Investigating Relationship Between Brand Image, Brand Credibility and Brand Equity

Shveta Kalra (Nee Malik)*

Abstract

Brand image is the combination of consumers' perceptions and beliefs regarding a brand as it is the belief of consumers which makes a brand trustworthy and likable.
The present study analyses the role played by brand image in making brand credibility and the role played by brand image and brand credibility in
creating brand equity has been analysed. Further, the role of brand credibility as a mediator between brand image and brand equity has been analyed. This research paper has tested three hypotheses on data collected from 477 responded comprising of all groups. Sample population consists of consumers using package foods and sports goods. Reliability tests on data set have been carried out, A rich literature review has been carried out to trace the development of concepts of Brand image, Brand value and Brand equity and their importance for marketing management. Results of the confirmatory factor analysis (CFA) show that brand image, brand value and brand equity have positive effects on purchase behavior of consumers.

Keywards *: Brand Image, Brand Credibility, Brand Equity, Consumer Perception, Belief*

Introduction - Investigating relationship between Brand Image, Brand Credibility and Brand Equity :

As Kumar and Sharma (1998) stated, American Marketing Association identified a brand as a "name, term, sign, symbol or design or a combination of these that identify products or services of one seller or a group of sellers and differentiates them from those of their competitors" (Kotler and Armstrong, 2010). While Brand image (Keller, 2008), credibility and perceived value (Vanrenen, 2005) are supposed to be indispensible virtues for building a strong brand, it has been the key factor in consumers' decision making processes (Erdem, Swait and Valenzuela, 2006).

Brand image is formed on the basis of consumer's perceptions and beliefs about a brand (Campbell, 1993). If the consumer has positive associations about a brand in his/her memory, it surely provides a platform to believe that the brand is capable of

*Dr. Shveta Kalra (Nee Malik)
Assistant Professor
Satyawati College (Day)
University of Delhi
Delhi, India

continuously delivering what has been promised resulting in positive brand credibility. Positive brand image along with positive brand credibility enables a brand to earn greater value over its generic counterpart, thus, helping a brand to earn brand equity. A clear, consistent and compelling image can create a unique space for its brand which helps the company in maintaining the magic word called 'Equity'.

In the segment of cars, Maruti, Hyundai, Toyata, Honda etc. have definite brand image in consumer's mind. According to a study by J.D. Asia Pacific (2014), on Indian consumers' perceptions, Maruti Suzuki is an Indian brand distinctively positioned as offering affordable and fuel efficient cars despite its Japanese origin while Honda and Toyota are perceived as Japanese brands viz. offering the latest technology and engineering having global images more than their European, Korean and U.S. counterparts. Hyundai is related more with technology and styling. Also, consistency of brand image is the hallmark of a great brand, be it Starbucks or Nordstrom. McDonalds has maintained consistency in its methods, systems and services. At last, brand image should be compelling to create brand magic, brand chemistry and attraction all rolled up into one.

The present study is an attempt to analyze the role played by brand image and brand credibility in making brand equity. The study also checks the role of brand credibility as a mediator in the relationship between brand image and brand equity.

Brand Image

Brand image describes the consumer's thoughts and feelings towards the brand (Roy & Banerjee, 2007). Keller (1993) defines brand image as "the perception about a brand as reflected by the brand associations held in consumer memory". It is largely a subjective concept which is formed in consumers' mind (Dobni & Zinkhan, 1990) and are influenced by beliefs, perception, feelings and attitudes towards a brand (Bullmore, 1984). These are strongly related to intangible aspects such as social meanings and symbolic value than the physical features of the product (Frazer, 1983).

Chiang and Jang (2007) indicated that brand image is a significant predictor of customer's perception of quality and trust. The mental image that consumers have of a brand, its uniqueness in comparison to the other brands affects the equity and credibility of the brand. A strong brand image creates a competitive advantage in the market place that will enhance their overall reputation and credibility. Consumers intend to buy well known brand products with positive brand image for reducing purchase risks (Akaah & Korgaonkar, 1988). Less information required and reduction in risks help in making the brand more trustworthy and believable which are considered to be part of brand credibility.

When a consumer purchases a Louis Vuitton handbag, it is because of its clear association with luxury which makes it credible in consumers' mind. Faircloth et al. (2011) studied the impact of brand image and brand attitude on brand equity based on the study of polar fleece sweaters. Alhaddad (2014) investigated the impact of brand image on brand equity based on a study of soft drink industry. On the basis of above discussion, the following hypotheses are proposed:

H_1: Brand image has positive impact on brand equity

Brand Credibility

Consumers do not have complete information on the product. Due to asymmetric information (Erdem and Swait, 2004; Wernerfelt, 1988), consumers are likely to depend on brand credibility. According to Erdem and Swait (2004), brand credibility is the most important attribute of a brand that can signal product positioning. Good warranty, advertising expenditure and brand names can serve as signals of quality (Rao et al., 1999). Brand credibility is developed through a firm's past marketing activities through cumulative experiences of customers having probability of influencing their future brand consideration (Erdem, Swait and Louviere, 2002). Thus, Brand credibility is "the believability of the product position information embedded in a brand depending on consumers' perception of whether the brand has the ability to continuously deliver what has been promised" (Erdem and Swait, 2004) meaning thereby that the brand contains three basic qualities viz. trustworthiness, expertise and attractiveness/likeableness (Hovland et

al., 1953; Keller and Aaker, 1998; Sternthal and Craig, 1982).

Brand Equity

Brand equity defined in the study is the differential effect that brand knowledge has on consumer response to the marketing of that brand (Keller, 1993). Raggio and Leone (2007) define brand equity as "a customer's attitude, perception, belief or desire that a brand will meet its promise of value". A brand which is considered to be trustworthy and attractive in the eyes of consumers is supposed to get positive response from consumers and earn greater volume. According to information economics framework, perceived quality of the product increases as long as brand credibility increases. So, information research costs decreases and the perceived risk drops. This results in consumer's expected benefit. Increment of the expected benefit means "the added value provided to a product by the brand" (Farquhar, 1990) which is nothing but brand equity. In the light of above discussion, the following hypothesis is proposed:

H_2: Brand image has positive impact on brand credibility.

A brand provides functional, economic and psychological benefits for the end users (Ambler, 1995, Hutton, 1997). The premium that a consumer pays for a brand over and above its generic counterpart is *brand equity*. Keller (1993) offered a cognitive psychology perspective, defining *customer based brand equity* (CBBE) as the differential effect that brand knowledge has on consumer response to the marketing of that brand. It is based on consumer attitudes about positive brand attributes and favorable consequences of brand use (American marketing association, 2010).

As defined by Leuthesser (1988) brand equity is value addition through relational associations among consumers. From the customer's point of view, brand equity refers to customer's perception, associations and the values attached to the brand (Farquhar, 1989).

Consumer choice depends upon multiple consumption values. A product's value proposition is a statement of the functional, emotional and self-expressive benefits delivered by the brand that provides value to the target customer (Aaker, 1996b). According to

Sheth et al. (1991), consumption values can be functional, social, emotional, epistemic and conditional which are independent to make differential contributions in any given choice situation. Hall et al. (2000) describe customer perceived value (CPV) as consisting of functional (quality, price and risk) value, emotional and social value in the context of intangible products. Sweeney and Soutar (2001) describe customer perceived value (CPV) as consisting of three values which are functional (economic and quality), emotional and social in case of durable goods. Forgas et al. (2012) found functional value benefits, functional value sacrifices, emotional value and social value as factors affecting offline perceived value in the context of passengers of British Airways. Chiang and Lee (2013) reported value for service experience, functional value, cultural value, value for community and value for money as significant dimensions of perceived value in case of hotel visitors in Taiwan. Since most of the studies have considered functional, emotional and social value as dimensions of CPV, the brand equity in the present study will be measured as summated score of three CPV viz. functional, emotional and social. Functional value can be seen in product quality and product performance and plays key role in consumer choice. Emotional value refers to the utility derived from the feelings or affective states that a product generates. Social value is the utility derived from the product's ability to enhance social self concept such as status. Hence third hypothesis is as follows:

H_3: Brand credibility has positive impact on brand equity.

Mediated Hypothesis

Brand image is similar to overall image of the brand in the person's mind reflecting or expressing uniqueness of each brand raised from marketing activities in presenting the prominent points of the brand to hit the target group (Schiffman and Kanuk, 2007). Brand image acts as a signal of intangibility of perceived value of brand. It exists in consumers' perception. This is what consumers think and feel about the brand. The products with a good image can create strong confidence of consumers than the products with a bad image (Chuchai Smithikrai, 2013). The confidence in the brand is the most critical driver of brand credibility. As discussed earlier, brand

credibility is the believability of the product information. When a consumer considers a brand as credible, only then he is willing to pay more for it and recommend it to others. Srinivasan (1979) stresses the role of "brand specific effect" in defining brand equity. This effect explains part of consumers' overall preference for a brand that could not be justified by its objectively measured attributes. A brand which is seen as trustworthy, expert and attractive is preferred over its counterpart. Since brand credibility stems from the unique associations in consumers' minds, it is expected that it will mediate the relationship between brand image and brand equity.

On the basis of above discussion, it can be proposed that

H_4: The relationship between brand image and brand equity is mediated by brand credibility.

Questionnaire and Measures

This study included FMCG or CPG (consumer packaged goods) of FMCG category. Based on an exploratory study of product categories, three different categories were chosen viz. breakfast cereals; athletic shoes and jeans.

The questionnaire included three parts. The first part measured demographics of respondent and brand image (general brand image). The other section measured brand credibility. The last section measured brand equity as consisting of emotional, social, and functional values. A total of 477 valid responses were collected.

General brand image was measured in this study as per the following dimensions suggested by Aaker (1996) i.e. there is a reason to buy the brand instead of others; the brand is different from competing brands; the brand has a personality; the brand is interesting; I have a clear impression of the people who consume the brand.

Index of Brand credibility was developed on the basis of a scale Attractiveness/likeableness, Trustworthiness nd ability to deliver what it promises (Erdem and Swait's ,2004 and Ohanian's ,1990). The measures of the three values were also adapted from Sheth *et al.* (1991). Functional values were measured

as "this brand performs as it promises"; "it is of consistent quality";

Social values were measured as "this brand would give me a sense of prestige"; "it reflects the kind of person I am" and "it would make people think that I can afford good quality things";

Emotional values were measured as consisting of "it makes me feel good"; "it makes me appreciated"; "it gives me a sense of assurance"; "it is the one with which I would be satisfied"; "it would give me a feeling of well being". (All dimensions will be measured on a 7 point Likert scale as 7-strongly agree; 6-agree; 5-little agree; 4-neutral; 3-little disagree; 2-disagree; 1-strongly disagree).

Respondents Profile

A total of 477 valid responses could be collected. The demographic information relating to age, gender, occupation status, working status, income is given in the table below.

Of the total respondents, 75% were from the age group of 18-25 years, 14% from 25-35 years, 3% from 35-45 years, 4% from 45-55 years and remaining from 55 years & above of age.

37% respondents were males and 63% were females. Out of the total consumers, app 49% were working and rest 51% were non-working. 30% respondents belonged to service class while a minimal 4% app were self-employed. Only 6% were professionals and majority 60% were occupied either in their studies or were home makers.

App. 20.5% i.e. 98 respondents earned income upto Rs 3 lacs; 16.6% i.e. 79 respondents had income in the bracket of Rs 3-6 lacs. 5.9% i.e. 28 consumers had income of 9-12 lacs and a minimal of 0.4% had income of 9-12 lacs. Almost 240 respondents were either home makers or students.

Reliability analysis

The reliability of a measure indicates the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of a measure (Cavana, Delahaye and Sekaram, 2001). The composite reliability for internal consistency was first demonstrated. The values for all constructs were above the suggested threshold of 0.70 (recommended by Cavana et al., 2000), with a minimum of 0.873.

Table 1: Cronbach's alpha values

	Number of items	Cronbach's alpha
Brand credibility	5	0.888
Brand image	7	0.873
Brand equity	10	0.913

Confirmatory factor analysis

Following Anderson and Gerbing's work, models were tested using a two stage structural equation model. First, CFA was performed to evaluate construct validity regarding convergent and discriminant validity. In the second stage, structural equation analysis was performed to test the research hypothesis empirically.

Three measurement models (brand image; brand credibility and brand equity) were subjected to a confirmatory factor analysis (CFA) through the use of AMOS 18. The CFA allows for a validity assessment of measures used. The initial measurement model of brand equity and brand image was reflecting mediocre model fit; subsequently to improve the model fit some items were deleted one by one. Items were deleted on the basis of their standardized residual i.e. those having a larger amount of error variance with their measurement items.

After the deletion, the results of all the three measurement models were found to be satisfactory and then the structural model given in the table was tested using CFA.

The results of the structural model were found to be satisfactory which are presented below:

Chi-square= 1984.8;df=501; CMIN/DF=3.962; NFI=0.931; RFI=0.922; IFI=0.948; TLI=0.94; CFI=0.948; RMSEA=0.03

In addition, the standardized factor loadings for all were significant with strong evidence of convergent validity. The average variance extracted (AVE) of each construct in the model was more than 0.50, which means the criterion that a construct's AVE should be at least higher than 50 percent. The constructs also show high discriminant validity (Fornell and Larcker (1981).

Table 2: AVE and squared inter-construct correlations to demonstrate discriminant validity.

	CR*	AVE**	SIC***
B_ET	0.913	0.516	0.506;0.492
Bim	0.875	0.586	0.493;0.277
BcreT	0.890	0.618	0.506;0.277

(Note:*CR=composite reliability; **AVE=average variance extracted; and ***SIC=squared inter-construct correlations; B_ET=brand equity; Bim=brand image; BcreT=brand credibility.)
The structural model is shown in the figure below:
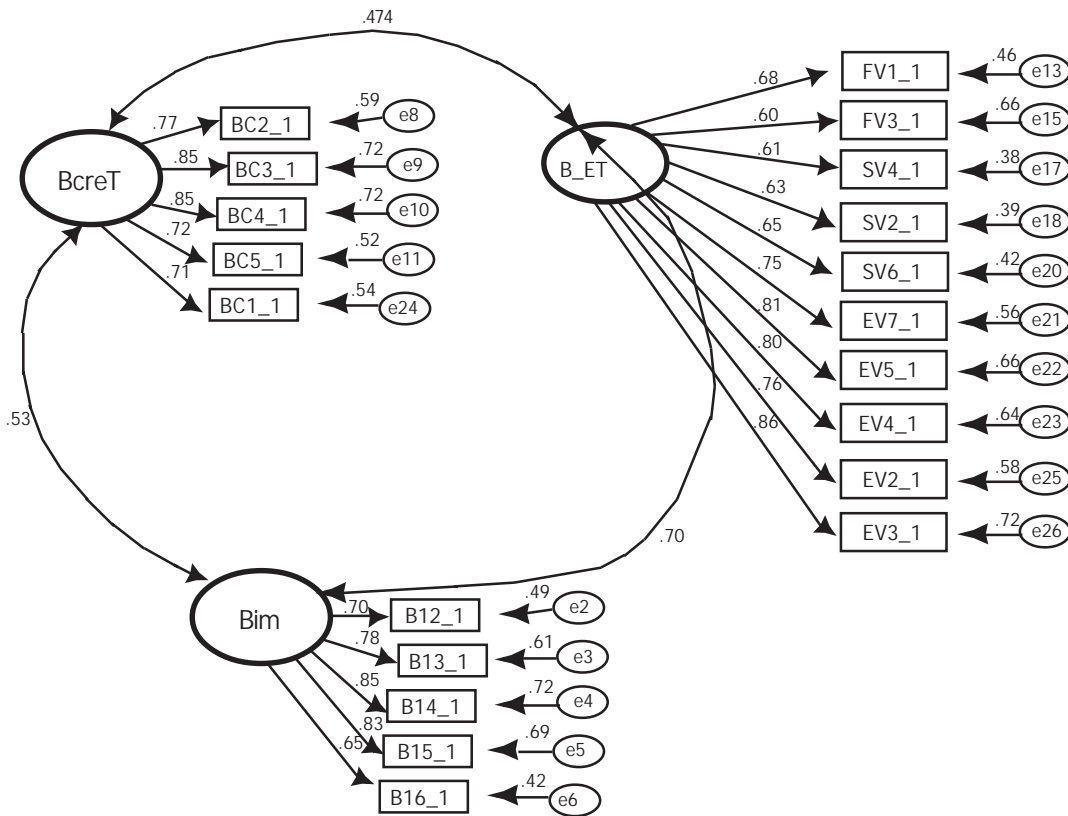
Figure 1: CFA Model (Bcret Indicates Brand Credibility; B_ET Indicates Brand Equity & Bim Indicates Brand Image)

Hypothesis Testing

H_1: Brand Image has a Positive Effect on Brand Equity
H_2: Brand Image has a Positive Influence on Brand Credibility
H_3: Brand Credibility has a Positive Influence on Brand Equity

Table 3 : Results of Hypothesis Testing

Causal path	Hypothesis	Expected sign	Standardized structural coefficient	Assesssment (p<0.05)
BI → BE	H1	+	0.406	Significant
BI → BC	H2	+	0.56	Significant
BC → BE	H3	+	0.401	Significant

Chi-square=1984.8; df=501;p=0.000;CMIN/
df=3.962;NFI=0.931;RFI=0.922;IFI=0.948;TLI=0.940;CFI=0.948

The above result show that brand image and brand credibility have a positive impact on brand equity. Also, brand image also has a significant positive impact on brand credibility.

To study the mediation of brand credibility, bootstrapping was performed with 1000 bootstrap samples, the results of which are given below:

Table 4: Standardized Indirect effect

Standardized indirect effect			
	Brand image	Brand credibility	Brand equity
Brand credibility	0.000	0.000	0.000
Brand equity	0.250*	0.000	0.000

(Note: *standardized indirect effect of brand image on brand equity is 0.250 (with 95% confidence intervals 0.194 to 0.321; statistically significant at 0.001))

Table 5: Standardized Direct effect

Standardized direct effect			
	Brand image	Brand credibility	Brand equity
Brand credibility	0.527	0.000	0.000
Brand equity	0.452**	0.474	0.000

(Note: **Standardized direct effect of brand image on brand equity is 0.452 (with 95% confidence intervals 0.36 to 0.545; statistically significant at 0.002))

Table 6 : Standardized total effect

Standardized total effect			
Brand image	Brand credibility	Brand equity	
Brand credibility	0.527	0.000	0.000
Brand equity	0.702***	0.474	0.000

(Note: *** standardized total effect of brand image on brand equity is 0.702 (with 95% confidence intervals of 0.636 to 0.767; statistically significant at 0.001))

As is evident from results that direct and indirect effects is less than 0.05, also total effect is less than 0.05, there is significant partial mediation. Brand credibility is serving as a mediator between brand image and brand equity. The following model can be stated:
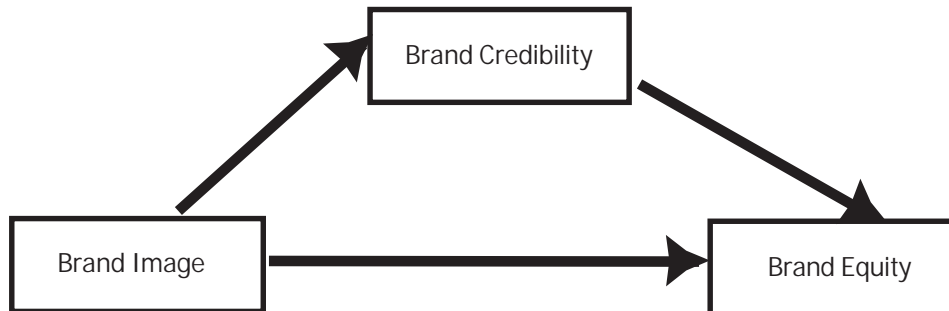
Figure 2 : Mediating Effect of Brand Credibility

Discussion and implications

As shown in this paper, the brand credibility has a partial mediating effect as the total, direct and indirect effects were found to be statistically significant. Also, brand image and brand credibility were found to have positively influence on brand equity. A closer look at the results show that brand image had the most significant impact followed by brand credibility on brand equity. Also, brand image significantly influences brand credibility.

These findings have direct implications for managers who are responsible for communicating and maintaining relationship with their consumers. Brand image i.e. the associations that the consumer have with the brand may be the single marketable investment a company can make. Brand equity is the value of the brand in the market place. A brand with high equity has the potential to create differential positive response in the market place. The differential positive response can be created if the brand enjoys a positive and strong image and it is seen as trustworthy, an expert and is liked by all its consumers. In today's competitive scenario, the most important signal of product positioning is credibility of a brand. The brand image must be believable and trust worthy to have high brand equity i.e. high value in the market place. There are various other factors that influence brand equity and which are not included in this study. It would be interesting if future research could include the other factors which affect brand equity. Moreover, research can be done by including non-FMCG and service sector also.

References

Akaah, I. P. and Korgaonkar, P. K. (1988). A Conjoint Investigation of the Relative Importance of Risk Relievers in Direct Marketing, *Journal of Advertising Research* Vol. 28, Issue , 4.

Aaker, D. A., D. M. Stayman and M. R. Hagerty (1986). Warmth in Advertising: Measurement, Impact, and Sequence Effects, *Journal of Consumer Research,* Vol. 12.

Albert Wenben Lai (1995). Consumer Values, Product Benefits and Customer Value: a Consumption Behavior Approach", in NA - *Advances in Consumer Research* Volume 22, eds. Frank R. Kardes and Mita Sujan, Provo, UT : Association for Consumer Research.

Allhaddad, A. (2014). The Effect of Brand Image and Brand Loyalty on Brand Equity. *Inernational Journal of Business and Management & Innovation*, Vol. 3, Issue 5.

Ambler T. and Barrow S. (1996) The employer Brand, *The Journal of Brand Management* Vol. 4, No. 3.

Bagozzi, Richard P. and Youjae Y. (2012). Specification, evaluation, and interpretation of structural equation models, *Journal of Academic Marketing Science*,40.

Bullmore J. (1984). The Brand and Its Image Revisited. *International Journal of Advertising*, Vol. 3.

Cavana, R.Y., Delahaye, B.L. & Sekaran, U (2001). *Applied Business Research: Qualitative & Quantitative Methods*, Queensland: John Wiley & Sons.

Churchill, G.A. (Jr.) (1979). A Paradigm for Developing Better Measures of Marketing Constructs, *Journal of Marketing Research*, 16(February).

Day, George S. (1990). *Market Driven Strategy*, New York, NY: Free Press

Dawn D. and Zinkhan G.M. (1990). In research of Brand Imgage in *A Foundation Analysis in Advances in Consumer Research* (eds) Goldberg, Marvin E, GornGerald J. amd Pollay , Richard W. Provo UT, Association for Research, 17

Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations, *Journal of Marketing Research*, Vol. 28(August).

Erdem.T & J.Swait (2004). Brand Credibility, Brand Consideration and Choice, *Journal of Consumer Choice*, Volume 31, Issue,1.

Farquhar, P.H. (1990). Managing Brand Equity *Journal of Advertising Research*, Vol. 30, No. 4.

Faircloth, J.B., L.B.Capella , & Alford (2001). The Effect of Brand Attitude and Brand Image on Brand Equity, *Journal of Marketing Theory and Practice*, 9 (3).

Farell, Andrew (2009). Insufficient Discriminant Validity: a Comment on Bove, Pervan, Beatty and Shiu, *Journal of Business Research*, 63.

Fornell, C. G., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error, *Journal of Marketing Research*, Vol.18, Issue 1.

Gladden, J.M. & Milne, G.R. (2004). Examinig the importance og brand equity in professional sport In S. Rosner & K. Shropshire (Eds), *The sports*, Massachusetts; Jones & Bartless publishers

Hair,J.F., W.C.Black, B.Babin,R.E. Anderson, & R.L.Tatham, (2010). *Multi-variate Data Analysis*, Upper Saddle River, N.J: Prentice Hall.

Hanzaee K. H. and Taghipourian M. J. (2012). The Effects of Brand Credibility and Prestige on Consumers Purchase Intention in Low and High Product Involvement *Journal of Basic and Applied Science Research*, Vol.2 , Issue 2.

Hutton, J.G. (1997). A Study of Brand Equity in an Organisational-buying Context, *Journal of Product and Brand Management*, Vol 6, No 6.

Keller, K.L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity', *Journal of Marketing*, Vol. 57.

Kumar, A.and Sharma, R. (1998). *Marketing Management*, Atlantic Publication, New Delhi.

Khan M.M., Razzaque R. (2015). Measuring the Impact of Brand Positioning on Consumer Purchase Intention Across Different Products, *Journal of Quality and Technology Management,* Volume, XI, Issue I, University of the Punjab, Lahore.

Leuthesser, L., (ed., 1988). *Defining, Measuring and Managing Brand Equity*: A Conference Summary Report . Cambridge, MA: Marketing Science Institute.

Martinez, E. and Chernatony L. d., (2004). The Effect of Brand Extension Strategies Upon Brand Image, *Journal of Consumer Marketing*, Volume 21, Issue 1.

Mathew, V. Thomas S. and Joseph I. Injodey (2012). Direct & Indirect Effect of Brand Credibility, Brand Commitment & Loyalty Intentions on Brand Equity, *Economic Review, Journal of Business,* Vol. 10, Issue ,2.

Raggio, R.D. and Leone, R.P. (2007). The Theoretical Separation of Brand Equity and Brand Value: Managerial Implications for Strategic Planning, *Journal of Brand Management*, Volume 14, Issue 5.

Rao, Roopesh (2012). Brand credibility & Brand Involvement as an Antecedent of Brand Equity- an Empirical Study, *Asia Pacific Journal of Business*, Vol. 3, Issue, 1.

Rao, A. R., Qu, L., & Ruekert, R. W. (1999). Signaling Unobservable Product Quality through a Brand Ally. *Journal of Marketing Research,* Vol. 36, Issue, 2.

Roy, D. and Banerjee, S. (2007). CARE-ing Strategy for Integration of Band Brand Identity with Brand Images, *International Journal of Commerce and Management* , Vol. 17, Issue 1 & 2.

Sheth, J.N., Newman, B.I. and Gross, B.L. (1991). Consumption Values and Market. Choices. *Theory and Applications.* Cincinnati, OH: South-Western Publishing Co.

Sweeney, Jillian, Geoffrey Soutar, Alma Whiteley & Lester Johnson (1996). Generating Consumption values, *Asia Pacific Advances in Consumer Research,* Vol. 2.

Wang, Xuehua & Yang, Zhilin (2010). The Effect of Brand Credibility on Consumer's Brand Purchase Intention in Emerging Economies: The Moderating Role of Brand Awareness and Brand Image, *Journal of Global Marketing*, Vol. 23.

Wang, Yonggui, Hing Po Lo, Renyong Chi & Yongheng Yang (2004). An Integrated Framework for Customer Value and Customer Relationship Management Performance: a Customer-based Perspective from China, *Managing Service Quality*, 14(2/3).

Y. L., Chieng Fayrene & Lee, Goi Chai (2011). Customer Based Brand Equity: A Literature Review, *Journal of Arts, Science & Commerce*, II (I).

Yi Zhang (2015). The Impact of Brand Image on Consumer Behavior: A Literature Review, *Open Journal of Business Management*, Vol. 3, No. 1.

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52 (July).