IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 5. Ver. II (May. 2014), PP 25-30
www.iosrjournals.org

"Consumer-Based Brand Equity: Improving the Measurement - Empirical Evidence"

M. Mohamed Riaz[1], D. Kumaresan[2], K. Aruna[3], K. Vibin Charles Michael Raj[4]
[1,2,3,4]*(Assistant Professor, AR School of Business, Dindigul)*

Abstract:
Purpose: *The present research aims to improve the measurement of consumer-based brand equity. Current measurement of consumer-based brand equity suffers from limitations, including: a lack of distinction between the dimensions brand awareness and brand associations, the use of non-discriminant indicators in the measurement scales and of student samples.*
Design/methodology/approach: *Based on the recommendations of extant research, the scale constructed to measure consumer-based brand equity in this study included brand personality measures. Brand associations were measured using a different set of items. Unlike many of the previous studies that had used student samples, the present study used a sample of actual consumers from an Australian state capital city. Confirmatory factor analysis employing structural equations modeling was used to measure consumer-based brand equity in two product categories and across six brands.*
Findings: *Results support the hypothesized four-dimension model of consumer-based brand equity across two product categories and six brands. Brand awareness and brand associations were found to be two distinct dimensions of brand equity as conceptualized in the marketing literature. The present study contributes to the understanding of consumer-based brand equity measurement by examining the dimensionality of this construct.*
Paper type: *Research paper*
Key Words: *Brand Awareness, Brand Equity, Brand Identity, Brand Loyalty, Consumers, Quality.*

I. Introduction And Background

Building brand equity is considered an important part of brand building (Keller, 1998). Brand equity is supposed to bring several advantages to a firm. For example, high brand equity levels are known to lead to higher consumer preferences and purchase intentions (Cobb-Walgren et al., 1995). Firms with high brand equity are also known to have high stock returns (Aaker and Jacobson, 1994).

Developing further insights into the measurement of consumer-based brand equity is important in the face of the prominence of branding. Branding is a powerful means of differentiation. Differentiation is one of the key competitive positioning strategies suggested by Porter (1990). The strategic impact of branding is duly recognized in the marketing literature (see Aaker, 1991, 1992; de Chernatony and McDonald, 1998; Kapferer, 1994; Keller, 1999). Brands might develop sustainable competitive advantage for firms (Aaker, 1989). That is, if consumers perceive a particular brand favorably, then the firm may have a competitive advantage. Hence, it becomes vital for brand managers to have access to valid and reliable consumer-based brand equity instruments.

Further, brand management is considered useful in fully exploiting the assets of an organization and in generating additional value from the investments already made into brands. The high costs associated with the launching of new brands and the high failure rates of new products (Crawford, 1993; Ourusoff, 1992) as well as increasing costs of advertising and distribution (Aaker, 1991) are some of the reasons for the growing interest in brand management. Brand building is considered the best way of doing business because of the constant changes in the marketing environment (Aaker, 1996a, b; King, 1991; Lannon, 1993). Successful brand building could strengthen a producer's competitive position to withstand the increasing power of retailers (Park and Srinivasan, 1994). Brand building can also bring advantages such as defending against competitors and building market share (Adams, 1995). Hence, a better understanding of brand equity measurement is essential for an enriched practice of brand management.

Despite the availability of numerous definitions for brand equity in the literature, there is little consensus on what exactly brand equity means (Park and Srinivasan, 1994). Nor there is a general agreement among researchers, at the conceptual level about what brand equity comprises. The broad meaning attached to the term "brand equity" is similar to the definition provided by Farquhar (1989) as the value endowed by the brand to the product. Most researchers provided definitions that are similar to Farquhar's definition (e.g. Aaker, 1991; Keller, 1993; Leuthesser, 1988; Srinivasan, 1979; Srivastava and Shocker, 1991; Yoo and Donthu, 2001).

The definitions of brand equity can be broadly classified into two categories. Some definitions are based on the financial-perspective and stress the value of a brand to the firm (e.g. Brasco, 1988; Mahajan et al, 1990; Shocker and Weitz, 1988; Simon and Sullivan, 1993). Other definitions are based on the consumer-perspective, which define brand equity as the value of a brand to the consumer (e.g. Aaker, 1991; Kamakura and Russell, 1993; Keller, 1993; Kirn and Lehmann, 1990; Rangaswamy et al, 1993).

When reflecting a consumer or marketing perspective, brand equity is referred to as consumer-based brand equity. Mackay et al. (1997, p. 1153) stated:

The marketing approach (often referred to as consumer based brand equity) refers to the added value of the brand to the consumer. Subscribers to this approach tend to focus on the value created by marketing activities as perceived by customers.

Several researchers (e.g. Cobb-Walgren et al, 1995; Sinha and Pappu, 1998; Yoo and Donthu, 2001, 2002; Yoo et al, 2000; Washburn and Plank, 2002) have conceptualised brand equity similarly to Aaker (1991) and Keller (1993) and used the term consumer-based brand equity to refer to brand equity.

Although Aaker (1991) and Keller (1993) conceptualised brand equity differently, both defined brand equity from a consumer perspective based on consumers' memory-based brand associations. Keller (1993, p. 8) referred to brand equity as customer-based brand equity and defined it as "the differential effect of brand knowledge on consumer response to the marketing of a brand". (According to Keller, customer-based brand equity consisted of two dimensions - brand knowledge and brand image. Aaker (1991, p. 15) provided the most comprehensive definition of brand equity available in the literature, defining brand equity as: "a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers". In effect, Aaker conceptualised brand equity as a set of assets (or liabilities). Brand awareness, brand associations, perceived quality, brand loyalty and other proprietary assets were the five assets of brand equity he proposed. These assets (or liabilities) are proposed as "dimensions" in the present study. From the consumer perspective, brand awareness, brand associations, perceived quality and brand loyalty are the four most important dimensions.

Researchers (e.g. Crimmins, 1992; Farquhar, 1989) have argued in favour of a consumer-based measurement of brand equity. "[t]here is value to the investor, the manufacturer and the retailer only if there is value for the consumer" (Cobb-Walgren et al., 1995, p. 26). Several brand equity measurement methods have been suggested based on the marketing or consumer perspective, both by researchers (e.g. Aaker, 1996c; Green and Srinivasan, 1978, 1990; Kamakura and Russell, 1989, 1993; Srinivasan, 1979; Swait et al., 1993) and marketing practitioners or consulting firms (see Winters (1991) for a list of the methods).

Many of these measurement approaches, however, were of somewhat limited use for managers since brand equity is not broken into components that can be related to factors such as favourable customer perceptions (Sinha et al., 2000; Sinha and Pappu, 1998). Overcoming this problem, some researchers (e.g. Park and Srinivasan, 1994) divided brand equity into attributes-based and non-attributes-based components, while other researchers (e.g. Cobb-Walgren et al., 1995; Sinha and Pappu, 1998; Yoo and Donthu, 2001, 2002; Yoo et al., 2000), proposed a brand equity measurement method, by subdividing brand equity into different dimensions (e.g. brand awareness, brand associations, perceived quality and brand loyalty).

Cobb-Walgren et al. (1995) were the pioneering researchers to measure consumer-based brand equity based on the conceptualisation of Aaker (1991) and Keller (1993). These researchers treated consumer-based brand equity as a set of four dimensions, namely brand awareness, brand associations, perceived quality and brand loyalty. Sinha et al. (2000) and Sinha and Pappu (1998) measured consumer-based brand equity in a similar fashion but used Bayesian methods. Yoo et al. (2000) used confirmatory factor analytic methods to measure consumer-based brand equity. However, Yoo et al. treated consumer-based brand equity as a three-dimensional construct, combining brand awareness and brand associations into one dimension.

Yoo and Donthu (2001) were also the first to develop a multidimensional scale for consumer-based brand equity and test its psychometric properties. These researchers observed only three dimensions for consumer-based brand equity, similar to YOU et al. (2000). Yoo and Donthu's (2001) consumer-based brand equity scale was later validated by Washburn and Plank (2002).

However, both Yoo and Donthu (2001) and Washburn and Plank (2002) have acknowledged the scope to improve the measurement of consumer-based brand equity. For example, Washburn and Plank have highlighted the need to refine the dimensionality of consumer-based brand equity. They also advocated that researchers focus on the distinction between the dimensions of brand awareness and brand associations. While these two dimensions are conceptually different (e.g. Aaker, 1991), some empirical evidence (e.g. Yoo and Donthu, 2001, 2002; Yoo et al., 2000; Washburn and Plank, 2002) suggests that they should be combined into one. There is also empirical evidence to say that these are distinctive dimensions of brand equity (e.g. Sinha et al, 2000; Sinha and Pappu, 1998). Hence, it is important to examine further the dimensionality of consumer-based brand equity construct.

Further, Washburn and Plank urged researchers to reevaluate the items included in Yoo and Donthu's (2001, p. 60) consumer-based brand equity scale to "suggest more discriminating indicators". For example, brand personality is considered a sub-dimension of brand associations and is supposed to contribute to brand equity (Aaker, 1996b). However, Yoo and Donthu's (2001) scale does not include brand personality measures.

In fact, Yoo and Donthu advocated the inclusion of brand personality measures into consumer-based brand equity, as a future research direction. Thus, there is scope to enrich the measurement of consumer-based brand equity.

Another area for improvement in the previous research on consumer-based brand equity measurement is the usage of student samples. Both Yoo and Donthu (2001) and Washburn and Plank (2002) used student samples to validate the consumer-based brand equity scale. The present research aims to improve the measurement of consumer-based brand equity, by including more discriminating indicators in the scale, and by using a sample of actual (non-student) consumers. The objective of the present research is also to empirically examine the dimensionality of the consumer based brand equity construct.

II. Conceptual Domain Of Consumer-Based Brand Equity

The present research conceptualizes brand equity in accordance with Aaker (1991) and Keller (1993) based on consumer perceptions. The following sections provide a description of the four dimensions of consumer-based brand equity examined in our study:

2.1 Brand awareness: This refers to the strength of a brand's presence in consumers' minds. Brand awareness is an important component of brand equity (Aaker, 1991; Keller, 1993). Aaker mentioned several levels of brand awareness, ranging from mere recognition of the brand to dominance, which refers to the condition where the brand involved is the only brand recalled by a consumer. Rossiter and Percy (1987) defined brand awareness as the consumers' ability to identify or recognize the brand, whereas Keller conceptualized brand awareness as consisting of both brand recognition and brand recall. According to Keller, brand recall refers to consumers' ability to retrieve the brand from memory, for example, when the product category or the needs fulfilled by the category are mentioned. Keller (1993, p. 3) argued that "brand recognition may be more important to the extent that product decisions are made in the store". Hence, in the present study, brand awareness is conceptualized as consisting of both brand recognition and brand recall.

2.2 Brand associations: These are another important component of brand equity (Aaker, 1991; Keller, 1993). Brand associations are believed to contain "the meaning of the brand for consumers" (Keller, 1993, p. 3). While a brand may derive associations from a range of sources, brand personality and organizational associations are the two most important types of brand associations, which influence the brand's equity (Aaker, 1991, 1996b). Brand personality is a key component of brand equity, and is defined in terms of the various traits or characteristics that brands can assume from the perception of consumers (Aaker, 1991; Keller, 1993). In the present study brand personality is defined as "the set of human characteristics associated with a brand" (Aaker, 1997, p. 347). The concept of brand personality is well established in the marketing literature (Batra et al., 1993; Biel, 1993; Phau and Lau, 2000). Aaker (1991) argued that a brand association has a level of strength, and that the link to a brand (from the association) will be stronger when it is based on many experiences or exposures to communications, and when a network of other links supports it. Further, Aaker (1991) suggested that brand associations could provide value to the consumer by providing a reason for consumers to buy the brand, and by creating positive attitudes/feelings among consumers.

2.3 Perceived quality: This is another important dimension of brand equity (Aaker, 1991). Perceived quality is not the actual quality of the product but the consumer's subjective evaluation of the product (Zeithaml, 1988, p. 3). Similar to brand associations, perceived quality also provides value to consumers by providing them with a reason to buy and by differentiating the brand from competing brands.

2.4 Brand loyalty: This is a major component of brand equity. Aaker (1991, p. 39) defined brand loyalty as: "the attachment that a customer has to a brand". Oliver (1997, p. 392) defined brand loyalty as: "a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, despite situational influences and marketing efforts having potential to cause switching behavior". Oliver's definition emphasizes the behavioural dimension of brand loyalty, whereas Rossiter and Percy (1987) argued that brand loyalty is often characterized by a favourable attitude towards a brand and repeated purchases of the same brand over time. Brand loyalty is also conceptualized based on an attitudinal perspective. For example, Chaudhuri and Holbrook (2001, p. 82) argued that "attitudinal brand loyalty includes a degree of dispositional commitment in terms of some unique value associated with the brand". From an attitudinal perspective, brand loyalty was defined as "the tendency to be loyal to a focal brand, which is demonstrated by the intention to buy the brand as a primary choice" (Yoo and Donthu, 2001, p. 3). While the definitions of brand loyalty based on the behavioural perspective emphasized the consumer's actual loyalty to the brand as reflected in purchase choices, the definitions based on an attitudinal perspective accentuated consumer intentions to be loyal to the brand. As previously mentioned, we conceptualized brand equity on the basis of consumer perceptions not on the basis of their behavior. Hence, we conceptualize brand loyalty also based on an attitudinal perspective and consumer perceptions.

III. Method

The present research is part of larger study that investigated the relationships between consumer-based brand equity and country-of-origin effects (Pappu, 2003). The initial survey instrument was developed incorporating a pool of 19 items compiled from the literature. Three items were included for brand loyalty, five for perceived quality, eight for brand associations and three for brand awareness. These indirect measures of brand equity were empirically tested and used by several researchers (e.g. Agarwal and Rao, 1996; CobbWalgren et al, 1995; MacKay, 2001; Sinha and Pappu, 1998; Washburn and Plank, 2002; Yoo and Donthu, 2001, 2002).

Aided and unaided recall were used as measures of brand awareness (Aaker, 1991). Organisational associations and brand personality provided measures of brand associations as suggested by Aaker (1996b). Liking, pride and trust were used to measure organisational associations (Aaker, 1996b). Based on Aaker (1997), five measures were also obtained for brand personality. Each of these measures was based on the five facets of brand personality developed by Aaker (1997), namely sincerity, excitement, competence, sophistication and ruggedness. Previous research recommended the inclusion of brand personality as a sub-dimension of brand equity (Yoo and Donthu, 2001). The set of items to used to measure brand associations was different from those used by earlier researchers who measured consumer-based brand equity (e.g. Washburn and Plank, 2002; Yoo and Donthu, 2001). Measures of perceived quality were obtained from Aaker (1991) and Yoo and Donthu (2001), while measures for brand loyalty were obtained from Yoo and Donthu (2001) and Yoo et al. (2000).

The study was conducted in two product categories: cars and televisions. We selected the product categories in such a way that most respondents were able to evaluate them. Many respondents had used products from these two categories, as our results indicated. The product categories selected were also different in terms of consumer involvement, price, and associated risk. Three brands were included in each product category. Toyota, Maruti and Tata were the brands included for the product category cars, whereas Sony, LG and Samsung were the selected brand names for televisions. The brands were selected in such a way that they were all available to Indian consumers in each of the two product categories.

Confirmatory factor analysis using structural equations modelling was used for testing the multidimensionality of the consumer-based brand equity construct. Confirmatory factor analysis is a relevant technique for the validation of scales for the measurement of constructs (Steenkamp and van Trijp, 1991).

IV. Results And Discussion

The sample size employed was within the acceptable limits for confirmatory factor analysis, for both cars (n = 254) and televisions (n =285). The ratio of respondents to observed variables was 19 for cars and 22 for televisions. The ratio of respondents to estimated parameters was 28 for cars and 31 for televisions.

This section summarizes the results of the confirmatory factor analyses conducted to test the multidimensionality of the construct consumer-based brand equity. Brand awareness, brand associations, perceived quality, and brand loyalty, the dimensions of consumer-based brand equity, were the four latent variables or exogenous constructs in the hypothesised model.

A total of six separate confirmatory factor analyses were carried out: three were conducted within each product category, one for each brand. The results were first examined for offending estimates. No offending estimates (e.g. negative variances, non-significant error variances, correlations larger than 1 in magnitude and covariance or correlation matrices which were not positive definite) were present. The goodness-of-fit of the confirmatory factor models was then assessed.

4.1 Factor comparison

The factors that emerged from each of the six brands were then compared. The comparison involved the comparison of the number of factors, complexity and configuration (Rummel, 1970). The factor comparison clearly indicated that the same set of factors have been revealed across the six brands. Complexity refers to the degree to which different variables loaded on to factors. Configuration refers to the pattern and magnitude of the loadings of the variables.

The root mean square coefficients (RMSC) values for all the six brands were nearer to zero, indicating that the factors revealed by all the brands were similar in both magnitude and direction. The coefficient of congruence (CC) values for all the six brands were nearer to + 1.0, indicating that the factors revealed by the six brands had nearly perfect similarity. Thus, pattern similarity as well as magnitude similarity of the factors from the six brands was established.

V. Conclusions And Implications

The study contributes to our understanding of consumer based brand equity measurement by examining the dimensionality of this construct. The principal contribution of our findings is that they provide empirical evidence of the multidimensionality of consumer-based brand equity, supporting Aaker's (1991) and Keller's (1993) conceptualization of brand equity.

The results of the present study established the multidimensionality of consumer-based brand equity, consistent with the conceptualization of Aaker (1991). The four-dimensional construct found in this research was similar to Cobb-Walgren et al. (1995), but contrasted with the findings of other researchers. For example, Yoo and Donthu (2001, 2002) and Yoo et al. (2000) developed a consumer based brand equity measure based on Aaker's (1991) and Keller's (1993) conceptualization, but observed only three brand equity dimensions, combining the dimensions of brand awareness and brand associations into one. Washburn and Plank's (2002) study also provided results supporting this three-factor model. This warrants further investigation regarding the dimensionality of consumer-based brand equity.

The present research also enriched consumer-based brand equity measurement by incorporating the brand personality measures. Previous researchers (e.g. Yoo and Donthu, 2001) advocated including brand personality measures into the consumer-based brand equity scales.

Another improvement of the present study is the inclusion of a different set of measures (e.g. brand personality, organisational associations) for measuring brand associations. The measures of brand associations used by previous research (e.g. Yoo and Donthu, 2001) related to whether or not consumers associated with the brand. The present study measured various types of consumers' associations to the brand.

Limitations and Future Research Directions

This study has several limitations that must be addressed in future research. First, the use of a single measure for brand awareness is limiting because confirmatory factor analysis requires a minimum of three indicator variables for each exogenous construct. Future researchers should aim to develop multiple measures for brand awareness.

Furthermore, confirmatory factor analysis would require indicator variables to be continuous scaled, whereas we used a dichotomous scale for measuring brand awareness. This might have biased the results. Hence, brand awareness should be measured on a continuous scale by future researchers.

Second, only items related to brand personality and organisational associations were used in the present study for measuring brand associations. Keller (1993) suggested three types of brand associations: attributes-based, benefits based, and attitudes-based. Future researchers should incorporate items related to the above-mentioned types of associations in their measurement.

Finally, the use of a mall-intercept sample, albeit more cross sectional than student sample, limits our ability to fully generalize the findings to other samples. Future researchers Endeavour to use probability samples in any further study of brand equity.

References

[1]. Aaker, D.A. (1989), "Managing assets and skills: the key to a sustainable competitive advantage", California Management Review, Vol. 31 No. 2, pp. 91-106.

[2]. Aaker, D.A. (1991), Managing Brand Equity, The Free Press, New York, NY.

[3]. Aaker, D.A. (1992), "Managing the most important asset: brand equity", Planning Review, Vol. 20 No. 5, pp. 56-8.

[4]. Aaker, D.A. (1996a), "The agency as brand architect: how today's agencies are restructuring to become better brandbuilders", American Advertising, Vol. 12 No. 1, pp. 18-21.

[5]. Aaker, D.A. (1996b), Building Strong Brands, The Free Press, New York, NY.

[6]. Aaker, D.A. (1996c), "Measuring brand equity across products and markets", California Management Review, Vol. 38 No. 3, pp. 102-20.

[7]. Aaker, J.L. (1997), "Dimensions of brand personality", Journal of Marketing Research, Vol. 36 No. 3, pp. 345-55.

[8]. Adams, J. (1995), "Brands at the crossroads", American Advertising, Vol. 11 No. 3, pp. 18-20.

[9]. Agarwal, M.K. and Rao, VR. (1996), "An empirical comparison of consumer-based measures of brand equity", Marketing Letters, Vol. 7 No. 3, pp. 237-47.

[10]. Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling practice: a review and recommended two-step approach", Psychological Bulletin, Vol. 103 No. 3, pp. 411-53.

[11]. Batra, R., Lehmann, D.R. and Singh, D. (1993), "The brand personality component of brand goodwill: some antecedents and consequences", in Aaker, D.A. and Biel, A.L. (Eds), Brand Equity and Advertising: Advertising's Role in Building Strong Brands, Lawrence Erlbaum Associates, London, pp. 83-96.

[12]. Biel, A.L. (1993), "Converting image into equity", in Aaker, D.A. and Biel, A.L. (Eds), Brand Equity and Advertising: Advertising's Role in Building Strong Brands, Lawrence Erlbaum Associates, London, pp. 67-81.

[13]. Brasco, T.C. (1988), "How brand names are valued for acquisition?", in Leuthesser, L. (Ed.), Defining, Measuring and Managing Brand Equity: A Conference Summary Report, No. 88-104, Marketing Science Institute, Cambridge, MA.

[14]. Chaudhuri, A. and Holbrook, M.B. (2001), "The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty", Journal of Marketing, Vol. 65 No. 2, pp. 81-93.

[15]. Chou, C. and Bender, P.M. (1995), "Estimates and tests in structural equations modeling", in Hoyle, R.H. (Ed.), Structural Equation Modeling: Concepts, Issues and Applications, Sage, Thousand Oaks, CA, pp. 37-55.

[16]. Cobb-Walgren, C.J., Beal, C. and Donthu, N. (1995), "Brand equity, brand preferences, and purchase intent", Journal of Advertising, Vol. 24 No. 3, pp. 25-40.
[17]. Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), Multivariate Data Analysis, 5th ed., Prentice-Hall, Upper Saddle River, NJ.
[18]. Hayduk, L.A. (1987), Structural Equation Modeling with LISREL: Essentials and Advances, Johns Hopkins University Press, Baltimore, MD.
[19]. Hoyle, R.H. and Panter, A. (1995), "Writing about structural equation models", Structural Equation Modeling: Concepts, Issues, and Applications, Sage, Thousand Oaks, CA, pp. 158-76.
[20]. Kapferer, J.N. (1994), Strategic Brand Management: New Approaches to Creating and Evaluating Brand Equity, The Free Press, New York, NY.
[21]. Keller, K.L. (1993), "Conceptualizing, measuring and managing customer-based brand equity", Journal of Marketing, Vol. 57 No. 1, pp. 1-22.
[22]. Keller, K.L. (1998), Strategic Brand Management: Building Measuring and Managing Brand Equity, Prentice-Hall, Upper Saddle River, NJ.
[23]. Keller, K.L. (1999), "Managing brands for the long run: brand reinforcement and revitalization strategies", California Management Review, Vol. 41 No. 3, pp. 102-4.
[24]. Leuthesser, L. (Ed.) (1988), Defining, Measuring and Managing Brand Equity: A Conference Summary, Report No. 88-104, Marketing Science Institute, Cambridge, MA.
[25]. MacKay, M.M. (2001), "Evaluation of brand equity measures: further empirical evidence", Journal of Product & Brand Management, Vol. 10 No. 1, pp. 38-51.
[26]. Mahajan, V, Rao, VR. and Srivastava, R.K. (1990), "Development, testing, and validation of brand equity under conditions of acquisition and divestment", in Maltz, E. (Ed.), Managing Brand Equity: A Conference Summary Report, No. 91-110, Marketing Science Institute, Cambridge, MA, pp. 14-15.
[27]. Park, C.S. and Srinivasan, V. (1994), "A survey-based method for measuring and understanding brand equity and its extendibility", Journal of Marketing Research, Vol. 31 No. 2, pp. 271-88.
[28]. Phau, I. and Lau, K.C. (2000), "Conceptualising brand personality: a review and research propositions", Journal of Targeting, Measurement and Analysis for Marketing, Vol. 9 No. 1, pp. 52-69.
[29]. Porter, M.E. (1990), The Competitive Advantage of Nations, Macmillan, London.
[30]. Rangaswamy, A., Burke, R. and Olive, T.A. (1993), "Brand equity and the extendibility of brand names", International Journal of Research in Marketing, Vol. 10 No. 1, pp. 61-75.
[31]. Srinivasan, V. (1979), "Network models for estimating brand-specific effects in multi-attribute marketing models", Management Science, Vol. 25 No. 1, pp. 11-25.
[32]. Srivastava, R.K. and Shocker, A.D. (1991), Brand Equity: A Perspective on Its Meaning and Measurement Report, No. 91-124, Working Paper Series, Marketing Science Institute, Cambridge, MA.
[33]. Steenkamp, J.E.M. and van Trijp, H.C.M. (1991), "The use of LISREL in validating marketing constructs", International Journal of Research in Marketing, Vol. 8 No. 4, pp. 283-99.
[34]. Washburn, J.H. and Plank, R.E. (2002), "Measuring brand equity: an evaluation of a consumer-based brand equity scale", Journal of Marketing Theory and Practice, Vol. 10 No. 1, pp. 46-62.
[35]. Yoo, B. and Donthu, N. (2001), "Developing and validating a multidimensional consumer-based brand equity scale", Journal of Business Research, Vol. 52, pp. 1-14.
[36]. Yoo, B., Donthu, N. and Lee, S. (2000), "An examination of selected marketing mix elements and brand equity", Journal of the Academy of Marketing Science, Vol. 28 No. 2, pp. 195-211.
[37]. Zeithaml, V. (1988), "Consumer perceptions of price, quality, and value: a means-end model and synthesis of the evidence", Journal of Marketing, Vol. 52 No. 3, pp. 2-22.