

BRAND EQUITY AND PURCHASE INTENTION: THE INDIAN AUTOMOBILE INDUSTRY

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Abstract

This study utilized the Aaker's model of brand equity to develop a model of consumer purchase intention in Indian automobile industry. The model sought to analyze the effect of various dimensions of brand equity on consumer purchase intention. A structural equation model was developed using the data collected from a sample of Indian consumers. Findings of the study reveal that perceived quality have a direct and significant impact on consumers' purchase intention. These findings have significant implications for marketing managers who would need to carefully adapt their branding approaches to enhance equity of their brands and reduce consumer brand switching.

Keywords: Brand equity; Consumer behavior, Purchase intention; Brand Awareness, Perceived Quality, Automobile Industry.

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Introduction

Brand equity is the value addition to a product, derived from its brand name that contributes to the long-term profitability of the company. The Indian automobile industry stands at number 11 in international ranking and approximately two million units are produced every year. Indian automobile industry is also one of the fastest growing manufacturing industries. After gaining independence in 1947, the public and private sectors of India jointly established automotive component manufacturing industry. This industry was meant to meet the needs of automobile industry. The initial growth of automobile industry was slow and the wave of nationalization that occurred during 1950-1960 seriously hampered the growth of the automobile industry (Bergen & Heide, 2000). During 1980s, significant growth in the sector was witnessed. This growth was contributed by tractors, scooters and commercial vehicles. The entry of Japanese automobile manufacturers in India was followed by the entry of several other foreign automobile manufactures. Indian automobile industry was expected to become world leader by 2012 (Jack, 2010). By 2009, India become the fourth largest exporter of automobiles. The 75 % of current Indian automobile comprised of small cars and it was expected that in the next 2-3 years many new high-impact brands of cars will enter into Indian market. The large foreign automotive companies of India (such as General Motors) has ambitious expansion plans (Bucklin, 2008). Currently the Indian market presented huge market potential with very low car ownership levels and a rapidly growing economy. Many new foreign car brands were set to enter into Indian market such as Maruti Splash by Suzuki and Jazz by Honda. Indian automobile manufacturers continue to make efforts for establishing and maintaining their brand equity. Despite their efforts, a clear movement of brand equity is yet not visible. Switching cost, such as after sales and support services are also need to be taken into account in the relationship between brand equity and customer loyalty. A correct and objective measurement of brand equity can be used to evaluate the long-term impacts of firms marketing decisions (Simon and Sullivan, 1993). According to Keller (2008) positive brand equity can provide several advantages such as higher revenues lower costs, firm's ability to enjoy premium pricing, more effective marketing communication, and successful brand extensions. Being a multi-dimensional complex concept brand equity has been examined by several researchers e.g.

(Yoo&Donthu, 2001; Lassar et al., 1995; Keller, 1993; Jones, 2005; Aaker, 1991). This study utilizes the Aaker's model (Aaker, 1991) to examine the relationships between brand equity of automobile manufacturers in India to purchase intentions of prospective customers. Aaker's model is a popular model of brand equity. This model has been utilized by many researcher under different industrial research contextse.g. Eagle and Kitchen (2000) used Aaker's model to investigate the perception of senior marketing and advertising professionals regarding the use of brand equity as a performance measurement too. Their results indicated that there has been an increasing interest in using brand equity as a long-term performance measurement tool. Yooand Donthu(2001) used it in a study to develop and validate a multidimensional consumer-based brand equity scale. Washburn andPlank (2002) used it in a different context to examine the robustness of Aaker's model.The study of Atilgan, Aksoy, and Akinci (2005)examined the practicality and application ofAaker's model in beverage industry of Turkey. Similarly some other researchers also used Aaker's model in other different industry settings such as Pappu,Quester, andCooksey (2005), Kayaman and Arasli (2007), and Chen and Chang (2008). However, few researchers have used this model to investigate the relationship between brand equity and customer purchase intention (Atilgan et al., 2005). Empirical evidence suggest that there exist many contexts in which brand equity can affect consumer purchase intention (Ashil& Sinha, 2004; Chang & Liu, 2009). However, there exist limited studies that attempt to use Aaker's model to measure impact of this model's individual dimensions on consumer purchase intention. The objective of this study is to explore and analyze possible relationships among various dimensions (or constructs) of brand equity suggested by (Aaker, 1991) and customer purchase intention and to determine the possible effect of individual brand equity dimension on consumer purchase intention.

Literature Review

Aaker's model (Aaker, 1991) is based on four dimensions. Aaker's model provides a very comprehensive brand identity planning model that provides a four-fold perspective of a brand. This model aims to provide a company brand a texture and depth by urging to consider a brand as a product, organization, person, and a symbol. All four perspectives (or dimensions) are distinct and aim to help

brand strategists clarify, enrich, and differentiate their brand identity. The subsequent sections provide discussion of each dimension and related hypotheses.

Brand Awareness

According to Aaker (1991) and Keller (1993), brand awareness is brand's perceived strength in the eyes of the customer. Brand awareness may vary from mere brand recognition by the customer to sole brand recognition by the customer. Brand recall refers to the customer's retrieval of brand from his/her memory. Brand recall is very important in consumer purchase decisions. A brand with high customer-based equity commands high levels of brand awareness and recall. This brand awareness impacts consumer purchase intention by impacting consumer learning, consideration, and choice (Keller, 2008). Brand awareness is a fundamental component of brand equity. Brand equity consists of two components: brand recall and brand recognition. To develop brand equity, we need to enhance brand awareness, customer trust on brand, and brand loyalty.

Brand Association

Brand association forms the basis of consumer purchase decision. Brand association reflects consumer's memory about brand. The level of brand association can be increased by having frequent communication with the customers (Aaker, 1991). Brand association can help customer retrieve information related to brand, differentiate the brand, develop a reason to purchase the brand, develop a favorable, positive attitude towards the brand, and develop basis for brand extension. According to Rio et al. (2001), brand association plays a significant role in formation of brand equity.

Perceived Quality

Perceived quality is a reason for customer to buy and differentiate a brand from other brands. According to (Aaker, 1991) perceived quality is an important dimension of customer based brand equity. However it refers to the subjective evaluation of the product by the consumer. Perceived quality is one core component of brand equity that can be used to measure brand equity. It is also a dimension

of brand value. Perceived quality is a customer feeling toward brand. The real success of a service provider is dependent on the perceived quality of the services provided to its customers. Literature suggest there exist a relationship among perceived quality, customer satisfaction, and firm profitability (Zeithaml, 1988; Kotler, 2000).

Brand Loyalty

Brand loyalty is a situation where a customer is likely to switch to another brand specifically when brand changes occur (e.g. through changes in product (Aaker, 1991). Brand loyalty can help companies develop and sustain long-term customer loyalty and thus increase brand equity. According to Javalgi and Moberg (1997) brand loyalty has multiple dimensions such as behavioral (based on how much a particular brand is purchased) (Oliver, 1997), attitudinal (based on consumer preferences towards brand) (Chaudhuri & Holbrook, 2001; Yoo & Donthu, 2001), and choice (based on reasons of purchase) (Rundle-Thiele & Bennett, 2001). Brand loyalty represents customer's deep commitment to continue purchasing a product in future even if situation changes (Oliver, 1997).

Brand Equity and Purchase Intention

While the attitudinal definition of brand loyalty emphasizes customer intention in brand loyalty, the behavioral definition emphasize consumer purchase in brand loyalty. Therefore this study conceptualize brand loyalty from a behavioral perspective and investigate the relationship of purchase intention with the four dimensions of Aaker's model.

Research Hypotheses

The following hypotheses were derived from the literature review.

- H1. Brand awareness significantly and directly influences purchase intention.
- H2. Brand association significantly and directly influences purchase intention.
- H3. Perceived quality significantly and directly influences purchase intention.

H4. Brand loyalty significantly and directly influences purchase intention.

Methodology

Conceptual Framework

To test the hypotheses, a research framework was developed. This framework was used to test the hypothesized relationships among the variables studied. Table 1 presents the research framework and the number of items used to measure each dimension of Aaker's model. A five-point Likert scale was used to measure all items.

Table 1
Measurement scales

| Dimension | Item | Enunciation | Variable (sources) |
|---------------------------|-------|---|---|
| Brand Association | BASS1 | I can quickly remember some characteristics of car Z | (Aaker and Álvarez del Blanco, 1995; Lassar et al., 1995; Yoo et al., 2000) |
| | BASS2 | I can quickly recall the logo or symbol of car Z. | |
| | BASS3 | I cannot easily imagine car Z in my mind. | |
| Brand Awareness | BAW1 | I am aware of car Z. | (Yoo et al., 2000) |
| | BAW2 | I can recognize car Z among competing car brands. | |
| | BAW3 | I know what car Z looks like. | |
| Perceived Quality | PQU1 | The quality of car Z is high. | (Aaker and Álvarez del Blanco, 1995; Lassar et al., 1995; Yoo et al.) |
| | PQU2 | The likely quality of car Z is extremely high. | |
| | PQU3 | The likelihood that car Z is reliable is very high. | |
| | PQU4 | Car Z must be of very good quality. | |
| Brand Loyalty | BLO1 | Provided car Z is available for purchase, I would not buy other car brands. | (Aaker and Álvarez del Blanco, 1995; Yoo et al., 2000) |
| | BLO2 | Car Z would be my first choice. | |
| | BLO3 | I consider myself to be loyal to car Z. | |
| | BLO4 | Car Z is one of the preferred brands I want to buy. | |
| Purchase Intention | PI1 | I would buy car Z rather than any other car brands available. | (Chang, H. H. and Liu, Y. M. 2009) |
| | PI2 | I am willing to recommend others to buy this company's automobiles. | |
| | PI3 | I am willing to purchase this company's cars in the future. | |

Research Instrument and Measure

For this study, the Indian automobile market was targeted. A self-administered survey questionnaire was used to collect the data relating to the five dimensions of research framework. The survey also consisted of questions about respondents demographics. Respondents rated car Zon 17 items (See Table 1). These items described the possible ways in which customers might have interacted with car Z. Questionnaires were distributed both in hard copy and via emails.

Sample and Data Collection

Researcher sought help from his friends in India. Initial study respondents belonged to various sectors such as people working in public and private sector, students, and general public. All these study participants belonged to city of Mumbai. These participants in turn referred the survey questionnaire to their acquaintances in other major cities who owned a car. A total of 600 surveys were administered during the periods of June, 2014 to March of 2015. Out of 600, 300 questionnaires were found complete and useful. Thus, a response rate of 50 percent was achieved. Hair et al. (2009) suggests that to develop structural equation models, a sample size of over 200 should be used. Therefore, the sample size of 300 used in this study was deemed sufficient.

Data Analysis

A two-step approach was used. First, the research structural equation model was analyzed to test reliability and validity of the constructs. Second, we analyzed the hypothesized relationships among various constructs of our research structural equation model. This study used the model fit criteria suggested by Hu and Bentler (1999) (See Figure 1). According to this criteria, acceptable model should have following values:

Profile of respondents

Table 2: Provides the breakdown of various residential consumers in our sample.

Table 2:
Profile of Respondents

| | Number of respondents |
|------------------------|-----------------------------|
| Gender | |
| Male | 390 (65 %) |
| Female | 210 (35 %) |
| Age | |
| Under 20 | 25 (4.16 %) |
| 21-30 | 160 (26.66 %) |
| 31-40 | 210 (35 %) |
| 41-50 | 150 (25 %) |
| 51 and older | 55 (9.16 %) |
| Income (INR) | |
| <50,000 | 40 (6.66 %) |
| 50,000-60,000 | 15 (2.5 %) |
| 61,000-70,000 | 95 (15.83 %) |
| 71,000-80,000 | 178 (29.66 %) |
| 81,000-90,000 | 90 (15 %) |
| 91,000-100,000 | 152 (25.3 %) |
| >100,000 | 30 (5 %) |
| Education level | |
| High school | 178 (29.66 %) |
| Technical college | 155 (25.83 %) |
| 4-year degree | 200 (33.33 %) |
| Graduated degree | 67 (11.16 %) |
| Total | 600 |

Figure 1:
Values for Acceptable Model

Goodness of fit (GFI) ≤ 3

Adjusted Goodness of Fit (AGFI) ≥ 0.80

Root Mean Square Residual (RMR) ≤ 0.1

Root Mean Square Error of Approximation (RMSEA) ≤ 1.0

GFI and CFI > 0.90

Data Screening

Before analyzing the data, it is essential to check the dataset for errors (Pallant, 2007). The checking involves e.g. checking of outlier values of variables and missing values of variables. The data contained no cases with missing values. According to (Hair et al. 2009), the dataset is acceptable if the proportion of missing values is less than 10 percent of the total values of variables. Withdf=17 the value of Mahalanobis distance with $\alpha=0.001$ was 40.790. Two cases were found that exceeded that limit. They were removed. Table 3 shows the summary of descriptive inter-correlations. As we can see the correlations among the studied variables were moderate.

Table 3:
Correlation Matrix for Statements

| | B L O 1 | BL O2 | BL O3 | BL O4 | PQ U1 | PQ U2 | PQ U3 | PQ U4 | BA W1 | BA W2 | BA W3 | BAS S1 | BAS S2 | BAS S3 | PI3 | PI2 | PI1 | | |
|-----------------------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|------|------|------|------|---|
| B L O 1 | 1 | | | | | | | | | | | | | | | | | | |
| B L O 2 | 0.51 | 1 | | | | | | | | | | | | | | | | | |
| B L O 3 | 0.42 | 0.50 | 1 | | | | | | | | | | | | | | | | |
| B L O 4 | 0.46 | 0.54 | 0.44 | 1 | | | | | | | | | | | | | | | |
| P Q U 1 | 0.11 | 0.14 | 0.11 | 0.12 | 1 | | | | | | | | | | | | | | |
| P Q U 2 | 0.09 | 0.14 | 0.12 | 0.13 | 0.71 | 1 | | | | | | | | | | | | | |
| P Q U 3 | 0.12 | 0.08 | 0.12 | 0.13 | 0.71 | 0.6 | 1 | | | | | | | | | | | | |
| P Q U 4 | 0.14 | 0.17 | 0.14 | 0.15 | 0.54 | 0.57 | 0.57 | 1 | | | | | | | | | | | |
| B A W 1 | 0.15 | 0.18 | 0.14 | 0.16 | 0.56 | 0.6 | 0.70 | 0.70 | 1 | | | | | | | | | | |
| B A W 2 | 0.25 | 0.30 | 0.25 | 0.27 | 0.23 | 0.24 | 0.28 | 0.29 | 0.29 | 1 | | | | | | | | | |
| B A W 3 | 0.28 | 0.33 | 0.27 | 0.3 | 0.25 | 0.27 | 0.31 | 0.32 | 0.32 | 0.69 | 1 | | | | | | | | |
| B A S S 1 | 0.26 | 0.31 | 0.25 | 0.27 | 0.23 | 0.25 | 0.29 | 0.30 | 0.64 | 0.71 | 0.64 | 1 | | | | | | | |
| B A S S 2 | 0.26 | 0.31 | 0.25 | 0.27 | 0.23 | 0.25 | 0.29 | 0.30 | 0.64 | 0.71 | 0.64 | 0.81 | 1 | | | | | | |
| B A S S 3 | 0.14 | 0.16 | 0.13 | 0.14 | 0.25 | 0.27 | 0.31 | 0.33 | 0.29 | 0.32 | 0.30 | 0.33 | 0.81 | 1 | | | | | |
| P I 3 | 0.15 | 0.18 | 0.15 | 0.16 | 0.28 | 0.30 | 0.35 | 0.36 | 0.33 | 0.36 | 0.33 | 0.81 | 0.81 | 1 | | | | | |
| P I 2 | 0.11 | 0.13 | 0.10 | 0.11 | 0.20 | 0.21 | 0.25 | 0.26 | 0.23 | 0.26 | 0.24 | 0.58 | 0.64 | 0.64 | 1 | | | | |
| P I 1 | 0.06 | 0.07 | 0.06 | 0.06 | 0.21 | 0.23 | 0.27 | 0.28 | 0.16 | 0.18 | 0.16 | 0.20 | 0.22 | 0.16 | 0.16 | 1 | | | |
| P I 3 | 0.07 | 0.08 | 0.06 | 0.07 | 0.24 | 0.26 | 0.30 | 0.31 | 0.18 | 0.20 | 0.18 | 0.22 | 0.25 | 0.18 | 0.74 | 0.74 | 1 | | |
| P I 2 | 0.05 | 0.05 | 0.05 | 0.05 | 0.19 | 0.20 | 0.24 | 0.25 | 0.14 | 0.16 | 0.14 | 0.17 | 0.2 | 0.14 | 0.58 | 0.66 | 0.66 | 1 | |
| P I 1 | 0.05 | 0.04 | 0.04 | 0.04 | 0.19 | 0.20 | 0.24 | 0.25 | 0.14 | 0.16 | 0.14 | 0.17 | 0.2 | 0.14 | 0.58 | 0.66 | 0.66 | 0.66 | 1 |

Reliability Testing

The reliability of the overall research model and each dimension of the model was evaluated using Cronbach's coefficient (alpha) score. Variables depict high internal consistency. Higher values of Cronbach's alpha represent the higher internal consistency of the construct. Values of alpha greater than 0.9 represents very high consistency while the values between 0.5 and 0.7 represent moderate consistency (Hinton, P. R., Brownlow, C., McMurray, I., & Cozens, B. (2004). Table 4 presents reliability comparison of the scales used in this study and other studies. It can be noticed that the reliability of scales across studies are comparable.

Table 4:
Reliability of Constructs

| Construct | Cronbach's Alpha | | | |
|---------------------------|--------------------------|---------------------------------|------------------------------------|----------------------------------|
| | Scale used in this study | Scale used in Yoo et al. (2000) | Chang, H. H. and Liu, Y. M. (2009) | Scales used in Eda et al. (2005) |
| Brand Awareness | 0.863 | - | 0.69 | 0.74 |
| Brand Association | 0.861 | 0.94 | 0.69 | 0.62 |
| Perceived Quality | 0.864 | 0.93 | 0.79 | 0.89 |
| Brand Loyalty | 0.788 | 0.90 | 0.69 | 0.85 |
| Purchase Intention | 0.857 | - | 0.83 | - |
| Overall | 0.860 | - | - | 0.91 |

Testing of Multicollinearity

In this testing, any possible issues of multicollinearity (Fotopoulos & Psomas, 2009; Hair et al., 2009; Lee et al., 2010; Lu, Yao, & Yu, 2005) were checked. Table 5 shows the variance inflation factor (VIF) values of various independent variables. The values ranged from 1.120 to 1.914. No value of VIF exceeded 10 and all tolerance values were greater than 0.1. These values show that there was no issue of multicollinearity in the data (Hair et al., 2009). There were no independent variables that had condition indexes above 30 coupled with two variance proportions greater than .50 (Tabachnick & Fidell,

2007). Thus, test results show no significant violations of statistical concepts (Lee et al., 2010; Sit et al., 2009).

Table 5:
Collinearity Statistics

| Model | | Coefficients ^a | | | | | Collinearity Statistics | |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Tolerance | VIF |
| | | B | Std. Error | Beta | | | | |
| 1 | (Constant) | 146.549 | 23.836 | | 6.148 | .000 | | |
| | PI1 | 11.888 | 8.544 | .114 | 1.391 | .165 | .521 | 1.921 |
| | PI2 | -.481 | 11.109 | -.004 | -.043 | .966 | .334 | 2.991 |
| | PI3 | -17.575 | 10.709 | -.151 | -1.641 | .102 | .410 | 2.441 |
| | BASS1 | -1.003 | 12.371 | -.009 | -.081 | .935 | .298 | 3.356 |
| | BASS2 | -1.459 | 13.866 | -.012 | -.105 | .916 | .252 | 3.962 |
| | BASS3 | -4.417 | 9.548 | -.040 | -.463 | .644 | .468 | 2.138 |
| | BAW1 | 5.092 | 8.499 | .053 | .599 | .550 | .439 | 2.280 |
| | BAW2 | 1.379 | 8.233 | .017 | .167 | .867 | .353 | 2.834 |
| | BAW3 | -5.016 | 7.643 | -.060 | -.656 | .512 | .418 | 2.391 |
| | PQU1 | 4.398 | 9.090 | .045 | .484 | .629 | .401 | 2.495 |
| | PQU2 | 6.911 | 8.793 | .076 | .786 | .433 | .375 | 2.664 |
| | PQU3 | .450 | 8.607 | .005 | .052 | .958 | .414 | 2.418 |
| | PQU4 | -4.022 | 8.913 | -.043 | -.451 | .652 | .381 | 2.624 |
| | BLO1 | -.244 | 5.110 | -.004 | -.048 | .962 | .631 | 1.586 |
| | BLO2 | -4.646 | 5.828 | -.066 | -.797 | .426 | .513 | 1.949 |
| | BLO3 | 4.162 | 4.767 | .064 | .873 | .383 | .643 | 1.556 |
| | BLO4 | 1.854 | 5.233 | .027 | .354 | .723 | .605 | 1.654 |

a. Dependent Variable: SNO

Confirmatory Factor Analysis

The next step involved analysis of various causal relationships among the variables studied in our research model. In our research model, the four dimensions of Aaker's model were taken as the antecedents of consumer purchase intention. A structural equation model was developed to test the significance of our research model. Figure 2 shows the conceptual framework that depicts the proposed relationships among the variables studied.

The 17 statements were tested for normality and kurtosis. None of the statements had significant deviation from normality or pronounced kurtosis, and thus all 17 statements were found suitable for use. The results of structural equation model were checked for theoretically inconsistent estimates. There were no negative error variances or very large standard errors. None of the standardized coefficients exceeded or very close to 1.0 (Hair et al., 2009). See Table 6 and 7.

Figure 2:
Conceptual Framework for Purchase Intention

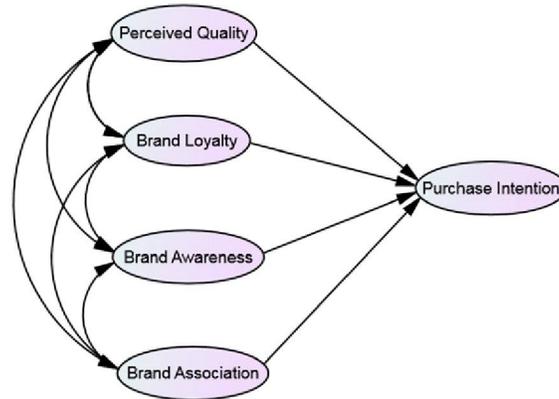


Table 6:
Correlations among the exogenous constructs

| | | | Estimate | S.E. | C.R. | P |
|------------|------|-----|----------|-------|-------|-----|
| BAS | <--> | BAW | 0.192 | 0.035 | 5.573 | *** |
| BAS | <--> | PQU | 0.188 | 0.033 | 5.787 | *** |
| BAS | <--> | BLO | 0.114 | 0.034 | 3.388 | *** |
| BAW | <--> | PQU | 0.287 | 0.049 | 5.811 | *** |
| BAW | <--> | BLO | 0.355 | 0.061 | 5.881 | *** |
| PQU | <--> | BLO | 0.184 | 0.051 | 3.617 | *** |

Table 7:
Structural Equation Coefficients

| | | | Estimate | S.E. | C.R. | P |
|-----------|--------|-----|----------|-------|--------|-------|
| PI | <----- | BAS | 0.133 | 0.082 | 1.631 | 0.103 |
| PI | <----- | BAW | 0.054 | 0.061 | 0.899 | 0.368 |
| PI | <----- | PQU | 0.248 | 0.059 | 4.174 | *** |
| PI | <----- | BLO | -0.027 | 0.053 | -0.517 | 0.605 |

The four exogenous variables of our research model included brand loyalty, perceived quality, brand association, and brand awareness. The purchase intention was the endogenous variable. The four exogenous variables were proposed to be inter-correlated. The data analyses and hypotheses testing were conducted using SPSS version 20 and AMOS version 20. Using AMOS, a confirmatory factor analysis (CFA) was performed. The purpose of CFA was to establish the validity of various variables together in the given research context. The model fit indices suggested by Byrne (2009) were used (See Figure 2)

Figure 2:

Suggested Indices of Model-fit

CMIN/df

Tucker–Lewis Index (TLI)

Comparative Fit Index (CFI)

Root-Mean Square Error of Approximation (RMSEA)

According to Hair et al. (2009) and Kline (2011) for a good model fit the values of CFI and TLI should be greater than 0.90 and value of RMSEA should be below 0.08. The first model, taking all exogenous and endogenous variables together provided the following values (CMIN/df = 2.3348, CFI = 0.943; TLI = 0.929, RMSEA = 0.067). The modification indices were reviewed and one recommended covariance between e12 and e13 was established. The revised model fit statistics were found to be (CMIN/df = 1.924, CFI = 0.961; TLI = 0.951, RMSEA = 0.056). These values of fit indices established that the research model was acceptable.

The convergent and discriminant validities were calculated for all the constructs. These calculations followed procedure of Hair et al., (2009). According to Hair et al., (2009), convergent validity of a construct is established if the value of average variance extracted (AVE) is greater than 0.5. The reliability of a construct is established if the value of composite reliability (CR) is greater than 0.70. The discriminant validity of a construct is established when the values of maximum shared variance (MSV) and average shared variance (ASV)

are less than AVE. The results presented in Table 8 established that all constructs met the statistical criteria of reliability and validity.

Table 8:
Construct Validity

| | CR | AVE | MSV | ASV |
|------------|-------|-------|-------|-------|
| PQU | 0.817 | 0.512 | 0.205 | 0.157 |
| BAS | 0.782 | 0.528 | 0.205 | 0.153 |
| BAW | 0.770 | 0.514 | 0.242 | 0.209 |
| BLO | 0.712 | 0.521 | 0.242 | 0.125 |

The four exogenous constructs analyzed in this study were assumed to be the precursors of consumer purchase intention. The results of the estimated structural equation model provide strong support for our third hypothesis (i.e. perceived quality significantly and directly influences purchase intention) (See Figure 3). However, the models results provided no support for the other three hypotheses despite the fact that all four exogenous constructs were positively and significantly correlated with each other (Table 9). This shows that these constructs may have some sort of interconnection and as such cannot be separated from consumer purchase intention.

Table 9:
Correlations among exogenous constructs

| | | Estimate |
|------------|-----------------|----------|
| BAS | <--> BAW | .438 |
| BAS | <--> PQU | .453 |
| BAS | <--> BLO | .248 |
| BAW | <--> PQU | .439 |
| BAW | <--> BLO | .492 |
| PQU | <--> BLO | .269 |

Figure 3:
Path Coefficients for Constructs

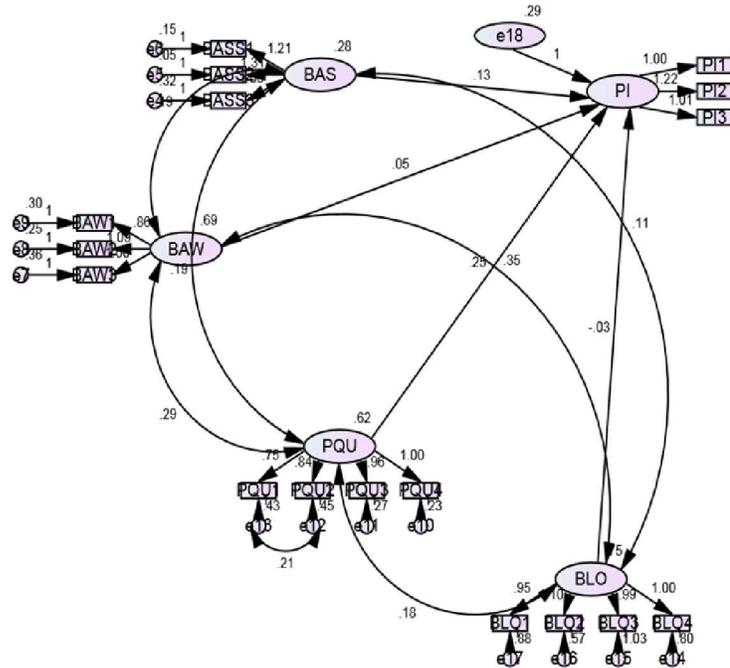


Table 10 :
Hypothesis results for the structural model

| Research hypothesis | Path coefficients | Standardized coefficients | SE | CR | P value | Conclusion |
|---|-------------------|---------------------------|------|-------|---------|---------------|
| H1:Brand awareness → purchase Intention | .054 | .076 | .061 | .899 | .368 | Not Supported |
| H2:Brand association → purchase Intention | .133 | .118 | .082 | 1.631 | .103 | Not Supported |
| H3:Perceived quality → purchase Intention | .248 | .328 | .059 | 4.174 | .000 | Supported |
| H4:Brand loyalty → purchase Intention | -.027 | -.040 | .053 | -5.17 | .605 | Not Supported |

The results provided strong support for H3 which indicated the positive and direct role of perceived quality (Standardized coefficient $\beta = 0.328$). However, brand association (Standardized coefficient $\beta = 0.118$), brand awareness (Standardized coefficient $\beta = 0.076$), and brand loyalty (Standardized coefficient $\beta = -0.04$) were found to have no direct significant influence on purchase intention (see Table 10).

Discussion

Branding is a popular marketing phenomenon which continues to receive attention from academicians, managers, and media. This study provides an empirical analysis of this phenomenon in a developing country's perspective by using a widely used brand equity model from Aaker (1991).

Despite using different context, findings of this study confirms the findings of previous studies. Perceived quality was found to have a positive direct influence on consumer purchase intention. While this finding is in agreement with findings of Ashil and Sinha (2004), Chang and Liu (2009) and Atilgan et al. (2005) found no relationship between perceived quality and consumer purchase intention. The study results support existence of causal relationship among four exogenous constructs (i.e. brand loyalty, brand awareness, brand associations, and perceived quality) and consumer purchase intention. A pairwise comparison of the various constructs of Aaker's model also shows that these exogenous constructs are correlated. This finding is in agreement with the findings of Chang and Liu (2009) and Atilgan et al. (2005).

This study provides important implications for marketing managers. Contrary to our initial hypothesis, not all four dimensions of brand equity were found to have direct and positive influence on consumer purchase intention. Only perceived quality was found to have positive direct influence on consumer purchase intention while the influence of other three brand equity dimensions (i.e. brand association, brand awareness, and brand loyalty) was either very low or negative. Nevertheless, these dimensions may have an indirect influence on brand equity and consumer purchase intention. This indirect influence may be significant and may vary under different

research contexts. More studies would be needed to determine the extent and nature of this indirect influence of predictors on purchase intention.

These findings present some important implications. First, marketing managers need to adapt their marketing strategies to focus on positive contributors to brand equity in order to increase customer purchase intention. Second, the correlations among various constructs studied show that perceived quality can be used as a differentiation tool for the brand and managers must not underestimate the effect of perceived quality and brand awareness on brand loyalty (Aaker, 1991). The key to success in the highly competitive Indian automobile market would be a strong and favorable brand image. According to Aaker (1991) and Tepeci (1999), this brand image would provide the basis for consumer's first purchase, develop brand loyalty, and eventually gain repeat business from the consumers. Academicians and researchers would need more cross-cultural, cross-country, and cross-industry studies that could help establish dimensions of brand equity and antecedents of consumer purchase intention in a variety of contexts. These studies would be helpful to determine new relationships and new possible constructs of brand equity.

Conclusion

This study used well-developed Aaker's model of brand equity and applied it to analyze the antecedents of consumer purchase intention. This study has added to the existing knowledge base of brand management by providing application of a well-known brand equity framework to determine possible predictors of consumer purchase intention in the context of a developing country i.e. India. The study provided mixed findings. Some of the findings confirmed the findings of earlier studies while some didn't. Contrary to previous literature, this research found that only one dimension of brand equity (i.e. perceived quality) had positive and direct influence on consumer purchase intention. The findings of this study have significant implications for marketing managers responsible for developing marketing strategies for their company's brands.

Limitation and future studies

No study is without limitations and this study is no exception. First major limitation of this study is that it is limited to the Indian automobile industry. In order to generalize the results across industries and countries, more studies would be needed that take into account the gaps in consumer behaviors in different research contexts. The second limitation is that this study didn't take into account the performance measurement and financial performance of the brand studies. Such analysis could further strengthen the present research.

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