refers to a group of buyers who do not switch between the brands since they are satisfied with the brand and they do not want to incur switching costs. The switching costs which are identified are generally associated with loss of time, money, loss of loyalty advantages and performance risk associated with switching.

- 4. Likes the Brand: This group consist of group of buyers which are emotionally attached with the brand. They do not generally switch the brand because they are using product since a very long time and they have developed a good relationship with the brand.
- 5. Committed Buyer: Committed buyers occupy the topmost position in brand loyalty pyramid. These are the group of consumers who feel that brand is an expression of their personality. The brand is functionally vital for them. Also, they feel proud for discovering and using the brand.



Figure 3.4: Brand Loyalty Pyramid

Source: Aaker David (1991), Managing Brand Equity, Capitalizing on the value of Brand Name

Brand loyalty is defined as "a deeply held commitment to rebuy a preferred product or service consistently in future despite various influences and marketing efforts to cause switching behavior (Oliver, 1997)." Loyal customers towards a particular brand show more favorable responses than nonloyal customers towards a particular brand (Grover & Srinivasan 1992). Increase in brand loyalty cause increase in brand equity.

In several existing studies brand Loyalty is shown as one of the vital dimension of Brand Equity (Yoo & Donthu, 2001; Buil et al. 2008; Pappu et al. 2005; Washburn & Plank, 2002). But, more recently a debate has emerged, and researchers have argued that Brand Loyalty is the outcome of brand equity. Traditionally Brand loyalty was considered a behavioural construct, and it is related towards repeat purchase intention. However, brand equity provides a favourable outlook for the brand which may not necessarily indulge purchasing behaviour. Therefore intention towards purchase is the behavioural outcome of brand equity rather than its dimension (Nam et al. 2011).

#### 3.5 Brand Association

"Brand Association is defined as anything linked in memory to a brand Aaker (1991)." Various types of brand associations were defined by Keller, (1993) which includes functional, symbolic benefits, experiential product related, non-product related and overall brand attitudes. Product associations differ by strength, uniqueness, and favourability. Favourable brand associations are evoked by marketing. These associations create a positioning which articulates that the brand carries benefits and attributes that satisfy the needs of customer and also helps to build overall positive brand attitude.

Brand associations are the central part of a decision making for any brand as these are used by consumers to organize the process and regain information in their memory. They are used later as an aid in decision-making process. However, it is essential to understand, that all associations are not of equal importance (French & Smith, 2013). Therefore the associations which are strongly held which are unique to a brand and are favourably evaluated provide dominance over the competing brands (Keller, 1993). Brand association strength is required to create high consumer based brand equity.

The strength of association dictates the manner, in which brand will be perceived by the customer. The strength of associations is defined by the input of information in consumer memory which is called as encoding. And its linkage and maintenance as a part of brand image termed as storage. It is a function of quantity and intensity of processing done during encoding (i.e., thinking of a person regarding information) and the quality and nature of information processing during encoding (i.e., manner in which an individual consider the information).

Brands carry different associations which are linked to the minds of customer, and they help in image building for a brand. Keller, (1993) distinguished associations into three categories i.e. attributes, benefits, and attitudes. Associations for attribute can be classified in non product attributes and product attributes. Non-product attributes are external to product these can be price, information, product appearance and product packaging. Product attributes refer to specific functions which a consumer expects from a particular product or service.

The next categories of associations are the benefits that consumer expects would be given by a product or service. However, researchers have further classified Park et al.

(1986) and Keller, (1993) various categories of benefits i.e. symbolic benefit, functional benefits and experiential benefit. The benefits which are strongly related to the functioning of product and service are called functional benefits; they fulfil the basic needs of customers. Symbolic benefits are related to fashion products and prestige products and the brands which are socially visible (Keller, 1993). Experiential benefits are the benefits derived from the feelings consumers have when they consume product or service. Third category of brand associations is the brand attitude which can be conceptualized as the summary of brand in his memory. Attitude plays a vital role in defining consumer behaviour. It was discussed as an important construct in theory of planned behaviour (TPB). It is a function of belief of the consumer regarding brand and its important attributes and the judgment of such beliefs in the minds of the customer.

The uniqueness of brand association lies in the fact that they are unique selling proposition of a particular brand and are not shared by competitors. The positioning of the brand should be done in such a way that it gives provides consumers with a compelling reason to buy a brand.

Existing literature has shown that brand association can be categorized into two categories:

Product Associations – are defined in terms of product and its attributes. They
further consist of non-functional attribute associations and functional attribute
associations. Non-functional attribute is emotional association with the product,
user situation, symbolic association and price/value association in the perception

of the customer. Functional attribute comprises of functional benefits given by the product.

Organizational Associations – can be classified into corporate capability
associations and CSR associations. Corporate capability associations are linked to
company's proficiency in delivering and manufacturing its products and services
innovation in products, use of latest technology and skills of employees. CSR
associations refer to organizational obligations concerning society (Chen, 2001).

### 3.6 Brand Awareness

Brand awareness is "the ability for a buyer to recognize or recall that a brand is a member of a certain product category (Aaker, 1991)." "It is the strength of the brand node or traces in memory as reflected by consumer's ability to identify the brand under different conditions (Rossiter & Percy, 1987)".

Brand awareness is the extent to which the consumer can recognize or recall a brand in other words whether the consumer knows about a brand. Brand awareness paves the way for brand equity. The brand name creates memory nodes in the mind of the consumer and consumer link knowledge about brand to the brand name this leads to brand equity (Keller, 1993). Brand awareness provides an identification advantage to brand which facilitates consumer decision making. Brands which are known to the consumer are present in the consideration set of consumers and brand awareness is used as a heuristic in the purchase (MacDonald & Sharp 2000; Hoyer & Brown 1990). A known brand is likely to prefer by the consumer over unknown brands in the market (Hoyer & Brown 1990). Therefore the performance of known brand is better

than the lesser known brand. It has been identified in a study that incidental encounter of several brands in routine basis increases the frequency of exposure which in turn raises the chances of that brand being chosen by the customer, though such choice would not be consciously made (Ferraro et al. 2009). Familiar brands have better information recall as compared to unfamiliar ones (Esch et al. 2012). In a study by Kim et al. (2003) in the context of hotel industry, it has been reported that brand awareness positively affects sales.

Brand awareness is sometimes an undervalued component of brand equity. However, Brand awareness plays a vital role in shaping brand equity, it can affect perceptions and, attitudes and it also drives brand loyalty (Motameni & Shahrokhi, 1998). Brand Awareness reveals brand prominence in the mind of the customer. Brand awareness comprises of several levels (Aaker, 1996):



Figure 3.5: Levels of Brand Awareness

Source: Aaker, (1996)

 Unaware of the brand: The level or stage where a consumer is unaware of a particular brand in the market.

- Recognition: refers to the situation wherein the customer is familiar of the brand
  and has some past exposure towards the brand and he is able to remember one
  brand amongst others. It is a form of aided recall.
- Recall: refers to a situation when a product class is mentioned and the customer is able to remind a particular brand. It is a type of unaided recall.
- Top of the mind: It is the uppermost stage of brand awareness wherein the brand
  is dominated in the mind of the customer and it hits the conscious when ever
  applicable.

Brand awareness is understood by brand recognition and brand recall. It is consumer's ability to relate that the he has undergone a previous experience with the brand when he encounters the brand. It refers to the consumer's capability to discriminate the brand on the basis of been seen or heard about it previously. Brand recall however, is consumer's capability to reiterate the brand when a particular product category is conversed. In other words, if the consumer is able to accurately produce the brand from his/her memory, then brand recall is said to occur (Keller, 1993).

## 3.7 Perceived Quality

Perceived quality is "the consumer's judgment about a product's overall excellence or superiority". Customer-based brand equity considers perceived quality as an important dimension. It is defined as customer perception of the relative inferiority

and superiority of products and services of an organization and organization as a whole (Zeithaml, 1988).

Perceived quality is a relationship which is central to brand equity; it consists of a frame of orientation concerning competitor. In comparison to other alternative brands are identified on the basis of high quality, average quality or inferior quality (Motameni & Shahrokhi, 1998). It is considered as a primary aspect across CBBE frameworks (Farquhar, 1989; Keller, 1993; Dyson et al. 1996; Aaker, 1996). Customers evaluate perceived quality on the basis of product performance as well as the extent to which product adheres to the manufacturing standards prescribed (Beneke et al. 2013).

Consumers organize the information which they get from the product attributes which range from simple attributes to complex attributes. It is also obtained that attributes of the product can be categorized in to two types of information: extrinsic cues (product-related, not the physical product itself) and intrinsic cues (physical aspects of the product) (Zeithaml, 1988).

Perceived parent brand quality is a chief determinant of extension evaluations. Brands with high quality are well established, with an elaborate, strong, positive network of associations (schema) in consumers' memories (Dens & Pelsmacker, 2015). Perceived quality is termed as customer's perception and judgement of brand's excellence, esteem and superiority in terms of intended uses relative to other brands in the market. It is the primary construct of customer-based brand equity since it is associated with brand choice, purchase intent and his/ her willingness to pay price premium (Netemeyer et al. 2004). Quality is associated with brand therefore

consumer perception of quality forms an association in memory. Higher level of satisfaction induces a customer to choose the brand over competitors because of high brand recall (Yoo et al. 2000). It also accelerates the value equity and brand position. Hence it is one of the important elements of brand equity.

In the recent studies, brand equity is studied with the help of several different approaches. Different CBBE models were cross validated in the context of retail brands (Cifci et al. 2016). Comparison of Consumer based brand equity scales proposed by Nam et al. (2011) and Yoon and Donthu's (2001) was in Turkish and Spanish cultures in retail industry it has shown that Nam et al.'s scale has better validity than Yoo and Donthu's scale. However, both the scales were applicable in retail industry.

The present state of research defines that Brand Equity is an area which still undergo the possibility of redefinition and restructuring of existing models. Measurement of brand equity also can be done in different manner. CBBE Brand Equity model proposed by Aaker in 1991 was proposed in altogether different market. In last 25 years the customers have changed the flow of information, marketing communication techniques and role of information technology has transformed the consumer perception. Several aspects of branding still have potential of more work to be done. Digital marketing has given rise to numerous challenges for managing brands and also provided marketers with tools to track heart and minds of customer, and for monitoring their conversations. This has provided researchers with the opportunity to construct and analyze rich models of brand equity measurement and tracking (Swaminathan, 2016).

Table 3.3: Summary of Major Researches on Brand Equity

Factor / Variable	Country	Author & Year	Findings	
Brand Equity	-	Aaker, (1991) and (1996)	Brand equity is a wide concept it consist of brand association, brand loyalty, brand awareness, perceived quality and other proprietary assets.	
Brand Equity	-	Keller (1993)	Consumer based brand equity is explained with the help of direct and indirect approach. In the indirect approach potential sources of brand equity are reflected with the brand knowledge The direct approach estimate the effect of brand knowledge on consumer response to the elements of the marketing mix.	
Brand Equity	-	Lassar et al., (1995)	Authors have used five components i.e. Performance, image, value, trust and attachment to explain Brand Equity.	
Brand Equity	U.S & South Korea	Yoo and Donthu, (2001)	A path breaking study to define the scale of Brand Equity. The scale was prepared by taking three dimensions to explain brand equity i.e. Brand awareness/associations, Brand loyalty and perceived quality. The scale was generalizable in different cultures.	
Brand Equity	U.K & Spain	Buil, Chernatony and Martinez (2008)	It was identified that brand equity consists of perceived quality, brand awareness, brand loyalty and brand associations. Scale for measuring brand equity was devised and it was cross-nationally tested. The scale was invariable for both the countries.	
Brand Equity	U.K	Buil, Chernatony and Martinez (2013)	Study evaluated the Impact sales promotions and advertising on the creation of brand equity (Brand equity was measured using perceived quality, brand loyalty brand awareness and brand association)	
Brand Equity	Sweden	Anselmsson, Burt and Tunca (2017)	Researchers have compared three different brand equity models in order to understand retailer's brand equity. Best model out of the three corresponds to the brand resonance model given by Keller in 2001.	
Brand Equity	U.S	Tasci (2018)	Researcher tested the CBBE model proposed by Tasci (2016) and it was tested in 5 popular tourist destinations in U.S. The model was reconfigured adding satisfaction which yielded better results and it contributes to loyalty.	

Source: Author's compilation

## 3.8 Brand Extension and Brand Equity

Brand equity is termed as "the added value with which a particular brand bestows a product (Jones, 1986)." The notion of brand equity has gained substantial attention in past few years, the reason for such attention is the benefit or leverage which can be taken from a established brand. Leveraging brand equity can be done in three ways—buy it, build it or borrow it. Brand equity is made by creating positive brand evaluations and developing a consistent brand image. Borrowing brand equity can be done by extending brand names to new products i.e. brand extension which can further be categorized in to line extension and category extension. The existing brand name when is applied to existing category of firm it is termed as line extension (Farquhar, 1989). For example coca cola brand includes coca cola zero. The line extension generally involves a different flavour, different form or application for the brand. When existing brand name is applied to a new category it is called as category extension. Recent category extensions example includes horlicks entry in to a segment of oats which was initially a health drink brand. In order to extend a brand into new category three factors are needed (Tauber, 1981):

- 1. Perceptual fit: New product should be consistent with the parent brand.
- Competitive leverage: This kind of leverage is obtained when the new product is superior compared to other products in that category.
- 3. Benefit transfer: consumer desire that the benefits which are offered by the parent brand should be provided in the new category of products.

Buying of brand equity is another way to leverage it. Brand equity can be acquired by getting hold of a company its products and brands. One of the approaches is licensing

wherein firm gets the right to use someone else's brand on their product. Licensing sometimes helps to offer vital protection for a parent brand (Farquhar, 1989).

New product introductions are extensions of established brands in the market. Brand extension augments the diffusion of a brand in the market also it spread and creates awareness about novel uses of the brand. Brand extension if executed properly creates sources of revenue it also redefines the meaning of the brand. In this way, it helps in building brand equity (Dens & Pelsmacker, 2015).

Brand extension is affected by the equity of the parent brand. An extension product as compared to the new brand has relatively lower advertising and communication costs and higher sales since there is widespread awareness of the core brand in the market (Smith & Park, 1992). It has been observed that extensions which do not differ much in quality are easily accepted compared to extensions where there are large quality variations (Dacin & Smith, 1994). This provides marketers with a clue that brand equity of the parent brand should not be compromised by lowering the quality of products or by launching substandard products.

Brand equity and brand extension are linked by the reciprocal effects or the spillover effects shown by the extension brand concerning initial brand image (Martinez & Pina, 2010). A substantial amount of brand literature is focussed on explaining the reciprocal effects of brand extension on parent brand image. The effect caused by brand extension on the parent brand image is also termed as feedback effects (Dwivedi & Merrilees, 2013a). Reciprocal effects and feedback effects were explained in various studies in western context (Zimmer & Bhat, 2004; Grime et al. 2002 and Martinez & Chernatony, 2004) as well as Indian context (Dwivedi &

Merrilees, 2013b). Introduction of extension causes additional exposure to the parent brand which helps to create a more positive attitude for the parent brand (Zimmer & Bhat, 2004). It increases parent brand sales due to enrichment of consumer's perceptions of brand image with increased communication (Grime et al. 2002). Brand image is a multi-dimensional concept. Also, it is evident that it is not static, it is bound to change and influenced by the numerous decisions which are taken by the company (Martinez & Chernatony, 2004). It is established that weak parent brands should adopt brand extension strategy. However, when the parent brand is sufficiently strong brand extension can be designed. Also a considerable amount of investment in parent brand is needed before practicing brand extension (Dwivedi Abhishek, 2010).

Brand extension feedback effect in context of India was explained with the help of one of the most popular brand of India i.e. Amul and its hypothetical extension in restaurant sector (Dwivedi & Merrilees, 2013b). The study revealed similar results as were observed in the West. It was established that Brand extension attitude has a strong significant impact on the change in the brand equity of the parent brand. There are few recent studies which have understood the reciprocal effects caused by brand extension in the services sector. The backward impact of brand extension on the core brand was evaluated in the education sector with a research on university students. It has been identified that satellite branch of the main university has helped to bring strong brand identity. Findings of the study suggest that the Performance of extended brand makes a vital involvement for escalating the relationship between the extended brand image and identity of parent brand (Yuan et al. 2016).

Successful brand extensions provide several marketing benefits however failure can lead to negative perceptions. Therefore brand name dilution or enhancements of existing equity are of critical interest to marketing managers (Gurhan Canli & Maheswaran, 1998). Brand image is not a static concept it keeps on altering the new information about extension however if is of negative nature may distort the brand associations to a much larger extent. Though it does not change the overall attitude about the brand it does alter certain beliefs associated with the brand (Martinez, 2003).

Positive effects on brand equity exist only when a successful brand extension is introduced by an average quality (as compared to its competitors) parent brand (Keller & Aaker, 1992). As a result of favourable brand experience, the consumer evaluations of a successful parent brand will not significantly change (Chen & Liu, 2004). Any new product when introduced is tried by a heterogeneous group of consumers some of which are prior/ former users others are prior/ former non users. A successful brand extension gives favourable experience to both former users and non former users. Former users who are highly loyal to the brand will not show any significant change in case of successful extension. Low to moderate loyalty consumers also non prior users will certainly change their beliefs about the brand and are more prone to seek new brand extensions.

However, for unsuccessful extensions, the prior users can acquire negative information regarding the brand which can contradict their existing belief towards the brand. For non users the brand is not of much importance so negative association will not cause any effect in their evaluation of the parent brand (Chen & Liu, 2004).

According to Keller, (1993) extensions help the brand image of core brand by accelerating and improving the associations and favourability of brand expounding its business definition and its core benefits. Extending into a relatively new category generates added convenience value. Enhanced value perceptions bring changes in consumer brand evaluations which result in modifications caused in the brand equity (Dwivedi & Merrilees, 2013a).

Marketers can reinforce brand equity by introducing innovative products. Innovation helps in enhancing brand satisfaction, and it amplifies brand equity. Branding revolves around articulation of features of the brand. However, innovation adds to competitive advantage therefore, better innovative brand experience build favourable brand equity for the brand (Lin, 2015). Innovation can increase the attractiveness of the product and can increase the loyalty of existing customers. By introducing innovative line extensions, the parent brand develops a difference from the competitors. Innovations in the form of new brand extensions create new associations for the brand which are distinctive to the brand and which become the source for improved parent brand equity (Sinapuelas & Sisodiya, 2010).

Table 3.4: Summary of Researches on Brand extension and Brand Equity

Factor / Variable	Country	Author & Year	Findings
Brand extension and attitude towards parent brand	USA	Zimmer and Bhat (2004)	Brand extension enhance parent brand attitude regardless of its similarity or fit and quality.
Brand extension and brand equity	India	Dwivedi (2010)	A framework for analyzing brand extension feedback effects is presented.
Brand extension and brand equity	Australia	Dwivedi and Merrilees (2013a)	The relationship of brand extension attitude and the change in parent brand equity is mediated by change in parent value equity.
Brand extension and brand equity	India	Dwivedi and Merrilees (2013b)	Brand-extension attitude significantly impacts change in brand-equity and Parent brand trust cause a change in the brand equity of the parent brand.
Brand extension and brand equity	Egypt	Matarid, Youssef and Alsoud (2014)	Study was done on the FMCG goods in Egypt; the results reveal that brand extension has strong significant effect on consumer based brand equity.
Brand extension and brand equity	India	Joshi and Yadav (2017)	A framework/model is presented which exhibits the antecedents of brand extension and the subsequent effect of brand extension on brand equity is empirically validated with the help of two popular Indian FMCG brands.

Source: Author's compilation

## 3.9 Summary

The literature on branding can be diversified into various sub-areas ranging from brand satisfaction to brand equity. A brand has always been an important subject for

Chapter -3 Literature Review

academicians all over the world since it has direct implications for the marketers. They also follow and implement the concepts and theories build by the researchers. Brand equity therefore, is of utmost importance to the marketers. The literature on brand equity is segregated into the understanding of the concept from two different dimensions, i.e., consumer based brand equity, and firm-based brand equity. Firms can however; estimate financial brand equity through estimation of revenue and sales but, measurement of consumer based brand equity is a comprehensive exercise.

Therefore estimation of consumer based brand equity and related models and concepts are relevant for the practitioners. Consumer based brand equity (CBBE) measures the perception of a customer for the particular brand. Several scales are suggested by researchers for measuring CBBE. They are tested, re-tested, modified and reframed in context of different products and services. It is also observed that various antecedents affect brand equity. Out of several variables which affect brand equity, brand extension is observed to be one such important strategy which has spill-over effects on brand equity of the parent brand.

Existing researchers have identified the concept and importance of brand extension in developing markets. There are several studies which have tried to emphasize on several aspects of brand extension and factors affecting brand extension with the help of various real and hypothetical brands. Review of these studies provides inputs for the researchers to identify the underlying gaps and address these gaps in their forthcoming studies.

## **CHAPTER -4**

## RESEARCH METHODOLOGY

- 4.1 Overview
- **4.2 Stimulus Development**
- 4.3 Research Methodology
- 4.3.1 Research Gap
- **4.3.2 Research Questions**
- **4.3.3** Research Hypotheses
- 4.3.4 Research Design
- 4.3.5 Measures Used
- **4.3.6 Research Instrument**
- 4.3.7 Research Tools & Software Packages Used
- **4.4 Pilot Study**
- 4.5 Summary

#### 4.1 Overview

The focus of the study is to understand and evaluate the impact of brand extension on brand equity. The researcher has proposed a framework to empirically analyze the factors affecting brand extension and to further determine the impact caused by brand extension on brand equity of the parent brand. The relative importance of factors affecting brand extension is also examined. The stimulus for the study is a popular FMCG brand in India. FMCG market is a growing market in India which is observed to be the fourth largest sector in Indian economy in terms of market size. Therefore, it was appropriate to understand the effect of brand extension in a sector which has significant impact in our economy. Also, fast moving consumer goods market view quick procurement and volumes of products are purchased on daily basis, thus the effect of any strategy is easily observed and verified in such industry.

## **4.2 Stimulus Development**

The rationale of this research is to evaluate the impact of brand extension on brand equity in FMCG industry. The study initially considered five FMCG brands which extended their portfolio by using brand extension. Various pre-tests were conducted which finalized one brand and its respective brand extension which was considered for the final study. The brands which were included initially in the process of stimulus development for the research were:

- 1. Fortune
- 2. Fair & Lovely
- 3. Nivea

- 4. Saffola
- 5. Duracell

The respective extensions of these brands were:

- 1. Fortune Rice
- 2. Fair & Lovely Face Wash
- 3. Nivea Deo
- 4. Saffola Oats
- 5. Duracell Powermat
- Fortune is a flagship edible oil brand manufactured by Adani Wilmar which is joint venture between Singapore based Wilmar International group and Adani group based in India. Fortune is a popular brand among Indian households. It has several variants in edible oil category like Fortune goldnut, Fortune soya health, Fortune rice bran health, Fortune sunlight, Fortune filtered ground nut oil, Fortune kachi ghani, Fortune plus soya health and Fortune filtered mustard oil. The firm has done brand extension through the launch of range of Fortune rice which includes Fortune every day basmati rice, Fortune special biryani basmati rice and Fortune basmati rice rozana. Along with rice they have extended in other food categories like Fortune soya chunks and Fortune besan.



Figure 4.1: Fortune Edible Oil and Fortune Rice

Source: Adani Wilmar website

Fair & Lovely is a popular brand of Hindustan Unilever; it was patented by Hindustan Unilever in 1971 by taking patent of niacinamide which is a melanin suppressor. It was launched in Indian market in 1975. The brand is positioned as a fairness cream and over the years has maintained its USP. It is available in thirty countries across the world. The brand was endorsed by Yami Gautam (a model and Bollywood actress) in 2014. Fair & Lovely have extended the brand in 2015 through the launch of fair and lovely face wash, it is claimed to provide instant fairness by removing dust, dirt and pollution from the face.



**Figure 4.2:** Fair and Lovely Fairness Cream and Fair and Lovely Face Wash Source: Fair and Lovely India website

Nivea is a personal care brand based in Germany, it is owned by Hamburg based Beiersdorf Global AG. Nivea word has a Latin meaning which means snow white; the cream was launched in 1911. Brand has wide range of skincare products which includes Nivea skin cream, sunscreen lotion and body lotion. The brand has extended in to the category of deos through the launch in Nivea men deodorizer. This deo has claimed itself to be a product typically manufactured for Indian climate and skin type, it promises day long stay. The brand was launched by witnessing Bollywood actor, Arjun Rampal as the brand ambassador.



Figure 4.3: Nivea Cream and Nivea Deodorizer

Source: Nivea India website

Saffola is positioned as a popular health care brand in India. Brand has created awareness about heart health and a healthy lifestyle. The brand is owned by Marico. It is a Mumbai (India) based consumer goods company which is offering health and personal care products. Saffola since its inception has focussed on healthy heart therefore they have articulated the use of 'Oryzanol' as an important ingredient in their edible oil which helps in lowering cholesterol. Hence the brand portrays that it is good for heart. They have extended in different new categories like Saffola oats and Saffola salt plus. Oats is positioned as a healthy breakfast

and is available in various flavours like Saffola oats classic, Saffola masala oats veggie classic and Saffola fruit and nut oats. Saffola salt plus is a low sodium salt which is another product targeted towards health conscious customers.





Figure 4.4: Saffola Edible Oil and Saffola Oats

Source: Marico website

Duracell is a brand of U.S based manufacturing company Berkshire Hathaway. The brand manufactures different sized batteries like AA, AAA, C, D and 9V. Also sizes like AAAA and j which are used in blood glucose meters and other hospital devices respectively. Brand was initially owned by Procter and Gamble (P&G); it was sold to Berkshire Hathaway in the year 2014. Duracell has extended into wireless charging power bank named Duracell Powermat. It was the joint venture between Powermat technologies and P&G company. Powermat has been providing wireless charging technology, and with the joint venture between the two Duracell powermat brand has caused wireless charging revolution. It was the solution to every day battery draining problems of smart phones for the customer.



Figure 4.5: Duracell Battery and Duracell Powermat

Source: Duracell India website

Five pre-tests were conducted before selecting one brand as a stimulus for our study. The purpose of pre-tests was to understand the customer awareness about the brands, their respective brand extension, association and perception. And by the frequency of choice by the respondents in all pre-tests finally, one brand is selected as a stimulus for our study. It was conducted in different geographical areas of Delhi NCR for a widespread coverage of the survey. The detail of the pre-tests is given below:

#### PRE-TEST -1

Pre-test-1 was done in two parts first part was done to obtain brand associations for the five brands taken for the study and second part was focussed on selection of one brand as a stimulus for our study. Respondents for the pre-test were chosen from the Eastern region of Delhi NCR. It was the group of 12 respondents. The group was first asked to write down the associations or thoughts that came to their mind when they heard about the given brands. They were given two minutes for the recall. Responses collected from the questionnaire are summarized in Table 4.1.

Table 4.1: Pre-Test 1

Brand	Brand Associations		
Fair & Lovely	Cosmetic cream, Fair, Bleaching ingredients		
Saffola	Health, Heart		
Fortune	Refined Oil		
Nivea	Tender feel, Cream, Blue colour,		
Duracell	Long Lasting battery		

After obtaining brand associations, focus group was conducted among the same respondents. It was employed for the selection of one brand for the study. It is a type of group interview that is based on communication between participants involved in the study in order to generate data for research. In this method people are encouraged to talk to each other by exchanging their point of view and are allowed to ask questions among themselves instead of researcher asking questions (Kitzinger, 1995). In this type of research participants are selected on the criteria that they have similar socio- economic characteristics, they have something to say on the topic and are comfortable talking to each other and the interviewer (Rabiee, 2004). The age group of respondents ranged from 30- 45 years. They were allowed to discuss brands and their extensions under the observation and moderation of the researcher. The discussion was observed by the researcher; respondents were asked to select a popular brand & its brand extension as per them. The results narrowed fortune as the selected brand for our research.

## **PRE-TEST-2**

Pre-test-2 is the repetition of the pre-test-1 to obtain brand associations and one selected brand. Respondents for the pre-test were chosen from the Western region of Delhi NCR; it was the group of eight people. First they were asked to recollect the thoughts or associations that came to their mind when they heard about a particular given brand. Respondents were then asked to write them in the open-ended questionnaire given to them. They were given two minutes for the recall. Responses collected from the questionnaire are summarized in Table 4.2.

**Table 4.2:** Pre-Test 2

Brand	Brand Associations		
Fair & Lovely	Whiteness Cream		
Saffola	Cholesterol Free, Health		
Fortune	Light, Cooking Oil		
Nivea	Fairness, Cold Cream		
Duracell	Long Lasting, Keep Running		

In the second part of pre-test focus group was again conducted to re-examine the highest brand recall for the group of five brands. The age group of respondents ranged from 32-50 years of age. The results of pre-test -2 selected Nivea as the brand for the main study.

## PRE-TEST -3

Pre-test-3 is conducted to elicit brand associations of five brands taken in the study from the Southern region of Delhi NCR followed by the focus group among them. The group consisted of 10 respondents. First they were asked to recollect and write the associations or thoughts that came to their mind when they were exposed to a particular brand. They were given two minutes for the recall. Responses collected from the questionnaire are summarized in Table 4.3.

**Table 4.3:** Pre- Test 3

Brand	Brand Associations	
Fair & Lovely	Fairness Cream , Beauty product	
Saffola	Health , Low Cholesterol	
Fortune	Refined Oil, Easy Availability	
Nivea	Cold Cream, Winters	
Duracell	Long Life	

In the second part of pre-test 3 focus group was conducted among the same respondents from Southern region of Delhi NCR. The age group of respondents ranged from 30-48 years of age. The results of pre-test -3 selected fortune brand as a stimulus for the main study.

## PRE-TEST-4

Pre-test-4 is conducted to bring out brand associations of five brands taken in the study and the selection of one brand as per the group as a stimulus for the main study. The group consisted of 10 respondents from the Northern region of Delhi NCR. They were asked to recall/recollect the associations or thoughts they felt about the five given brands and to write those associations in the open ended questionnaire provided to them. They were given two minutes for the recall. Responses collected from the questionnaire are summarized in Table 4.4.

Table 4.4: Pre-Test 4

Brand	Brand Associations	
Fair & Lovely	Cream , Fairness	
Saffola	Heart, Low Calorie	
Fortune	For Low Medium Class People , Oil	
Nivea	Smooth Skin , Cream For Men	
Duracell	Long Lasting	

Second part of pre-test 4 is again followed by the Focus group. The age group of respondents ranged from 35-55 years of age. The results of pre-test 4 selected Fair & Lovely as the brand for the main study.

## PRE-TEST -5

Pre-test-5 is again conducted to obtain brand associations of five brands taken in the study and for the selection of one brand as a stimulus. The group consisted of 11 members from the central region of Delhi NCR. They were asked to recollect the associations they can think of about the given five brands, then these associations/ thoughts were captured in the form of an open-ended questionnaire. They were given two minutes for the recall. Responses collected from the questionnaire are summarized in Table 4.5.

**Table 4.5:** Pre-Test 5

Brand	Brand Associations
Fair & Lovely	Beautiful, Fair
Saffola	Safe oil, Yellow, Heart
Fortune	Oil, Soyabean
Nivea	Cold Cream
Duracell	Powerful Battery , Rabbit , Energy

Second part of pre-test-5 consisted of Focus group to narrow down one brand for the study. The age group of respondents ranged from 35-47 years of age. The results of pre-test -5 resulted in selection of Saffola brand as a stimulus for the final study.

After conducting all the five pre–tests the final frequencies of selection were tabulated to calculate the brand chosen by consumers for the main study. The results of the pre–tests are tabulated in Table 4.6.

TOTAL BRAND PRETEST -1 PRETEST -2 PRETEST-3 PRETEST-4 PRETEST-5 FREQUENCY Fair & 1 Lovely Saffola 1 **Fortune** 2 Nivea 1 Duracell 0

Table 4.6: Summary of Pre-Tests for Brand Selection

After five pre-tests the brand with the maximum frequency of appearance in all the five focus groups was finally selected for the main study the brand chosen was Brand Fortune.

## 4.3 Research Methodology

## 4.3.1 Research Gap

With the extensive literature review in the concerned subject area various gaps are identified. The gap includes lack of researches which defines the relationship between Brand Equity and Brand Extension. There are not many studies in context of Indian FMCG industry. Also the earlier researches on this area are done in western context and they have discussed about hypothetical extensions of the brand. Most of the researches have taken the sample of students (Aaker & Keller , 1990; Kaur & Pandit , 2014; Dwivedi & Merrilees , 2013b; Sunde & Brodie , 1993; Buil , Chernatony & Hem , 2009; Martinez & Chernatony , 2004; Bottomley & Doyle , 1996). There is

dearth of literature which discusses the relative importance of factors that affect brand extension. Also the role of demographic variables in brand extension evaluation by the customer is not thoroughly analyzed in the existing literature. The present study has tried to abridge all these gaps.

## 4.3.2 Research Questions

- What are the factors which influence Brand Extension?
- What is the relative importance of factors which affect Brand Extension?
- Does Brand Extension have an impact on Brand Equity?
- Do demographic variables play any role in the evaluation of brand extension by the consumer?

## 4.3.3 Research Hypotheses

The following alternative hypotheses for the study have been formulated:

**H1a** Consumer Innovativeness has significant positive impact on evaluation of Brand Extension.

**H2a** Perceived Risk has significant positive impact on evaluation of Brand Extension.

**H3a** Brand Extension Advertisements have significant positive impact on evaluation of Brand Extension.

**H4a** Perceived Fit has significant positive impact on evaluation of Brand Extension.

**H5a** Parent Brand Reputation has significant positive impact on evaluation of Brand Extension.

**H6a** Overall Evaluations of Brand Extension have significant positive impact on overall Brand Equity.

**H7a** There is significant difference in evaluation of Brand Extension with respect to gender.

**H8a** There is significant difference in evaluation of Brand Extension with respect to marital status.

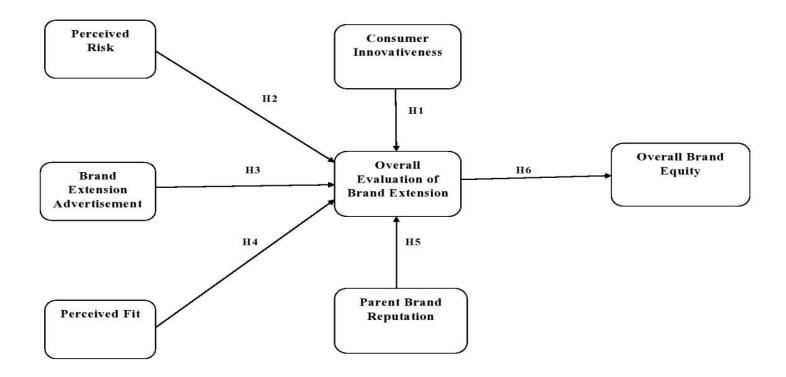
**H9a** There is significant difference in evaluation of Brand Extension with respect to age.

**H10a** There is significant difference in evaluation of Brand Extension with respect to income.

**H11a** There is significant difference in evaluation of Brand Extension with respect to profession.

**H12a** There is significant difference in evaluation of Brand Extension with respect to educational qualification.

Chapter -4 Research Methodology



**Figure 4.6:** Proposed Framework for the Study

## 4.3.4 Research Design

A framework or blueprint for conducting marketing research is termed as research design. It underlines the procedures which are essential to obtain the information required to solve or structure the marketing research problems (Malhotra & Dash, 2016). In this research, the research design is cross sectional in nature. Data was collected both by online and offline survey. Respondents were given the hardcopy of the questionnaire or softcopy in the form of online survey. Google forms were used to create the online survey links of questionnaires. These were circulated to the respondents through their links on various social networking website like Facebook and linked-in. Also emails containing the links of questionnaire were used to provide questionnaire to the respondents.

**Universe and survey population:** Universe for the study is the consumers of FMCG products in Delhi NCR.

**Sampling Technique**: Sampling technique used is non probability based convenience sampling. The diversity in the surveyed population was taken in to account by including respondents from different job profiles, educational qualification, Age, Gender, Income and Marital Status.

Sample Size: The sample chosen for the study to collect the primary information were the consumers of the Fortune brand in Delhi NCR. Only those consumers who were found to be using the brand for at least last six months were selected as respondents. The target sample size was of 524 respondents then after the process of data cleaning and filtration, only 488 respondents were found to be suitable for analysis. The sample size is adequate for applicability of structural equation modeling (SEM). Since SEM requires a 'critical sample size' of 200 (Garver and Mentzer 1999; Hair et al. 2013).

Independent variables for the study are Consumer Innovativeness, Parent Brand Reputation, And Perceived Fit, Perceived Risk and Brand Extension Advertisements. Dependent variables for the study are Overall Evaluation of Brand Extension and Overall Brand Equity. Figure 4.6 depicts the proposed framework for the study.

#### 4.3.5 Measures Used

Scale is developed by revisiting the literature in the concerned subject area for different variables. Questionnaire was framed with the help of Likert scale where 1 refers to strongly disagree and 7 refer to strongly agree. Overall Brand equity was estimated with the help of a four-item scale taken from the study of Yoo and Donthu (2001). It was a path-breaking study in the area of measurement of Consumer based Brand Equity. Overall Evaluation of Brand Extension was measured with the help of four items derived from Dwivedi (2010) & one item from Aaker & Keller (1992) as cited by Hem et al. (2003). Study of Klink and Athaide (2010) helped in gathering two items for Consumer Innovativeness construct. However two items were gathered from the scale used by Hem et al. (2003). Parent Brand Reputation was measured by deriving scale items from Hem et al. (2003) & Dwivedi (2010), total six items were considered for the construct Parent Brand Reputation. Another two items for Perceived Fit was taken from Hem et al. (2003) and the remaining three items were taken each from Martinez et al. (2008), Aaker & Keller (1992) and Dwivedi (2010). All the five items for the construct Perceived Risk were adapted from Hem et al. (2003). Another important construct was Brand Extension Advertising; it was evaluated by adoption of two items each from Kaur & Pandit (2015) and Volcker et al. (2008).

 Table 4.7: Scales Used in the Questionnaire

Construct	Items			
	It makes sense to buy Fortune instead of any other brands.			
	Even if another brand has the same features as Fortune, I buy Fortune.			
Overall Brand Equity	If there is another brand as good as Fortune, I still buy Fortune.			
	If another brand is not different from Fortune in any way, it is smarter to purchase Fortune.			
	Overall, I am very positive to extension Fortune rice.			
	I am inclined towards extension Fortune rice.			
Overall Evaluation of Brand Extension	According to me extension Fortune rice is great.			
Extension	I admire extension Fortune rice a lot.			
	I feel good about Fortune rice.			
	Overall, I like buying the most recent rice brand.			
	If I needed to purchase rice I would buy latest one available.			
Consumer Innovativeness	When I see I new brand of rice product in the store, I often buy it because i is new.			
	I like to purchase the latest rice before others do.			
	I like to experience novelty and change in my daily routine.			
	I like surprises.			
Parent Brand Reputation	All together, I am very positive to brand Fortune.			
•	All together I am Very satisfied with brand Fortune.			
	All together I associate positive things with brand Fortune.			
	The Fortune brand is interesting.			
	According to me Fortune brand is different from other competing brands.			
	I feel that I have a clear reason to buy Fortune instead of others.			
Perceived Fit	The extension Fortune rice makes sense.			
	Fortune brand has skills to launch the brand extension.			
	How similar or dissimilar are "new product" to the products usually offere by Fortune?			
	How similar is the position of Fortune user with extension Fortune rice?			
	Think about brand Fortune how similar is the competence for making original brand and extension Fortune rice?			
Perceived Risk	When I m in front of rice section, I always feel rather unsure about what to pick.			
	When you buy rice it's easy to make a wrong choice.			
	It's difficult to know that which rice is the best option in the market.			
	I should be annoyed with myself if it turned out I'd made the wrong choice			
	It's not so dangerous to make a wrong choice of rice.			
Brand Extension Advertisement	Extension product is well supported in advertisements.			
	Extension product advertisements are memorable.			
	Frequency of extension product advertisement is 3-4 times a day.			
	Advertisements of extension product have a strong appeal			

#### 4.3.6 Research Instrument

A structured questionnaire was constructed for the collection of primary data which was given personally to the customers of the selected brand. To provide aided recall to respondents the questionnaire was designed in a manner that it includes a picture of the parent brand i.e., Fortune cooking oil and the extended brand i.e., Fortune Rice and the picture of advertisement of Fortune rice featuring Kajol Devgan and two kids. The questionnaire consisted of Likert scale statements related to the brand extension evaluation and brand equity and the demographic variables such as gender, marital status, age, educational qualification, profile and income have also been considered for the study

## 4.3.7 Research Tools & Software Packages Used

Tools utilized in research are the statistical techniques for data analysis which help a researcher to arrive at meaningful results. Software packages of IBM SPSS statistics 22, IBM SPSS AMOS 22 were used for data analysis.

The following statistical tools were used to analyze the data:

- 1. Frequencies and Descriptive
- 2. T Test
- 3. Analysis of variance (ANOVA)
- 4. Structural Equation Modeling (SEM)
- 5. Neural Networks (NN)

- 1. Frequencies and Descriptive: Frequencies are the statistical methods which defines the frequency of occurrence of responses chosen by the respondents. The objective of this method is to obtain the number of responses linked with values of one variable and measuring these values in percentage terms (Malhotra & Dash, 2016). Descriptive statistics are commonly used for summarizing data regularity or measures of central tendency (mean median and mode). Also skewness and kurtosis measures can be estimated in descriptive statistic.
- 2. T-test: t-test is a statistical test which is based on the premise of comparison of means. It is a parametric test which based on the assumption of normality in data. There are three kinds of t tests i.e. student t test or single sample t test, independent sample t test and paired t test. Student t-test statistical difference between assumed mean/ hypothesized mean and actual mean. Independent sample t test compares the means of two different populations which are independent of each other. However paired t test compares pre and post significant change in means of the same population. In this study we have used independent sample t test to compare consumer evaluation of brand extension across gender and marital status.
- 3. **Analysis of variance (ANOVA):** ANOVA is a statistical technique developed by a biologist Ronald Fisher. He proposed the term variance and has shown its relevance in an article published in 1918. This technique is also a parametric technique which is based on the assumption of normality. This technique was an extension of t test and z test. ANOVA is used to estimate whether the means and relative variance of two or more groups differ significantly from each other or not.

It is two types one way ANOVA and two way ANOVA, one way ANOVA employs the use of more than two categories of one independent variable. Two way ANOVA however uses more than two categories of two independent variables. In addition to the identification of significant difference, this technique also provides researchers with the advantage of post-hoc analysis which determines the groups where the differences are present. In this study researcher has used one way ANOVA to study differences in consumer evaluation of brand extension with respect to their age, income, profession and educational qualification.

- 4. Structural Equation Modeling (SEM): SEM is a multivariate analysis technique. This technique attempts to explain the complexities that exist among multiple variables, it identifies structural relationships among them. It examines the inter relationships with the help of series of equations likewise in multiple regression. These equations show the relationships between the dependent and independent variables involved in the analysis (Hair et al. 2013). This technique is a combination of factor analysis and path analysis used in regression. It is an excellent technique for testing theory by formulation of hypotheses. It also assists in testing whether a proposed framework is a good fit or not. Therefore researchers all across the world have used this technique in social sciences to evaluate the goodness of their model.
- 5. **Neural Networks Technique (NN):** There has been a considerable increase in use of artificial neural networks (ANN) for application in the area of marketing. Many researchers across the world have used this technique in marketing issues

(Silva et al. 2009). It is also used complementing other techniques such as structural equation modeling and regression. ANN is a robust technique when it comes to imperfections in data like presence of outliers, noisy data and non linear data. ANN does not require any prior specifications in terms of assumptions or any other pre-requisite for its application (Detienne, 2017). Hyperbolic tangent activation function in ANN offsets the difficulties associated with outliers and incomplete data rather it takes into account the useful portion of data to make predictions. ANN however is not used for theory testing because of its 'black box' approach (Tiruwa, 2018), but it can detect linear and non linear relationships present in the data. ANN also determines the relative importance of independent variables which cause an effect on dependent variable. Root mean square error (RMSE) determines the model fit. ANN works on training and testing of data sets, some portion of data is used to train the network and rest is tested on the basis of prediction made by trained network. Consumer decision making is sometimes very complex hence assuming linearity in such situation may not be advantageous. Hence researcher has used an integrated multi-analytical approach to understand and verify theoretical relationships along with predictions made on the basis of disguised patterns present in the data.

## **Assumptions of SEM**

Structural equation modeling is a kind of multivariate data analysis technique (Hair et al. 2013). These techniques have a set of assumptions which are based on theory. Although there are several assumptions in multivariate data analysis which are

significant but mainly three of them affect every multivariate data analysis technique especially SEM. These are listed below:

- (i) Normality
- (ii) Outliers
- (iii) Multi-collinearity
- (iv) Homoscedasticity
- (v) Linearity
- (i) Normality: Normality is an important assumption which is to be fulfilled before proceeding with any of the multivariate analysis. Normality is the shape of data distribution (Hair et al. 2013). It is a prerequisite for most of the multivariate and other statistical tests. However if the sample sizes are large i.e. 200 or more the effects of non normal data becomes negligible.
- (ii) Outliers: The observations with distinctive characteristics which are identifiable within other observations. They are the presence of extremely high or low value for a variable. Outliers should be minimized in order to reduce the undue influence on results (Hair et al. 2013).
- (iii) Multi-collinearity: Multi-collinearity is the degree of correlation between the independent variables. High multi-collinearity in the variables can affect results and the statistical inferences gathered form data may not be reliable.
- (iv) Homoscedasticity: When dependent variable shows equal amount of variance across predictor variable it states the presence of homoscedasticity. It is also

an important pre-requisite for any multivariate analysis (Hair et al. 2013). Since there are different values of dependent variable for each value of independent variable, in order to understand such relationship the dispersion of values of dependent variable should be equal to values of predictor variable.

(v) Linearity: is the concept that postulates that a given model possess homogeneity and additivity. Linear models show the straight line with respect to the changes in dependent and independent variable i.e. the changes across both are constant (Hair et al. 2013).

## 4.4 Pilot Study

In order to check the appropriateness of scale for the target audience a pilot study was conducted. The study was done on a small sample of 40 respondents. These respondents were the residents of Delhi NCR they are the users of the brand undertaken in the study. Necessary modifications were made in the research instruments after the pilot study. Cronbach alpha values are used to determine the reliability of scale. The reliability values of the pilot study are mentioned in the Table 4.8.

Table 4.8: Reliability values

Construct	Cronbach α values		
Overall Brand Equity	0.875		
Overall Evaluation of Brand Extension	0.892		
Consumer Innovativeness	0.853		
Parent Brand Reputation	0.860		
Perceived Fit	0.796		
Perceived Risk	0.875		
Brand Extension Advertisements	0.874		

Table 4.8 shows that Cronbach alpha values for all the constructs in pilot study are more than 0.70. This indicates that the scale is reliable for the study (Hair et al. 2013).

## 4.5 Summary

The study is based on the FMCG Brand extension; it is therefore essential to choose a known FMCG brand as a stimulus for our research. By conducting several pre-tests Brand Fortune is selected for the study, it is a famous brand produced by Adani Wilmar Limited. The firm is marketing Brand Fortune through various media such as newspaper, magazines, and television. The company has understood the increasing importance of transit advertising; therefore they have placed hoardings and banners in different metro stations in Delhi NCR to increase its brand recall.

Research instrument for our study is a structured questionnaire which is based on 7 point Likert scale statements with the picture of brand fortune, its extension fortune rice and the advertisement of fortune rice. It is done to provide aided recall to the respondents who are answering the questionnaire. It is highly essential for a respondent to recall the brand when he/she is answering questions pertaining that; therefore the implementation of aided recall helps the consumer to recognize the brand when he/she is confronted with it (Pitta & Katsanis, 1995). Techniques for the analysis include Structural Equation Modeling and Neural Networks wherein former helps to test hypotheses by building structural relationships, the later helps in determining the relative importance of independent variables. Along with these two techniques, one way ANOVA and independent sample T- test is also employed to study group differences concerning the evaluation of brand extension by the

consumer. Also, frequencies and descriptive technique in SPSS is used to build charts and tables for estimating frequency characteristics of demographic variables. A Pilot study done with a sample of 40 respondents reveal that the reliability of the questionnaire is acceptable therefore researcher can continue with the further analysis.

# CHAPTER-5 DEMOGRAPHIC PROFILE

## **5.1** Overview

- **5.1.1** Gender Wise Profile of the Respondents
- **5.1.2** Marital Status of the Respondents
- **5.1.3** Age Wise Profile of the Respondents
- **5.1.4** Educational Profile of the Respondents
- **5.1.5** Occupation/Job Profile of the Respondents
- **5.1.6** Income Profile of the Respondents

## **5.2 Summary**

#### 5.1 Overview

Respondents in this study belong to varied demographic profile. In order to generalize the results of the study it is important to collect data from diverse group of respondents. Also, it helps to overcome the research gaps identified in the previous studies (Aaker & Keller , 1990 ; Kaur & Pandit , 2014 ; Dwivedi & Merrilees , 2013b; Sunde & Brodie , 1993; Buil , Chernatony & Hem , 2009 ; Martinez & Chernatony , 2004; Bottomley & Doyle , 1996) i.e. most of the studies done in past on factors affecting brand extension, brand extension and its feedback effects are done on a sample of students.

## **5.1.1** Gender Wise Profile of the Respondents

**Table 5.1:** Gender Wise Profile of the Respondents

		GENDER		
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	187	38.3	38.3	38.3
Female	301	61.7	61.7	100.0
Total	488	100.0	100.0	

Table 5.1 shows the number of males and females which are undertaken in the study. It shows 61.7 % are females and 38.3 % are males out of 488 respondents. The rationale behind taking both females as well as males for the study of an FMCG brand is based on the fact that now a day's males and females are jointly taking purchase decision in household products (Martinez and Polo, 1999). The brand taken in the study as a stimulus is an FMCG product which is purchased by both male and female therefore collective opinion from both had helped to validate the results of the study.

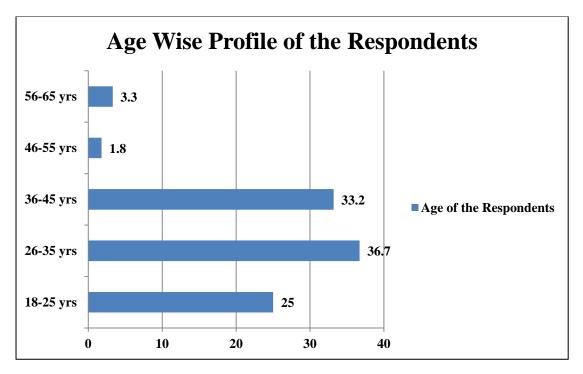
## **5.1.2** Marital Status of the Respondents

**Table 5.2:** Marital Status of the Respondents

MARITALS					
	Frequency Percent Valid Percent				
Married	299	61.3	61.3	61.3	
Unmarried	189	38.7	38.7	100.0	
Total	488	100.0	100.0		

Table 5.2 shows the marital status of individuals who are the customers of brand Fortune. 38.7 % of customers are unmarried and around 61.3% are married out of 488 total respondents. Brand is consumed by all the consumers irrespective of their marital status.

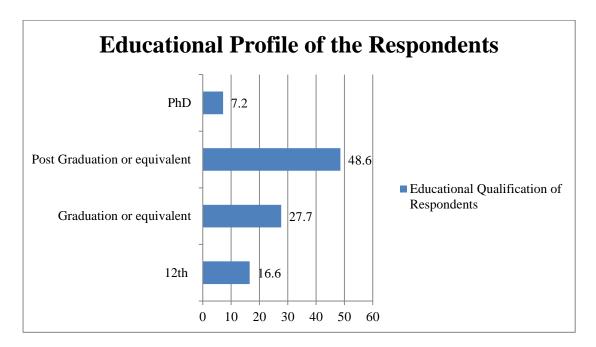
## **5.1.3** Age Wise Profile of the Respondents



**Figure 5.1:** Age Wise Profile of the Respondents

Figure 5.1 depicts the diverse age group of respondents which are considered in the study. Out of total respondents, 25 % belongs to the age group of 18-25 years, 36.7% of respondents are from the category of 26-35 years, 33.2 % of the respondents consisted of an age group of 36-45 years, 1.8% of the respondents consist of an age group of 46-55 years and only 3.3 % of total respondents belong to the age group of 56-65 years of age.

## **5.1.4** Educational Profile of the Respondents



**Figure 5.2:** Educational Profile of the Respondents

Figure 5.2 shows the educational qualification of respondents. Around 16.6 % of respondents have obtained the educational qualification up to class 12 only. 27.7 % of respondents are graduate, 48.6 % of respondents have obtained post graduation qualification. However 7.2 % of respondents have obtained PhD degree. Diverse set of respondents in terms of educational qualification has helped researcher to obtain varied responses.

## 5.1.5 Occupation/Job Profile of the Respondents

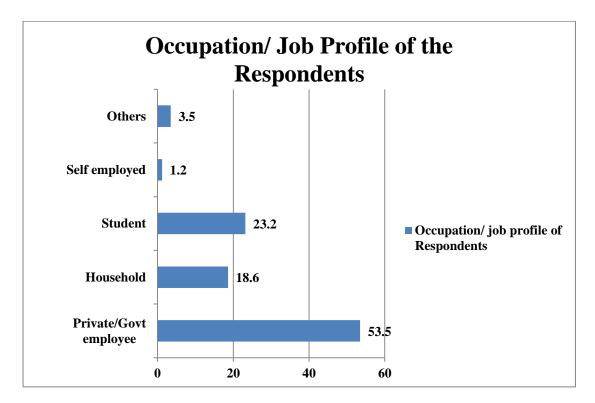


Figure 5.3: Occupation/Job Profile of the Respondents

Figure 5.3 depicts the profession or job profile of respondents under the study. It illustrates that 53.5 % of respondents are private/government employees, 18.6% of respondents are households, 23.2 % of respondents are students, 1.2 % of respondents are self employed and 3.5% of respondents belong to other category. Occupation of respondents is varied; it has helped to gather different opinions from the respondents. Majority of respondents belong to the category of private/government employees followed by students, households, other category and self employed.

## **5.1.6** Income Profile of the Respondents

Table 5.3: Income Profile of the Respondents (Per Annum\* in INR)

INCOME						
		Frequency	Percent	Valid Percent	Cumulative Percent	
	Less than 2 lakh per annum	37	7.6	11.9	11.9	
	2 lakh-5 lakh per annum	123	25.2	39.5	51.4	
	5.1 lakh to 10 lakh per annum	111	22.7	35.7	87.1	
	10.1- 15 lakh per annum	33	6.8	10.6	97.7	
	more than 15 lakh per annum	7	1.4	2.3	100.0	
	Total	311	63.7	100.0		
Missing		177	36.3			
Total		488	100.0			

<sup>\*</sup>Since household and few students were not earning missing values resulted in less than 100 percent response for variable

Table 5.3 shows the income classification of respondents. Around 7.6 % of respondents are in the income range of less than 2 lakh per annum, 25.2 % of respondents have an income of 2 lakh to 5 lakh per annum, 22.7 % of respondents have income in the range of 5.1 lakh to 10 lakh per annum and 6.8 % of total respondents have income in the range of 10.1 lakh to 15 lakhs. And only 1.4 % of respondents have income more than 15 lakh per annum. Out of 488 respondents only 311 respondents have filled this particular question which shows rest 177 are either not earning (they are students) or they have chosen not to mention their income.

## **5.2 Summary**

A diverse set of respondents in the study helped to understand the concept from a wider perspective. It has also assisted to generalize the results of the study. The study

has undertaken an FMCG brand to study the framework of brand extension feedback effects; therefore it's vital to observe brand extension evaluation by the consumer with reference to varied demographic profiles. Earlier it was thought that purchase decisions regarding household products are only taken by females but Martinez and Polo (1999) in their study discussed that male and female jointly take decisions concerning FMCG products. Hence it is justifiable to take the responses of both the gender under the study.

To gather information from a varied set of respondents, the researcher had gathered data from different age groups, different occupation profiles, and diverse educational backgrounds and respondents with different income range. Also, respondents with different marital status i.e. single and married both were targeted to understand the variations in the evaluation of brand extension with respect to different demographic profiles.

# **CHAPTER -6**

## **DATA ANALYSIS**

- **6.1 Data Screening**
- **6.2 Preliminary Analysis (Exploratory Factor Analysis)**
- **6.3** Reliability
- **6.4 Testing Assumptions of SEM**
- **6.5 Confirmatory Factor Analysis**
- 6.6 Path Estimates and Hypotheses Testing
- **6.7 Neural Network Analysis**
- **6.8 Independent Sample T-Test**
- **6.9 One Way ANOVA**
- **6.10 Summary**

#### 6.1 Data Screening

Data analysis begins with data screening. Data screening is the process by which collected data is analyzed for identifying the missing values and other discrepancies in data. Presence of missing data reduces the effective sample size which is used for analysis (Hair et al. 2013). In our analysis the initial sample size taken was of 524 respondents. However effective sample size after data screening is reduced. The effective sample size analysis was of 488 usable responses.

Steps involved in data screening:

- 1. In first step we have observed the count of missing values for each respondent.
- 2. After that we have deleted the respondent/cases with more than 50% of missing values (Hair et al. 2013).
- 3. Deleted unengaged responses ( giving same answer for almost every question mostly in the usage of likert scale in the questionnaire)
- 4. Unengaged responses were treated by calculating standard deviation for all the items of the questionnaire. Respondent with less than 0.40 of standard deviation is deleted.
- 5. Now the remaining cases with missing values were imputed. There are various data imputation techniques available :

Imputation Using Only Valid Data: In this technique only the cases with valid data are considered. And no data values are replaced.

 Complete Case Approach: Missing data can be treated by including only those observations which contain complete data. It is the simplest approach for dealing with missing data.

ii. Using All Available Data: Missing data is not replaced in this technique rather the characteristics or relationship of the distribution are imputed from the valid values in the data (Hair et al. 2013).

- iii. Imputation by Using Replacement Values: Certain estimated value is used to replace missing values and the estimated value is calculated on the basis of information obtained from the sample.
- iv. Using Known Replacement Values: It is the easiest imputation technique which requires the use of a known value for replacing missing data.
- v. Hot and Cold Deck Imputation: Researcher when substitutes the missing value of the given sample with the similar sample it is called as hot deck method. However in cold deck method the values for imputation are derived from some external sources such as prior studies.
- vi. Mean Substitution: It is one the most commonly used methods of substitution of missing values. In this method the missing values are straight away replaced by the mean values of a particular variable which is obtained by calculating mean of the complete/valid responses. Since very few missing values were left after deletion of responses with more than 50% missing values rest were imputed with mean substitution in our study.
- vii. Median Imputation: In this method missing values are replaced by median values from the valid responses. Missing data can be imputed by median imputation technique since in likert scale mean is less meaningful (Lynch, 2003).

Data screening has omitted cases with more than 50% of missing values and unengaged responses are also deleted. It has reduced the sample size to 488 which is further used for analysis.

#### **6.2 Preliminary Analysis (Exploratory Factor Analysis)**

The preliminary analysis of data was done with the help of factor analysis. It is a technique based on the purpose to understand the fundamental structure of the variables considered in the study (Hair et al. 2013). Highly inter-related variables constitute together and form factors. Factor analysis is applied to assess the identifiable number of factors from the entire data. For identifying the adequacy of factor analysis following two measures is used:

- 1. Barlett's test of sphericity: It is test to measure whether sufficient correlation exist between the variables to proceed with further analysis. A statistically significant value i.e. sig>.05 is advisable (Malhotra & Dash, 2016).
- Kaiser-Meyer-Olkin (KMO): Sampling adequacy is estimated by KMO. If the values of KMO are small it indicates that factor analysis is not appropriate for the given sample. Therefore the values greater than 0.5 are considered appropriate (Malhotra & Dash, 2016).

On the basis of literature review we have constituted a framework for our study. According to the framework there are seven factors. However by factor analysis we want to reassess the presence of seven distinct factors in our data. Therefore the number of factors to be extracted in the model is not specified by the researcher. In this analysis we have used VARIMAX rotation to rotate the factors, it seems to give clearer separation of factors (Hair et al. 2013).

Factor analysis results are shown below:

Table 6.1: KMO and Bartlett Test

KM	O and Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.						
Bartlett's Test of	Approx. Chi-Square	8509.592				
Sphericity	df	595				
	Sig.	.000				

Adequacy of sample for factor analysis is estimated by Kaiser Meyer Olkin measure of sampling adequacy or KMO values. It works on the logic of comparing the extent of partial correlation coefficients. KMO values which are lesser than 0.5 indicates that factor analysis is not an appropriate technique for such kind of data (Malhotra & Dash, 2016) therefore researcher should look for some alternative techniques of analysis. Table 1 indicates that the value of KMO is .874. KMO values are inferred on the basis of several different thresholds the values from 0.50-0.70 are considered acceptable while the range of values from 0.70-0.80 are considered good however remarkably good values are from the range 0.80-0.90 (Field Andy, 2009). These values confirm the use of factor analysis as an appropriate technique for the data.

Bartlett's test of sphericity is used to test the implicit null hypothesis in factor analysis i.e. variables are uncorrelated in the population. Hence a significant value rejects the null hypothesis therefore in such cases factors can be constituted from the given variables (Malhotra & Dash, 2016). In other words Bartlett's test of sphericity test the difference of correlation matrix from an identity matrix i.e. whether such difference is statistically significant or not. Table 6.1 show that the value for Bartlett's test of

sphericity is .000 which is less than 0.05 hence it is statistically significant, therefore factors can be constituted out of the given variables.

Factor extraction process involves the determination of number of factors to extract. Factor analysis works on the extraction of factors with the eigen-values more than 1. Table 2 shows the eigen-values with respect to each factor before extraction, after extraction and after rotation. 35 variables were identified within the dataset before extraction. Leftmost portion of the Table 6.2 shows the initial eigen-values they represent the amount of variance before rotation with respect to each variable. After that SPSS extracts the variables which explain most of the variance in data on the basis of eigen-values (Field Andy, 2009). These extracted variables are termed as factors. Analysis has shown that 7 factors are extracted which are showing 63.534 % of variance in the data

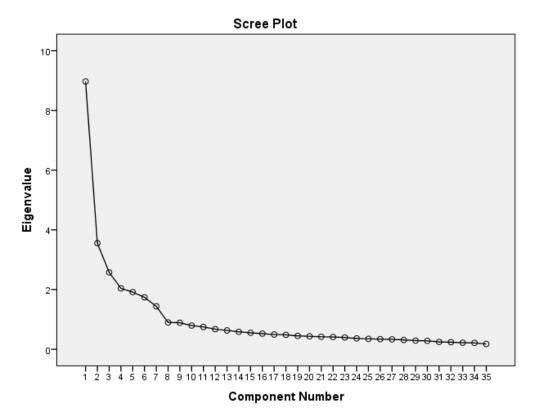


Figure 6.1: Scree Plot

Table 6.2: Total Variance Explained

Component	]	Initial Eige	nvalues	Extra	ection Sums Loadin	s of Squared	Rota	tion Sums Loadin	of Squared gs
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.971	25.631	25.631	8.971	25.631	25.631	3.726	10.647	10.647
2	3.555	10.157	35.787	3.555	10.157	35.787	3.611	10.316	20.962
3	2.576	7.360	43.147	2.576	7.360	43.147	3.242	9.263	30.225
4	2.040	5.830	48.977	2.040	5.830	48.977	3.240	9.258	39.483
5	1.916	5.475	54.451	1.916	5.475	54.451	3.050	8.714	48.197
6	1.740	4.972	59.424	1.740	4.972	59.424	2.817	8.049	56.246
7	1.439	4.111	63.534	1.439	4.111	63.534	2.551	7.288	63.534
8	.900	2.571	66.105						
9	.890	2.543	68.649						
10	.794	2.268	70.917						
11	.749	2.139	73.055						
12	.674	1.926	74.981						
13	.632	1.807	76.788						
14	.587	1.677	78.465						
15	.551	1.575	80.041						
16	.525	1.499	81.540						
17	.496	1.417	82.956						
18	.483	1.380	84.336						
19	.448	1.281	85.617						
20	.434	1.239	86.856						
21	.421	1.202	88.058						
22	.411	1.175	89.233						
23	.395	1.129	90.362						
24	.365	1.042	91.404						
25	.349	.996	92.399						
26	.341	.975	93.374						
27	.334	.953	94.327						

Component	Initial Eigenvalues			Extra	ction Sums Loadin	s of Squared	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
28	.313	.893	95.220						
29	.293	.836	96.056						
30	.283	.807	96.864						
31	.248	.709	97.573						
32	.238	.680	98.253						
33	.221	.631	98.884						
34	.213	.608	99.492						
35	.178	.508	100.000						
		Е	xtraction Meth	od: Prii	ncipal Comp	onent Analysi	s.		

Scree plot is the representation of eigen values of all the variables depicted in the graphical form. Figure 6.1 shows the scree plot which has a clear demarcation of a steep fall and the line is flatter as we reach to the eighth factor. Therefore scree plot figure also clearly identifies seven factors.

 Table 6.3: Rotated component Matrix

	Rotated Component Matrix <sup>a</sup>									
	Component									
	1	2	3	4	5	6	7			
OE1							.652			
OE2							.831			
OE3							.825			
OE4							.687			
CE1			.640							
CE2			.668							
CE3			.715							
CE4			.773							
CE5			.725							

		R	otated Cor	nponent Matrix	a <sup>a</sup>		
				Component			
	1	2	3	4	5	6	7
CIN1		.678					
CIN1		.767					
CIN2 CIN3		.784					
CIN3		.786					
CIN4		.774					
CIN6		.608					
PBR1	.668	.008					
PBR2	.745						
PBR3	.660						
PBR4	.650						
PBR5	.740						
PBR6	.761						
PF1					.640		
PF2					.678		
PF3					.765		
PF4					.810		
PF5					.695		
PR1				.752			
PR2				.770			
PR3				.747			
PR4				.791			
PR5				.815			
BEA1						.790	
BEA2						.808	
BEA3						.808	
BEA4						.802	
	Method: Princi Method: Varima						
	converged in 6						
	_						

Factor loadings for each variable with respect to a particular factor are shown in rotated component matrix. Table 6.3 depicts the rotated component matrix. The factor

loadings for all the variables in their respective factors are greater than 0.50. Factor loadings more than 0.50 are considered necessary for practical significance (Hair et al. 2013). There is no cross loadings of any variable in factors, all variables are loaded on their respective factors.

# 6.3 Reliability

**Reliability:** The consistency obtained among the several measurements for a particular variable is called as reliability. The objective of reliability is to verify that responses are not too varied. It measures the internal consistency among the items of a particular variable. Cronbach's alpha is the commonly used measure to calculate reliability coefficient. Table 6.4 shows the cronbach alpha values for all the constructs they all lie in acceptable range i.e. 0.70 or greater than 0.70 (Nunnaly, 1978).

**Table 6.4:** Cronbach α values

Construct	Cronbach a Values
Overall Brand Equity	.799
Overall Evaluation of Brand Extension	.853
Consumer Innovativeness	.854
Parent Brand Reputation	.872
Perceived Fit	.834
Perceived Risk	.855
Brand Extension Advertisement	.852

### **6.4 Testing Assumptions of SEM**

Next step in data analysis comprises of testing the assumptions of structural equation modelling. Presence of complexity of relationships and large number of variables in multivariate techniques elicits the need for testing statistical assumptions (Hair et al. 2013).

1. **Normality:** an important assumption in SEM analysis is that data is multivariate normal. Therefore before testing the model this criterion is checked. Normality of the distribution is estimated on the basis of presence of kurtosis and skewness in the data. Normal distribution is bell shaped in nature however kurtosis has a characteristic shape of "peakedness" or "flatness" in the distribution. Skewness is the balance in the distribution i.e. whether the distribution is on left side, right side or equally distributed on both sides (Hair et al. 2013). Skewness and kurtosis values for all the variables are shown in Table 6.5.

Table 6.5: Skewness and Kurtosis Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewi	ness	Kurte	osis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
OE	488	4	28	17.62	6.706	252	.111	770	.221
CE	488	5	35	22.76	9.848	361	.111	-1.134	.221
CIN	488	6	42	27.15	9.209	293	.111	803	.221
PBR	488	6	42	27.87	11.250	511	.111	931	.221
PF	488	5	35	20.76	9.397	268	.111	-1.076	.221
PR	488	5	35	22.62	9.912	330	.111	-1.173	.221
BEA	488	4	28	18.98	6.571	496	.111	809	.221
Valid N (listwise)	488								

All the variables shows that the range of Skewness and Kurtosis values lies from +2 to -2, therefore the data is normal in distribution (George & Mallery, 2010).

2. **Outliers:** Another important assumption of structural equation modelling is absence of any multivariate outliers. Outliers represent the cases in which the values are substantially different from others in particular data set. In order to detect multivariate outlier, squared mahalanobis distance (D<sup>2</sup>) is computed. It is established that an outlier has a D<sup>2</sup> value significantly different from other values of D<sup>2</sup> (Byrne, 2010). Table 6.6 shows the mahalanobis distance, the review of the D<sup>2</sup> values reported shows minimal evidence of any serious multivariate outliers.

Table 6.6: Mahalanobis Distance Values

Observation number	Mahalanobis d-squared	p1	p2
123	76.113	.000	.034
59	72.147	.000	.005
205	71.578	.000	.000
211	67.081	.001	.001
266	66.984	.001	.000
258	66.237	.001	.000
212	65.936	.001	.000
254	65.928	.001	.000
276	65.705	.001	.000
71	65.193	.001	.000
298	64.149	.002	.000
113	62.835	.003	.000
68	62.293	.003	.000
476	61.402	.004	.000
473	60.801	.004	.000
62	60.608	.005	.000

Observation number	Mahalanobis d-squared	p1	p2
356	60.339	.005	.000
349	59.731	.006	.000
198	59.678	.006	.000
8	59.023	.007	.000
418	59.023	.007	.000
89	58.954	.007	.000
134	58.479	.008	.000
173	57.980	.009	.000
24	57.778	.009	.000
87	57.615	.009	.000
270	57.607	.009	.000
136	57.132	.010	.000
93	56.951	.011	.000
148	56.910	.011	.000
261	56.564	.012	.000
74	56.290	.013	.000
358	55.339	.016	.000
267	55.018	.017	.000
51	54.869	.017	.000
115	54.789	.018	.000
470	54.768	.018	.000
23	54.755	.018	.000
433	54.755	.018	.000
67	54.745	.018	.000
468	54.670	.018	.000
193	54.610	.018	.000
221	54.565	.019	.000
214	54.424	.019	.000
469	54.357	.020	.000
112	54.168	.020	.000

Observation number	Mahalanobis d-squared	p1	p2
66	54.017	.021	.000
351	53.935	.021	.000
110	53.889	.022	.000
246	53.790	.022	.000
58	53.620	.023	.000
6	53.066	.026	.000
416	53.066	.026	.000
352	53.035	.026	.000
434	52.199	.031	.000
408	51.975	.032	.000
249	51.723	.034	.000
251	51.719	.034	.000
255	51.545	.035	.000
45	51.413	.036	.000
464	51.358	.037	.000
90	51.355	.037	.000
22	51.148	.038	.000
64	51.065	.039	.000
268	51.025	.039	.000
82	50.330	.045	.000
484	50.330	.045	.000
157	50.166	.047	.000
432	49.964	.048	.000
370	49.750	.051	.000
18	49.565	.052	.000
107	49.516	.053	.000
269	49.100	.057	.000
132	49.040	.058	.000
92	48.912	.059	.000
116	48.903	.059	.000

Observation number	Mahalanobis d-squared	p1	p2
137	48.742	.061	.000
135	48.584	.063	.000
158	48.565	.063	.000
384	48.508	.064	.000
108	48.451	.065	.000
149	48.147	.069	.000
80	47.477	.078	.000
482	47.477	.078	.000
81	47.320	.080	.000
215	47.167	.082	.000
31	47.084	.083	.000
21	47.077	.083	.000
431	47.077	.083	.000
364	47.055	.084	.000
262	47.050	.084	.000
83	46.807	.088	.000
485	46.807	.088	.000
52	46.719	.089	.000
4	46.649	.090	.000
414	46.649	.090	.000
114	46.511	.092	.000
240	46.457	.093	.000
457	46.406	.094	.000
474	46.327	.095	.000

3. Multi-collinearity: Multi-collinearity refers to presence of correlations among the dependent variables which causes variability in results. The two most common methods for assessing collinearity are to estimate tolerance and VIF (variance inflation factor). Tolerance is defined as the amount of variability of selected independent

variable not explained by other independent variables. Another measure for determining the presence of multi-collinearity is VIF which is the inverse of the tolerance value. Low tolerance values and higher VIF values indicate the presence of multi-collinearity. Threshold values for tolerance are .10 i.e. the values of tolerance should be more than .10. Values for VIF should be less than 10 (Hair et al. 2013). Table 6.7 indicates the tolerance and VIF values which are less than 10 for all the variables. Therefore there is no multi-collinearity in data.

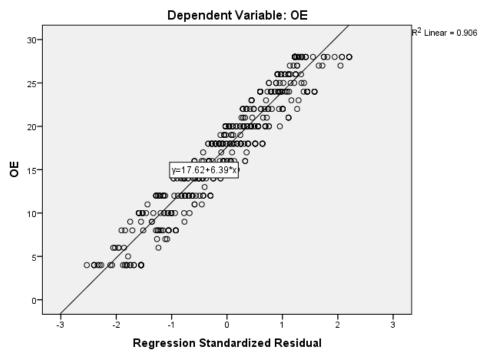
**Table 6.7:** Collinearity Diagnostics

				Coefficients <sup>a</sup>				
Unstandardized Standardized Coefficients Coefficients							Collinea Statist	•
	Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	7.711	1.169		6.599	.000		
	CE	.046	.036	.067	1.258	.209	.572	1.749
	CIN	.161	.032	.221	5.012	.000	.837	1.194
	PBR	.171	.032	.287	5.434	.000	.581	1.720
	PF	.015	.034	.021	.440	.660	.701	1.427
	PR	026	.030	038	867	.386	.841	1.189
	BEA	.000	.045	.000	010	.992	.822	1.216
a. De	pendent Varial	ole: OE						

4. Homoscedasticity: when equal level of variance is demonstrated by dependent variable with respect to predictor variable the relationship is said to be Homoscedastic in nature (Hair et al. 2013). The term homo means "same" and scedasticity means "to scatter" therefore Homoscedasticity is having the same scatter. Error term (that is the random disturbance among the relationship between the dependent variable and independent variables) is similar for the values of the independent variables. This is also called as homogeneity of variances. However relationship is heteroscedastic when the dispersion is not constant across the values of independent variable.

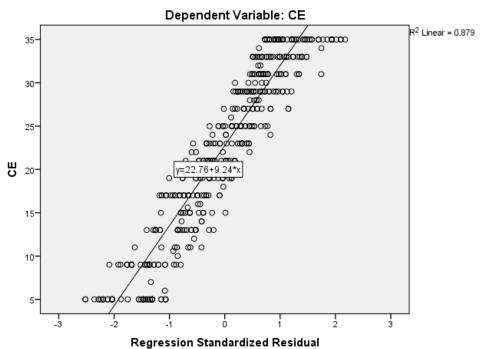
# **Scatter plots of Homoscedastic Relationships**

# Scatterplot

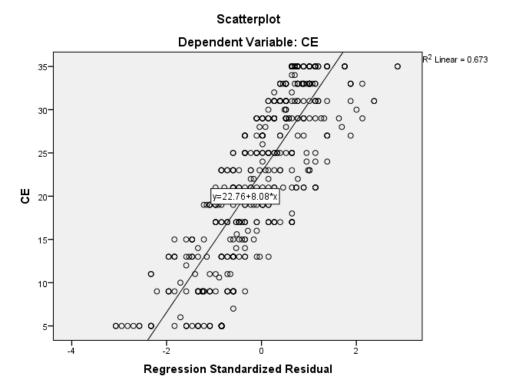


**Figure 6.2.1:** Scatter Plot of Overall Brand Equity and Overall Evaluation of Brand Extension

#### Scatterplot



**Figure 6.2.2:** Scatter Plot of Overall Evaluation of Brand Extension and Consumer Innovativeness



**Figure 6.2.3:** Scatter Plot of Overall Evaluation of Brand Extension and Parent Brand Reputation

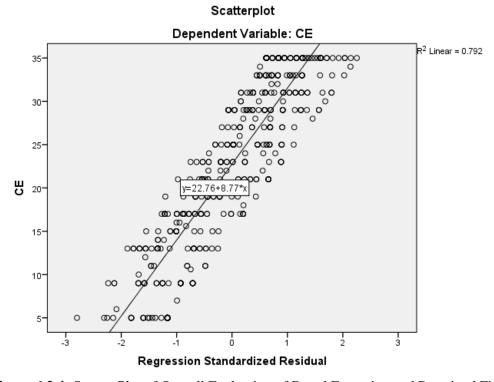


Figure 6.2.4: Scatter Plot of Overall Evaluation of Brand Extension and Perceived Fit

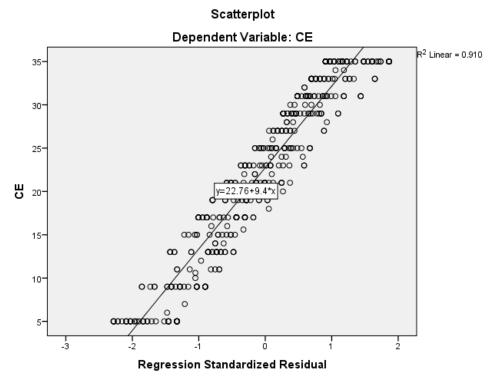


Figure 6.2.5: Scatter Plot of Overall Evaluation Of Brand Extension and Perceived Risk

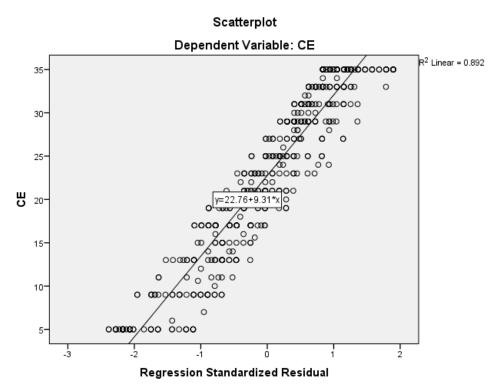


Figure 6.2.6: Scatter Plot of Overall Evaluation of Brand Extension and Brand Extension Advertisement

Figure 6.2.1 to 6.2.6 depicts the scatter plots for all the independent variables with respect to dependent variable i.e. overall brand equity. The visual examination of scatter plots depicts that there is the presence of equal variances along the dependent variable and residuals. Departures from equal dispersion exhibited by shape of cones i.e. more number of points in the center of distribution or huge dispersion on one side and less dispersion on the other side shows the presence of heteroscedasticity (Hair et al. 2013).

5. Linearity: It is another imperative assumption of various multivariate analysis techniques such as logistic regression, multiple regression, factor analysis and structural equation modelling. These are the techniques which are based on correlational measures of association since correlation only demonstrates linear association therefore non linear effects will not be shown. There are several approaches to examine linearity in data first approach is to observe the scatter plot , second approach refers to examining the residuals and third approach tends to model a non linear relationship by testing it with other alternative models . It is also called as curve fitting (Hair et al. 2013). We have used curve fitting to check linearity between independent and dependent variables.

Table 6.8.1: Curve Fitting of Overall Brand Equity and Overall Evaluation of Brand Extension

	Model Summary and Parameter Estimates										
Dependent	Variable:	OE									
Model Summary Parameter Estimates											
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3		
Linear	.094	50.396	1	486	.000	12.867	.209				
Quadratic	.098	26.320	2	485	.000	14.594	004	.005			
Cubic	.098	17.584	3	484	.000	13.622	.209	007	.000		
The independent variable is CE.											

Table 6.8.1 shows the curve fitting between overall brand equity of fortune brand and overall evaluation of brand extension of fortune (i.e. fortune rice). The F value for linear relationship is 50.396 which is higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

**Table 6.8.2:** Curve Fitting of Overall Evaluation of Brand Extension and Consumer Innovativeness

		Mo	del Sumr	nary and	Paramete	er Estimate	s			
Dependent Variable: CE										
		Mod		Parameter Estimates						
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3	
Linear	.121	66.941	1	486	.000	12.655	.372			
Quadratic	.125	34.679	2	485	.000	16.729	.009	.007		
Cubic	.128	23.688	3	484	.000	10.074	1.018	037	.001	
The independent variable is CIN.										

Table 6.8.2 shows the curve fitting between overall evaluation of brand extension of fortune (i.e. fortune rice) and consumer innovativeness. The F value for linear relationship is 66.941 which is much higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

**Table 6.8.3:** Curve Fitting of Overall Evaluation of Brand Extension and Parent Brand Reputation

-	Model Summary and Parameter Estimates										
Dependent Variable: CE											
Model Summary							Paramete:	r Estimate	S		
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3		
Linear	.327	236.634	1	486	.000	8.798	.501				
Quadratic	.331	119.831	2	485	.000	11.229	.253	.005			
Cubic	.331	79.740	3	484	.000	11.775	.155	.010	-6.313E-5		
The independent variable is PBR.											

Table 6.8.3 shows the curve fitting between overall evaluation of brand extension of fortune (i.e. fortune rice) and parent brand reputation. The F value for linear relationship is 236.634 which is much higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

**Table 6.8.4:** Curve Fitting of Overall Evaluation of Brand Extension and Perceived Fit

		Mod	del Sumi	nary and	Paramet	er Estimate	s		
Dependent	Variable:	CE							
		Mod		Parameter Estimates					
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3
Linear	.208	127.452	1	486	.000	12.844	.478		
Quadratic	.209	63.951	2	485	.000	11.778	.621	004	
Cubic	.227	47.373	3	484	.000	2.441	2.764	129	.002
The indepe	endent vari	able is PF.							

Table 6.8.4 shows the curve fitting between overall evaluation of brand extension of fortune (i.e. fortune rice) and perceived fit. The F value for linear relationship is 127.452 which is much higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

**Table 6.8.5:** Curve Fitting of Overall Evaluation of Brand Extension and Perceived Risk

		Mo	del Sumi	nary and	Paramet	er Estimate	S		
Dependent	Variable:	CE							
Model Summary Parameter Estimates									
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3
Linear	.090	48.257	1	486	.000	16.003	.299		
Quadratic	.097	25.931	2	485	.000	19.193	095	.009	
Cubic	.098	17.496	3	484	.000	21.760	658	.042	001
The independent variable is PR.									

Table 6.8.5 shows the curve fitting between overall evaluation of brand extension of fortune (i.e. fortune rice) and perceived risk. The F value for linear relationship is 48.257 which is higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

**Table 6.8.6:** Curve Fitting of Overall Evaluation of Brand Extension and Brand Extension Advertisements

	<b>Model Summary and Parameter Estimates</b>										
Dependent Variable: CE											
		Mod		Parameter Estimates							
Equation	R Square	F	df1	df2	Sig.	Constant	b1	b2	b3		
Linear	.108	58.815	1	486	.000	13.414	.492				
Quadratic	.108	29.475	2	485	.000	12.186	.659	005			
Cubic	.114	20.769	3	484	.000	3.095	2.753	142	.003		
The independent variable is BEA.											

Table 6.8.6 shows the curve fitting between overall evaluation of brand extension of fortune (i.e. fortune rice) and brand extension advertisements. The F value for linear relationship is 48.257 which is higher than quadratic and cubic relationships. And sig value for linear relationship is also significant at 1 percent and 5 percent level of significance i.e. P<.01, .05.

#### **6.5 Confirmatory Factor Analysis**

CFA is conducted to test adequate level of validity and reliability before testing for significant interrelationships among various variables in the measurement model of the proposed framework (Fornell and Larcker, 1981).

Confirmatory factor analysis comprises of the following aspects:

Composite reliability

Convergent validity

Discriminant validity

Model fit

Composite reliability is another important measure to evaluate reliability. It is argued that value of Cronbach alpha does not provide equal weight-age to the items in a given construct. Therefore Cronbach alpha can give biased results. An alternative test for reliability is assessing composite reliability, values greater than 0.7 are considered

$$CR = \frac{\left(\sum_{i=1}^{n} \lambda_{i}\right)^{2}}{\left(\sum_{i=1}^{n} \lambda_{i}\right)^{2} + \left(\sum_{i=1}^{n} \delta_{i}\right)}$$

Where

CR: composite reliability

good (Hair et al. 2013).

λ: standardized factor loading

δ: error variance

n: number of indicators or observed variables.

Validity: It shows whether the particular instrument is valid for measuring the concept of interest. The differences in the observed scale if truly reflect the characteristic difference being measured is called validity (Dash & Malhotra, 2016). The validity can be measured by the following forms.

#### 1. Convergent Validity

#### 2. Discriminant Validity

Convergent validity: Validity is an important assumption of CFA. Convergent validity explains that the measures or items which hold the basis of the same concept i.e. for a particular construct in theory are correlated. It is assessed by examining factor loadings and average variance extracted criterion. If the AVE scores for each construct meet the recommended level of 0.50 (Fornell and Larcker, 1981), it provides the inference for the presence of convergent validity.

Discriminant validity: measures the extent to which two different constructs which are the part of a related concept/ framework in theory are diverse from each other. To determine discriminant validity the standardized correlation values among the variables should be less than the square root of AVE for all the constructs (Fornell and Larcker, 1981). Discriminant validity is also measured by the values of MSV (Maximum shared variance), ASV (Average shared variance) and AVE (Average variance extracted). If value of AVE for all constructs is greater than MSV & ASV it shows that discriminant validity is achieved.

Table 6.9: Discriminant and convergent validity

	CR	AVE	MSV	ASV	BEA	PF	CE	PR	CIN	PBR	OE
BEA	0.852	0.591	0.164	0.082	0.769						
PF	0.834	0.502	0.347	0.156	0.231	0.709					
CE	0.854	0.540	0.429	0.213	0.377	0.557	0.735				
PR	0.855	0.542	0.164	0.067	0.405	0.230	0.348	0.736			
CIN	0.856	0.501	0.166	0.104	0.149	0.310	0.398	0.122	0.708		
PBR	0.872	0.533	0.429	0.214	0.297	0.589	0.655	0.208	0.408	0.730	
OE	0.805	0.511	0.211	0.099	0.144	0.280	0.338	0.076	0.405	0.459	0.715

Indices: BEA: Brand Extension Advertisement, PF: Perceived Fit, CIN: Consumer Innovativeness, CE: Overall Evaluation of Brand Extension, PR: Perceived Risk, PBR: Parent Brand Reputation, OE: Overall Brand Equity

Note: Square-root of the AVE of the constructs is typed in bold along the diagonal

Table 6.9 indicates that the Composite reliability (CR) value for all the constructs is more than 0.70 which indicates the presence of high scale reliability (Fornell and Larcker, 1981). (AVE) was calculated to measure the convergent validity. If the AVE scores for each construct meet the recommended level of 0.50 then convergent validity is established. Table 6.9 shows that the values for all the constructs are more than 0.50 hence researcher is able to obtain convergent reliability (Fornell and Larcker, 1981). Discriminant validity is a measure to ascertain that a construct is justly distinctive from other constructs (Hair et al. 2013). Table 6.9 shows all the values for AVE are greater than MSV & ASV. Table 6.9 also indicates that the absolute value of standardized correlation of particular constructs with all other constructs is less than the square root of average variance extracted (AVE) this also validates discriminant validity (Fornell and Larcker, 1981 & Dwivedi Merrilees, 2013b).

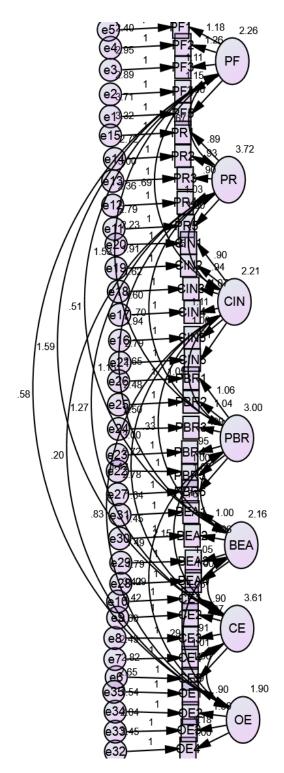


Figure 6.3: Measurement Model

The measurement model is depicted in figure 6.3. Measurement model has the value of chi square statistic/ DF as 2.818. Model fit is estimated with the help of the Goodness of Fit Index (GFI), Normed Fit Index (NFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). Table 10 shows the cut-off value of the model fit indices and the actual values achieved for the default model. Although the GFI value of 0.844 is less than 0.90 levels but the value is quite close to the threshold value therefore it represents an acceptable model fit. The value of CFI is .880 which is also close to 1 hence the model is a good fit (Byrne, 2010). RMSEA (Root Mean Square Error of Approximation) helps in determination of badness of fit. Value of RMSEA in structural model is .06 (the acceptable range is below .08, Mac Callum et al. (1996)). Thus it is clearly demonstrated from the values that measurement model shows a good model fit therefore researcher can proceed further for testing of hypotheses with the help of path estimates in the structural model.

**Table 6.10:** Summary of Goodness of Fit Index (Measurement Model)

Model fit index	χ2/df	CFI	GFI	NFI	TLI	RMSEA
model	2.818	.880	.844	.826	.867	.06
Cut-off values	<3	Close to 1	Close to	Close to	Close to 1	<0.1

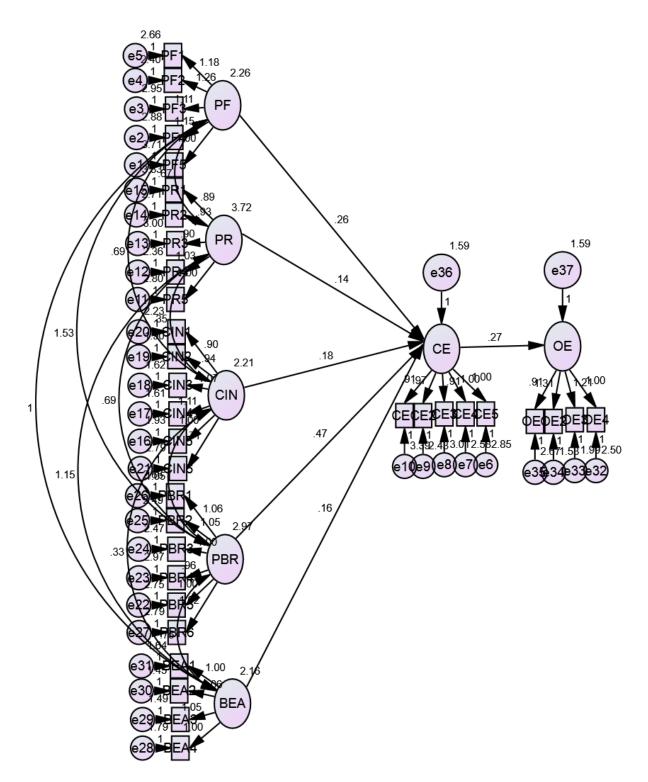


Figure 6.4: Structural Model

Figure 6.4 depicts the structural model for brand Fortune. Structural model has the value of chi square statistic/ DF as 2.896, GFI is .839, and value is near to 1 which indicates good fit (Byrne, 2010). The value of CFI is .873 which is also close to 1 hence the model is a good fit (Byrne, 2010). RMSEA (Root mean square error of approximation) helps in determination of badness of fit. Value of RMSEA in structural model is .062 (the acceptable range below .08 (Mac Callum et al. 1996).

 Table 6.11: Summary of Goodness of Fit Index (Structural Model)

Model fit index	χ2/df	CFI	GFI	NFI	TLI	RMSEA
Model	2.896	.873	.839	.820	.861	.062
Cut-off values	<3	Close to	Close to	Close to	Close to	<0.1

# 6.6 Path Estimates and Hypotheses Testing

Table 6.12: Path Estimates

Alternative Hypotheses	Independent Variable	Dependent Variable	Standardized Regression wt./Beta coefficient	P value	Hypotheses Acceptance/Rejection
H1a	Consumer Innovativeness	Overall Evaluation of Brand Extension	.057	.002*	Accepted
Н2а	Perceived Risk	Overall Evaluation of Brand Extension	.045	.002*	Accepted
НЗа	Brand Extension Advertisements	Overall Evaluation of Brand Extension	.060	.007*	Accepted
H4a	Perceived Fit	Overall Evaluation of Brand Extension	.070	.000*	Accepted
Н5а	Parent Brand Reputation	Overall Evaluation of Brand Extension	.068	.000*	Accepted
Н6а	Overall Evaluations of Brand Extension	Overall Brand Equity	.041	.000*	Accepted

Note: Significant at: \*0.01 levels

Table 6.12 shows the path estimates. It shows that all the six hypotheses are accepted. The P value for consumer innovativeness is .002 which is less than .05 & .01, hence the impact of consumer Innovativeness on evaluation of brand extension was found to be significant, thus H1 is accepted. The p Value for perceived risk is .002 which is less than .05 & .01 hence the impact of perceived risk on evaluation of brand extension was significant hence H2 is also accepted. P value for brand extension advertisement is .007 which is also less than .05 & .01 therefore the impact of brand extension advertisement on evaluation of brand extension if found to be significant. Hence H3 is also accepted. P value for perceived fit is .000 which is less than 05 & .01 therefore H4 is also accepted. P value for parent brand reputation is .000 which is again less than .05 & .01. This shows that parent brand reputation has significant impact on evaluation of brand extension. Hence H5 is also accepted. P value for evaluation of brand extension is .000 which is less than .05 & .01. This indicates that evaluation of brand extension has significant effect on overall brand equity. Therefore H6 is also accepted. All the p values are significant at 1% and 5% level of significance.

#### 6.7 Neural Network Analysis

The studies in marketing and consumer behavior with reference to the investigation of customer satisfaction and preference can be benefitted by artificial neural network to discover the predictions and relationships. Essential features of dataset are utilized by activation function of hidden layer in ANN therefore it out shadow the presence of irrelevant data and outliers which can disguise the model and the output associated (Detienne, 2017). Hyperbolic tangent is the activation function utilized for analysis.

Multilayer perceptron (MLP) training algorithm was used to train the data sets. Structural equation modeling has resulted in five significant independent variables which effect consumer evaluation of brand extension. These variables (Consumer innovativeness, parent brand reputation, perceived fit, perceived risk and brand extension advertisements) are taken in input layer. Output layer consists of consumer evaluation of brand extension as an output variable. NN model was tested using ten hidden nodes (Wang and Elhag, 2008 and Yadav et al. 2016). Model was trained with ninety percent data and testing of model was done with ten percent data; therefore the ratio was of 90:10. Ten cross-validations reduce the problem of over fitting of the model (Tiruwa, Yadav & Suri, 2018).

**Table 6.13:** Results of Neural Network Model

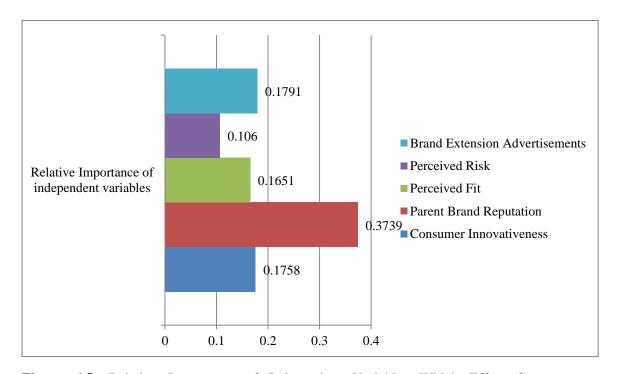
Network	Training	Testing
ANN1	0.64	0.366
ANN2	0.594	0.453
ANN3	0.58	0.536
ANN4	0.56	0.571
ANN5	0.566	0.653
ANN6	0.586	0.572
ANN7	0.593	0.437
ANN8	0.626	0.604
ANN9	0.506	0.493
ANN10	0.565	0.551
Mean	0.5816	0.5236

Results of training and testing validations obtained by Neural Network analysis show RMSE (root mean square error) values. The RMSE values in training and testing model

are 0.5816 and 0.5236 (as mentioned in Table 6.13). Therefore there are less variations hence it can be said that the model is robust. Relative importance of all the constructs is calculated for sensitivity analysis; results in Table 6.14 show that parent brand reputation is the most important variable for predicting overall evaluation of brand extension in the perception of consumer followed by brand extension advertisements, consumer innovativeness, perceived fit and perceived risk respectively.

**Table 6.14:** Sensitivity Analysis

Constructs	Relative Importance	
Consumer Innovativeness	0.1758	
Parent Brand Reputation	0.3739	
Perceived Fit	0.1651	
Perceived Risk	0.106	
Brand Extension Advertisements	0.1791	



**Figure 6.5:** Relative Importance of Independent Variables Which Effect Consumer Evaluation of Brand Extension

# 6.8 Independent Sample t Test to Analyze Group Differences in Gender & Marital status

**Table 6.15:** Descriptive Statistics

Group Statistics						
	GENDER	N	Mean	Std. Deviation	Std. Error Mean	
CE	MALE	187	22.79	10.003	.731	
	FEMALE	301	22.74	9.767	.563	

Table 6.16: Effect of Gender on Brand Extension Evaluation

	Independent Samples Test									
	Levene's Test for Equality of t-test for Equality of Means Variances									
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Co. Interva Diffe	l of the
									Lower	Upper
CE	Equal variances assumed	.339	.561	.058	486	.954	.053	.918	-1.750	1.857
CL	Equal variances not assumed			.058	387.353	.954	.053	.923	-1.762	1.868

**Table 6.17:** Descriptive Statistics

	Group Statistics						
	MARITALS	N	Mean	Std. Deviation	Std. Error Mean		
CE	Married	299	22.93	9.869	.571		
	Unmarried	189	22.48	9.835	.715		

Table 6.18: Effect of Marital Status on Brand Extension Evaluation

				Ir	ndepende	nt Samp	les Test			
		Equa	for			t-te	st for Equali	ty of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interva	nfidence l of the rence Upper
	qual ariances ssumed	.016	.900	.494	486	.622	.452	.916	-1.347	2.252
va no	qual ariances ot ssumed			.494	401.012	.621	.452	.915	-1.347	2.251

Table 6.15 shows the descriptive statistics where 187 are male and 301 are female customers who are using brand fortune. Males have a mean value of 22.79 with standard deviation of 10.003 and females have the value of 22.74 with standard deviation of 9.767. Table 6.16 shows the study of group differences among males and females with respect to their evaluation of brand extension. Levene's test of equality of variances has to be interpreted before we test for the group differences in independent sample t test, which based on two assumptions i.e. equal variances not assumed and equal variances assumed. As the Table 6.16 shows the sig value (p-value) for equal variances assumed is .561 which is >.05 therefore two independent groups i.e. males and females have equal variances among them. Hence we can proceed with the sig value mentioned against equal variances assumed. Table 6.16 shows two tailed sig value (p-value) is .954 which is >.05. Therefore it shows there is no significant difference in the evaluation of brand extension with respect to gender this leads to rejection of H7a.

Table 6.17 shows the descriptive statistics for marital statuses where 299 are married and 189 are single out of the 488 customers who are using brand fortune. The mean value and standard deviation for married customers is 22.93 and 9.869, for single customers the mean and standard deviation values are 22.48 and 9.835 respectively. Table 6.18 shows the study of group differences among married and single with respect to their evaluation of brand extension. Levene's test of equality of variances has to be interpreted before we test for the group differences in independent sample t test, which based on two assumptions i.e. equal variances not assumed and equal variances assumed. As the Table 6.18 shows the sig value (p-value) for equal variances assumed is .900 which is >.05 therefore two independent groups i.e. Married and single customers have equal variances among them. Hence we can proceed with the sig value mentioned against equal variances assumed. Table 6.18 shows two tailed sig value (p-value) is .622 which is >.05. Therefore it shows there is no significant difference in the evaluation of brand extension with respect to marital status this leads to rejection of H8a.

# 6.9 One way ANOVA to Analyze Group Differences in Age, Income & Profession

Table 6.19: Test for Homogeneity of variances

Test of Homogeneity of Variances						
CE						
Levene Statistic	df1	df2	Sig.			
1.494	4	483	.203			

**Table 6.20:** ANOVA Model for Evaluation of Brand Extension With Respect To Age of Respondent

		ANOV	A		
CE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	419.442	4	104.861	1.082	.365
Within Groups	46812.642	483	96.921		
Total	47232.084	487			

Test of homogeneity of variances is a pre-requisite for analysis of variance (ANOVA) which means that variances among each of the population are equal. Table 6.19 shows that the p-value for homogeneity of variance it shows the value is .203 which is >.05 therefore the variances among different population are equal and we can proceed with one way analysis of variance. Table 6.20 shows the ANOVA model for evaluation of brand extension by the consumer with respect to age. The sig value is .365 which is >.05, hence we can infer that there is no significant difference in evaluation of brand extension with respect to different age groups, i.e. H9a is rejected.

**Table 6.21:** Test for Homogeneity of variances

Test of Homogeneity of Variances						
CE						
Levene Statistic	df1	df2	Sig.			
1.595	4	306	.176			

**Table 6.22:** ANOVA Model for Evaluation of Brand Extension With Respect To Income of Respondent

ANOVA								
CE								
	Sum of Squares	df	Mean Square	F	Sig.			
Between Groups	332.054	4	83.014	.884	.474			
Within Groups	28730.597	306	93.891					
Total	29062.651	310						

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Table 6.21 shows that the p-value for homogeneity of variance it shows the value is .176 which is >.05 therefore the variances among different population are equal and we can proceed with one way analysis of variance. Table 6.22 shows the ANOVA model for evaluation of brand extension by the consumer with respect income of the respondent. The sig value is .474 which is >.05, hence we can infer that there is no significant difference in evaluation of brand extension with respect to different income groups, i.e. H10a is rejected. It infers that evaluation of brand extension by the consumer does not differ according to different income levels.

**Table 6.23:** ANOVA Model for Evaluation of Brand Extension With Respect To Profession of Respondent

		ANOV	A		
CE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	898.757	4	224.689	2.342	.054
Within Groups	46333.327	483	95.928		
Total	47232.084	487			

The assumption of homogeneity of variances was also examined for evaluation of brand extension with respect to profession/profile of respondent. The value is .029 which is <.05 therefore it is not advisable to proceed with ANOVA. Since the condition of homogeneity of variances was violated. Therefore researcher has used Welch test to study group differences. Table 6.23 shows the values of Welch test, the corresponding sig value is .054>.05 therefore it can be inferred that there is no significant difference in evaluation of brand extension with respect to their profession/ Profile. This leads to rejection of H11a.

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**Table 6.24:** Test for Homogeneity of variances

Test of H	Iomogenei	ty of Varianc	es
CE			
Levene Statistic	df1	df2	Sig.
1.169	3	484	.321

**Table 6.25:** ANOVA Model for Evaluation of Brand Extension With Respect To Qualification of Respondent

		ANOV	A		
CE					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	747.591	3	249.197	2.595	.052
Within Groups	46484.493	484	96.042		
Total	47232.084	487			

Table 6.24 shows that the p-value for homogeneity of variance it shows the value is .321 which is >.05 therefore the variances among different population are equal and we can proceed with one way analysis of variance. Table 6.25 shows the ANOVA model for evaluation of brand extension by the consumer with respect to educational qualification. The sig value is .052 which is >.05, hence we can infer that there is no significant difference in evaluation of brand extension with respect to different qualification, i.e. H12a is rejected. It infers that evaluation of brand extension by the consumer does not differ in terms of the qualification they have.

#### **6.10 Summary**

Analysis of the data reveals that all the independent variables, i.e. consumer innovativeness, parent brand reputation, perceived fit, perceived risk and brand

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extension advertisements have a significant impact on the overall evaluation of brand extension. Therefore, the entire five hypotheses are supported and the subsequent effect of brand extension on brand equity is also significant. It shows that brand extension has a significant positive effect on brand equity. Indices which indicate fitness model in measurement and structural model shows that the proposed model is a good fit. Hence, it can be inferred that the proposed model can be applied by the marketers to design their strategies for branding.

The effect of several independent variables on brand extension gives a cue to the researcher for obtaining the most important/relevant out of all independent variables. Therefore the study has also evaluated the relative importance of the independent variables which affect the evaluation of brand extension by the consumer. Artificial Neural Networks (ANN) technique in SPSS is utilized to achieve the results for the same. This technique considers the significant independent variables obtained from structural equation modeling (SEM) as inputs for the prediction of brand extension. Findings of ANN shows that parent brand reputation is the most important variable which effects evaluation of brand extension by the consumer followed by brand extension advertisements, consumer innovativeness, perceived fit and perceived risk.

Demographic analysis has analyzed group differences in the diverse set of respondents concerning the overall evaluation of brand extension by them. Results show there is no significant difference in evaluation of brand extension by the consumer across gender, marital status, age, income, the profile of respondents/profession and educational qualification. Findings of the study are consistent with Khan and Rahman (2009). They have also shown that age, education,

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gender, and profession does not have any significant effect on the overall evaluation of brand extension by the consumer.

The study is based on an FMCG product therefore; the evaluation of brand extension by the consumer does not vary much across various groups. Since FMCG products are consumed in volumes and the price of these products are relatively low as compared to the durable goods, there is no significant difference in its evaluation by the different categories of customers.

## **CHAPTER-7**

# FINDINGS, CONTRIBUTIONS, IMPLICATIONS, LIMITATIONS, FUTURE DIRECTIONS OF RESEARCH AND CONCLUSION

- 7.1 Findings of the Study
- 7.2 Contributions of the Study
- 7.3 Implications of the Study
- 7.4 Limitations
- 7.5 Future Directions of Research
- **7.6 Conclusion**

#### 7.1 Findings of the Study

The purpose of the research was to identify various factors which affect brand extension and the subsequent effect of brand extension on brand equity with reference to a real FMCG brand of Indian market. This chapter focuses on the key findings of the research, contributions of the research, implications, limitations of the study along with the discussion on future directions of the research and conclusion.

**7.1.1** The first objective of the study was **to understand customer perception for Brand Equity.** Customer perception of brand equity is evaluated with the help of preliminary investigation where researcher has conducted few pre-tests to understand brand associations for all the five selected brands (with the help of open-ended questionnaire formulated to write associations felt with the brands).

7.1.2 Second and third objective of the study were to examine the effect of various factors on Brand Extension & to analyze the impact of Brand Extension on Brand Equity. The findings of the study show that Consumer innovativeness significantly effects brand extension since the P- value for consumer innovativeness is .002\*\* which is less than .05 & .01. Perceived risk is also significantly effecting brand extension as the p-value for perceived risk is .002\*\* which is less than .05 & .01. Parent brand reputation is also an important independent variable which significantly affects brand extension as the P-value for parent brand reputation is .000\*\* which is again less than .05 & .01. Perceived fit & Brand extension advertisements are also observed to cause a positive significant effect on brand extension evaluation since the P-value for perceived fit is .000\*\* which is less than

.05 & .01 and for brand extension advertisement the P-value is .007\*\* which is also less than .05 & .01. And brand extension in turn has subsequent significant positive effect on brand equity since the P-value associated is .000\*\* which is less than .05 & .01.

**7.1.3** Fourth objective of the study was **to identify the relative importance of factors which affect Brand Extension.** Artificial Neural Networks (ANN) technique is conducted to estimate the relative importance of the independent variables which affect overall evaluation of brand extension by the customer. Sensitivity analysis show that parent brand reputation is the most important variable (i.e. the value is 0.3739) for predicting overall evaluation of brand extension followed by brand extension advertisements (the value is 0.1791), consumer innovativeness (the value is 0.1758), perceived fit (the value is 0.1651) and perceived risk (the value is 0.106) respectively.

**7.1.4** Fifth objective of the study aimed **to examine the role of demographic variables in evaluation of brand extension.** Demographic Analysis is done with the help of Independent sample T-Test and One Way ANOVA. The two-tailed sig value/ P-value for group differences in gender is .954 which is >.05. Therefore it shows there is no significant difference in the evaluation of brand extension with respect to gender. The two-tailed sig value/ P-value associated with Independent sample t-test for evaluating group differences in marital status is .622 which is also >.05. Hence, there is no significant difference in the evaluation of brand extension with respect to marital status. The ANOVA model for evaluation of brand extension by the consumer

with respect to age shows the sig value/ P-value is .365 which is >.05, this indicates that there is no significant difference in evaluation of brand extension with respect to different age groups. The ANOVA model for evaluation of brand extension by the consumer with respect to income of the respondents elicits the sig value/ P-value is .474 which is >.05, therefore it can be inferred that there is no significant difference in evaluation of brand extension with respect to different income groups. The condition of homogeneity of variances is violated in profession/profile of the respondents. Hence, researcher has used Welch test to study group differences, the corresponding sig value/ P-value is .054>.05, therefore it can be inferred that there is no significant difference in evaluation of brand extension with respect to their profession/ Profile. The ANOVA model for evaluation of brand extension by the consumer with respect to educational qualification states the sig value/ P-value is .052 which is >.05. Hence we can infer that there is no significant difference in evaluation of brand extension with respect to different qualification possessed by the respondents.

7.1.5 Sixth objective of the study was to propose a framework/model to analyze the impact of Brand Extension on Brand Equity in context of Indian FMCG industry.

The study is undertaken with the help of a popular Indian FMCG Brand Fortune which has good visibility through continuous promotion in the form of print advertising, television advertising, and transit advertising. A framework has been proposed which is tested with the help of Structural Equation Modeling. The results

indicates that the model is a good fit and all the indices of goodness of fit and badness lie in the prescribed ranges with all the six hypotheses getting supported.

#### 7.2 Contributions of the Study

- First significant contribution of the study is that it analyzes the concept of brand extensions with the help of Indian FMCG industry. This industry is a huge industry in India which exhibit high frequency purchases so the results are useful for the marketers.
- Another major contribution is the usage of real brand extension since the studies in past has discussed brand extension with the help of hypothetical extensions.
- It has recognized the relative importance of factors/variables which affect Brand Extension. Parent brand reputation is found to be the most important factor which affects brand extension.
- The group of respondent which are the part of study belonged to diverse socioeconomic status. Demographic profile is varied in nature, unlike previous studies which are only focussed on sample of students. Present study covers respondents of different age groups, educational background and job profiles.

#### 7.3 Implications of the Study

Implications are a significant part of research. It portrays the important facets of the research and underlines the fields where the findings are applicable. The researcher have discussed the implications under three heads i.e. implications for industry, implications for marketers and implications for academia.

#### • Implications for Industry

FMCG industry comprises of several goods which have less shelf life like grocery items, toiletries, soft drinks etc. They comprise of low-cost items and the profit margins are also low on individual product/good but the cumulative profits are high. The purchase of such items is more frequent therefore it is significant to understand the impact of various strategies such as brand extension used by marketers in these markets. Since substantial amount of costs are associated with brand extension, it is essential to understand the role of factors like consumer innovativeness, perceived fit, parent brand reputation, perceived risk and brand extension advertisements which affect brand extension in a positive manner. Brand under the study has explained that brand extensions are quite successful in enhancing brand equity in FMCG market. It is less risky and convenient to launch extension brands in consumer packaged goods.

However the study does not limits itself to the understanding of various factors which affect brand extension. Another key implication associated with the study is to understand the role of brand extension in enhancing the brand equity of the parent brand. Brand equity is the chief component for the brand since it provides value to the brand and it helps the brand to enjoy the benefits allied to premium/ prestige pricing.

#### • Implications for Marketers

Brand equity is a key component for each and every firm in the market which helps in positioning of a brand. It also provides the basis to make use of the high prices and results in enhanced brand loyalty among the customers. Therefore it is important for marketers to understand the role of brand extension strategy in enhancing brand equity. It has been identified in studies that extension does affect the core brand negatively;

brands do suffer from cannibalisation caused by extension. The negative effects of extension are mainly observed in automobiles where downscale extensions tend to erode the sales of the core brand (Pitta and Katsanis, 1995). Extension of the products is viewed on the basis of their usability and functionality by the consumers, downscale extension can easily be utilised in functional products. On the other hand prestige products can only be extended to a better and superior category of extension therefore upscale extensions are useful. Study however has identified that brand extensions in FMCG brands has a positive effect on the brand equity of the parent brand.

The research also demonstrates that the brands chosen for the study i.e. all the five brands for the initial phase of research had strong brand associations. It implies that in order to understand the role of several strategies incorporated by the marketers, it is vital to invest in marketing communications.

#### • Implications for Academia

Study has added in the existing body of knowledge in context of branding. It has validated the conceptual framework for feedback effects of brand extension on parent brand equity in with respect to a real brand extension in Indian FMCG industry. Earlier studies have focussed on hypothetical brand extensions. Very few studies in literature have discussed about the role of demographic variables in shaping overall evaluation of brand extension by the consumer. Therefore present study has added to the existing knowledge in academia about brand extension evaluation with respect to age, income, gender, marital status, profession and educational qualification. Relative

importance of various factors which effect brand extension is also an important input for the future researchers.

#### 7.4 Limitations

Results of the research should be interpreted in the light of limitations. First limitation is the use of non probability sampling which limits the generalization of the study. Another limitation is the use of only one FMCG brand; it can be done using more brands in India. Also respondents did not have any choice of choosing the brands. In the initial phases of the study i.e. during stimulus development they were provided with five popular Indian brands and on the basis of focus group study one brand was selected. However in researches it is difficult to encourage product / brand choice from respondents since it could only result in increase in the duration of the stimulus development stage. Third limitation is the geographical area which is covered; the study covers the respondents of Delhi NCR region. Although Delhi is capital of India and it attracts respondents from various regions of the country but if respondents could have been gathered from other geographical regions of country, the results would have become more exhaustive. Lastly, the current study has focussed in CBBE (Consumer Based Brand Equity) future researchers can explore financial brand equity of brands.

#### 7.5 Future Directions of Research

The study has suggested several new directions of further research on the aforesaid topic. Several studies are done on brand extension as well as brand equity, but majority of them are confined to products, rather than services. Since Brand extension

holds a considerable meaning and relevance in context of services, therefore researchers must aim at exploring the same. Several other less explored sectors like automobile, pharmaceuticals, consumer durables etc also needs to be well catered with respect to the nascent growth of brand extension and resulting change in brand equity.

According to data published by World Bank (Rural Population, 2017), the rural population in India contributes to 67% of the total population. Since the current research has focussed on the samples collected from Delhi NCR, therefore a major segment of Indian population has been left uncovered. Future researchers can focus on data collection from rural population by focussing on products/brands which are available and popular for consumption among rural folk. Current research was unable to cover such large portion of Indian market due to unavailability of funds for the research. Therefore, future researchers if, are able to generate funds for their research can employ few enumerators who can collect data with the help of schedules from rural population

Moreover, majority of the researches reviewed for this purpose lacked the effect of mediating/moderating variables like demographics, advertisements, role of ICT etc. Therefore, more emphasis can be laid on establishing a more concrete relationship between the studied variables with the intervening effect of moderating/mediating variables.

#### 7.6 Conclusion

Indian FMCG market is a huge market which is growing at a faster pace. According to a report by Indian Brand Equity Foundation (Indian Consumer Market, 2017); fast-moving consumer goods companies in India are performing better than other MNC's in the world. India's seven leading firms in FMCG sector contributed to about US\$ 11.1 billion in FY 2015-16. The growing influence of social media and the increasing purchasing power of Indian consumers have enabled consumers to indulge themselves in purchasing. The Indian FMCG sector has shown the annual growth rate of 5.7 per cent between FY 2005 to FY 2015. Growth rate of expenditure incurred by Indian consumers is more than double the anticipated expenditure rate in the global market which is merely five percent. This will help India to become the third largest consumer market by 2025.

Brand extension is a well identified strategy utilized by most firms to expand their range of products in the market. The strategy helps in materializing, the established image of brand in the market. Study has identified various factors which affect brand extension with respect to Indian FMCG industry. Although existing literature has shown the presence of factors which affect brand extension but it lacks researches concerning Indian market. Another important aspect of this study is that it has identified the subsequent affect of brand extension on parent Brand Equity. The findings of the study show that all the five identified factors i.e. Consumer Innovativeness, Perceived Risk, Parent Brand Reputation, Perceived Fit & Brand Extension Advertisements have significant effect on brand extension and brand extension in turn has significant effect on brand equity. Study is undertaken with the

help of a popular Indian FMCG brand i.e. Fortune which has a good visibility through continuous promotion in the form of advertising, sales promotion, social media marketing and email marketing etc. Since the brand under the study enjoys a good market share in the FMCG market, therefore it helped the researcher to capture the behaviour of consumer in context of FMCG market.

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#### **APPENDIX**

#### Dear Respondent,

This questionnaire is based on the study of Fortune brand (a vegetable oil brand) and its brand extension Fortune rice. You are requested to encircle the appropriate option (in the scale 1 to 7) mentioned against the statements. It is an academic study and the data provided by you will not be forwarded anywhere else.



#### **OVERALL BRAND EQUITY** (1- strongly disagree to 7 - strongly agree)

It makes sense to buy Fortune instead of any other brands.	1	2	3	4	5	6	7
Even if another brand has the same features as Fortune, I buy Fortune.	1	2	3	4	5	6	7
If there is another brand as good as Fortune, I still buy Fortune.	1	2	3	4	5	6	7
If another brand is not different from Fortune in any way, it is smarter to purchase Fortune.	1	2	3	4	5	6	7

# **OVERALL EVALUATION OF BRAND EXTENSIONS** (1- strongly disagree to 7 - strongly agree)

Overall, I am very positive to extension Fortune rice.	1	2	3	4	5	6	7
I am inclined towards extension Fortune rice.	1	2	3	4	5	6	7
According to me extension Fortune rice is great.	1	2	3	4	5	6	7
I admire extension Fortune rice a lot.	1	2	3	4	5	6	7
I feel good about Fortune rice.	1	2	3	4	5	6	7

#### **CONSUMER INNOVATIVENESS** (1- strongly disagree to 7 - strongly agree)

Overall, I like buying the most recent rice brand.	1	2	3	4	5	6	7
If I needed to purchase rice I would buy latest one available.	1	2	3	4	5	6	7
When I see I new brand of rice product in the store, I often buy it because it is new.	1	2	3	4	5	6	7
I like to purchase the latest rice before others do.	1	2	3	4	5	6	7
I like to experience novelty and change in my daily routine.	1	2	3	4	5	6	7
I like surprises.	1	2	3	4	5	6	7

# PARENT BRAND REPUTATION (1- strongly disagree to 7 - strongly agree)

All together, I am very positive to brand Fortune.	1	2	3	4	5	6	7
All together I am Very satisfied with brand Fortune.	1	2	3	4	5	6	7
All together I associate positive things with brand Fortune.	1	2	3	4	5	6	7
The Fortune brand is interesting.	1	2	3	4	5	6	7
According to me Fortune brand is different from other competing brands.	1	2	3	4	5	6	7
I feel that I have a clear reason to buy Fortune instead of others.	1	2	3	4	5	6	7

#### PERCEIVED FIT

The extension Fortune rice makes sense. (1-strongly	1	2	3	4	5	6	7
disagree to 7 - strongly agree )							
Fortune brand has skills to launch the brand extension.	1	2	3	4	5	6	7
(1- strongly disagree to 7 - strongly agree)							
How similar or dissimilar are "new product" to the	1	2	3	4	5	6	7
products usually offered by Fortune? (1– very dissimilar,7							
– very similar)							
How similar is the position of Fortune user with extension	1	2	3	4	5	6	7
Fortune rice? (1 – very dissimilar,7 – very similar)							
Think about brand Fortune how similar is the competence	1	2	3	4	5	6	7
for making original brand and extension Fortune rice? (1 –							
very dissimilar, 7 – very similar)							

## **PERCEIVED RISK** (1- strongly disagree to 7 - strongly agree)

When I m in front of rice section, I always feel rather	1	2	3	4	5	6	7
unsure about what to pick.							
When you buy rice it's easy to make a wrong choice.	1	2	3	4	5	6	7
It's difficult to know that which rice is the best option in	1	2	3	4	5	6	7
the market.							
I should be annoyed with myself if it turned out I'd made	1	2	3	4	5	6	7
the wrong choice.							
It's not so dangerous to make a wrong choice of rice.	1	2	3	4	5	6	7

# **BRAND EXTENSION ADVERTISEMENTS** (1- strongly disagree to 7 - strongly agree)



Extension product is well supported in advertisements.	1	2	3	4	5	6	7
Extension product advertisements are memorable.	1	2	3	4	5	6	7
Frequency of extension product advertisement is 3-4 times a day.	1	2	3	4	5	6	7
Advertisements of extension product have strong appeal.	1	2	3	4	5	6	7

Name
Gender □ Male □ Female
Marital status □ Married □ Unmarried
<b>Age</b> □ 18-25 yrs □ 26-35 yrs □ 36-45 yrs □ 46-55 yrs □ 56-65 yrs
<b>Qualification</b> $\Box$ 12 <sup>th</sup> $\Box$ Graduation or equivalent $\Box$ Post Graduation or equivalent $\Box$ Professional qualification (C.A, C.S, LL.B, LL.M, M.B.A or equivalent) $\Box$ PhD
<b>Profession</b> □ Private/ Govt Employee □ Household □ Student □ Self employed □ others
<b>Income</b> ( <b>If apply</b> ) $\square$ less than 2 lakh per annum $\square$ 2 lakh-5 lakh per annum $\square$ 5.1 lakh to 10 lakh per annum $\square$ 10.1- 15 lakh per annum $\square$ more than 15 lakh per annum

Thank you for sparing your valuable time!