Determining Brand Equity Dimensions on Consumer Buying Behaviour towards Durable Goods: A SEM approach

Shaswati Das[1] and Gouri Sankar Lall[2]

[1]*Research Scholar, Department of Commerce, Berhampur University, India*

[2]*Professor, Department of Commerce, Berhampur University, India*

Abstract

Purpose: *This paper seeks to investigate the impact of brand awareness, brand image and brand preference on brand equity. It also attempts to throw light on factors that influence the consumer's buying behaviour with regards to durables goods.*

Design/Methodology/Approach: *A well-structured questionnaire method was developed in the study taking a sample of 252 responses using simple random sampling method. The reliability of the questionnaire was checked using Cronbach's Alpha and convergent validity test. Structural Equation Modeling (SEM)-maximum likelihood method was used to analyse and test the research hypotheses. A causal relationship between brand equity dimensions was established.*

Findings: *The study results revealed that brand awareness and brand preference put a direct and significant impact on brand equity while brand image was not supported in this study. Strong support is found for the brand preference.*

Practical Implication: *Branding is one of the most powerful tools in the marketing arsenal and people are very fascinated using branded products. The marketer should target brand image so as to upsurge brand equity and also special consideration towards brand preference should be given, as it is the proactive dimension having distinct impact on brand equity.*

Originality/ Value: *The literature identified that there has been a lot of studies on brand equity, consumer behaviour relating to different industries but till now a countable number to studies prevails on consumer durables.*

Keywords*: Brand Equity, Brand Awareness, Brand Image, Brand Preference, SEM*

1. Introduction

Consumer psychology explains the behaviour of consumer in two ways what they want and why they need it. Apart from this, it also includes when, where, how, how much and how long a consumer will use or discard an offering (*Rajeswari & Prakatheeswari, 2014*). It is concerned with behaviour of consumers that examines the preference and habits of the different consumers. Consumers help marketers and the organizations to construct and improve their marketing strategies and formulate new products (*Bhattacharya & Mitra, 2007*). Consumers are very much aware of the product, price, features and all other options, basing on these criteria the purchase is done and price is not just the criterion as it was long backing (*Anandarajan & Sakthivel, 2016*). Customer is the main focus point for a company and they are also aware that if the customers are kept happy, they will incur a profit. It is also referred to be synonymous with a price premium i.e. the willingness of consumers to an extra amount that usual for different brands (*Anselmsson et al., 2007*). Brand is an image of quality or symbol which influences consumer's confidence (*Habib & Sarwar, 2021*). How do the customer interpret brands and what puts an impact on the customers to pay extra money for branded goods has been quite important topic in research while studying brand equity (*Anselmsson et al., 2007*).

Branding is one of the most powerful tools in the marketing arsenal and people are very much fascinated using branded products. In the market brands are creating an identity for themselves, though branded products have a higher value than the non-branded product still the penetration is increasing at a faster rate (*Hasan, 2014*). The impact of brand has been widely researched for a long time. Brand and branding has been in existence for decades as a way to distinguish a product from another (*Jeon, 2017*). Towards the middle of 20th century, the companies where compelled to produce standardised quality products and to uncover certain way through which they can be distinguished from their rivals.

Number of studies in the past has shared the value and significance of brand equity. Brand equity is the added value or the premium amount a consumer pays that is attributable to the brand name (*Wood, 2000*). It can be measured through various viewpoints namely consumer mind set and financial perspective (*Bakshi & Mishra, 2017*). According to Christodoulides and de Chernatony (2010) financial prospective relates to gaining market share thus making more money and profits, but that would entirely be possible when the consumer have a positive response (*Christodoulides & Chernatony, 2010*). Thus, a number of studies are concentrated towards CBBE. The CBBE exercises command over the literature while studying branding and holds a important place in business as if a particular brand has no

value to consumer it would ultimately be meaningless to all the sector of people (*Cobb-Walgren, Ruble, & Donthu, 1995)* as it is a obligation for financial based brand equity (*Ioannou & Rusu, 2012)*. Brand equity can definitely help a company to get the attention of consumers, outperform other competitors in the market by discriminating their products and lead the way to competitive advantages (*Soenyoto, 2015*). Presently both practitioners and academicians are attracted towards brand equity and concentrating to understand the factors that impacts brand equity (*Torres et al., 2015*) as it is gaining due noteworthiness in both domestic and international market (*Girard & Pinar, 2020*). Hoeffler and Keller (2002) have highlighted the potential of brand in the cognitive mind of consumers. Hence, organisations to gain a greater market share have to ensure right type of product and services to consumers that would in term elevate the fillings, perception and image of a brand (*Bakshi & Mishra, 2017; Hoeffler & Keller, 2002*).

Bamert & Wehrli (2005) extended Aaker, (1991 & 1996) groundwork of brand equity dimensions has focused on brand loyalty, brand awareness, perceived quality and brand associations (*Bamert & Wehrli, 2005*). Keller (1993) emphasized brand equity in two constructs i.e. brand awareness and brand image (*Atilgan et al., 2005*).

There has been a lot of studies on branding, brand equity considering Aaker's model dimensions exploring multiple and varied consumers in various segments. Say fashion and clothing sector (*Nyadzayo et al., 2020; So at el., 2013; Jung & Shen, 2011; Rahman et al., 2010*) Higher education sector (*Girard & Pinar, 2020; Mourad et al., 2020; Chen, 2017*) beer and wine (*Torres et al., 2015*) hospitality sector (*Liu et al., 2020; Wang, 2020; Wang et al., 2011*) tourism sector (*Tran et al., 2020; Zarei & Pachal, 2019; Im et al., 2012*) banking industry (*Pratihari & Uzma, 2018*) etc. in international context. In the Indian context, the researchers have mainly focused to understand the perceptions of consumers with regards to durable goods but not considered brand equity as a component.

Apparently, many studies seek to inspect behaviour of consumers and study brand equity relating to different products having many dimensions. Furthermore, authors those have studied the relationship between the dimensions have not recognised it as latent variables of brand equity based on consumers perspective and the findings were not clearly in conformity with conceptual background. Thus, it required to understand, analyse the dimensions, find out its importance, study their causal relations and clear validate it.

Moreover, the durable goods such as TV, washing machine, air conditioner, grinder, microwave ovens and refrigerator are purchased once in many years and it is associated with

huge investment. Indeed, the durable goods can also be associated with high risk and investment as well as products are categorised based on their durability.

A limited number of studies on consumer durable goods in the international context are found. Also, there are not enough research having conjointly studied brand equity, brand preference and consumer durable goods in one framework to get better insight. Hence, this would be perfectly justified to study the impact of brand equity dimensions on consumer buying behaviour towards durable goods and also highlight the impact of brand preference on brand equity which can be useful for top manager and marketers to design their marketing strategy. This study focuses its attention on consumer durable goods, primarily concerning electronic goods that are basically used by every household. As a consequence durable goods such as TV, Refrigerator, Air Conditioner and Washing Machine, Water Purifier and Micro-oven were considered. The main motive behind taking these items that can be used by each and every member of the family.

With an increase in the importance of brand equity, a model has been adopted to measure brand equity from a consumer perspective. It is very important for a marketer to understand, able to measure and track brand equity. Therefore, the aim of this research is to develop a model to measure brand equity dimensions.

Having this in mind the current work uses a model evolved from Aaker's conceptualisation with brand awareness, brand image, brand preference dimensions, in order to evaluate their relationship between dimensions with brand equity to extract conceptually strong insights.

Brand awareness a prerequisite and the most crucial dimension of brand equity as it is considered a first stage in creating and expanding the brand value (*Im at el., 2012*). According to Aaker (1991) brand awareness represents the potential of a buyer to acknowledge and remember the brand during the purchase of a product (*Shen at al., 2014*). Brand image could refer as the image a customer forms in their mind about a particular brand that is developed over a period of time. It can be defined as the way a brand is placed in the market and the way the consumers think and consider it (*Nyadzayo at al., 2020*). Brand preference is one of the important factors which indicate to choose a particular r brand's product from among the local and foreign brand (*Soenyoto, 2015*).

Last but not the least, ascertaining the causal relation of consumer perception on brand equity dimension have important connotation for the top manager, who must give due consideration that would in term enhance brand equity. Hence, the main objectives of the study is; to evaluate the important factors that affect the consumers in the decision-making process and

study the consumers brand equity impact on dimensions such as brand awareness, brand preference and brand image.

2. Background

Consumers and their satisfaction are the key element that helps in creating a long-term relationship with the companies. The success or failure of the company depends on the behaviour of consumers and their perception regarding a product. The customers are the real heroes in modern marketing and their satisfaction is extremely important in the bottom line (*Rajeswari & Prakatheeswari, 2014*). Now days, the consumers are much conscious about the brand and they have projected the brand as the shadow of their class and personality (*Riaz, 2015*). A consumer prefers branded products during their purchase of durable products and some factors such as quality, price, and technology are putting a strong impact on the consumers mind. The consumers always prefer branded as well as long lasting products (*Hasan, 2014*). Gender is associated differently among inhabitants in terms of impact of brand and males are more curious about branded products than females (*Bhattacharya & Mitra, 2007*). The study evaluates that brand status, appearance and after sale service, style of the product and cost-effectiveness are important as it puts an impact on the minds of the consumers while purchasing durables goods. According to Bezborah & Chakraborty (2015) the customers were loyal, faithful and satisfied in purchasing and using a particular brand. The consumers brand extension of durable goods on a match of product attributes such as quality and price (*Dharmaraj, 2017*). The demographic characteristic influences the buying behaviour of consumers (*Anandarajan & Sakthivel, 2016*). The rural area consumers have typical buying behaviour and they prefer to associate with the reference group, which includes family, friends and co-workers for purchase of high involvement products. It shows complex buying behaviour (*Lahoti & Jacob, 2013*).

Brand equity could be counted as an option globally for brand over the alternatives available (*Torres et al., 2015*). Factors which are important in the determination of brand equity includes perceived quality, brand loyalty, brand awareness, brand association and brand loyalty has major impact whereas brand awareness and perceived quality has weak impact on brand equity (*Atilgan et al., 2005*). Consumers heavily rely on perceived quality, brand loyalty, brand association and brand awareness dimensions and these dimensions have a positive impact and relationship with brand equity (*Yoo et al., 2000*). Further, the important dimensions of brand equity are perceived quality, brand association and brand loyalty but brand loyalty is the most significant among other dimensions (*Koirala & Shrestha, 2015; Brochado & Oliveira, 2018*). The brand loyalty has strong influential factor of brand equity

but perceived quality and brand awareness have weak support towards brand equity (*Atilgan et al., 2005*). In the other hand, the relationship between the brand equity dimensions had a significant effect also, it suggested that brand awareness and perceived quality showed a positive effect towards on overall brand equity mediated by brand loyalty (*Torres et al., 2015*).

Brand equity is a multi-dimensional approach among them some dimensions have already been evaluated in the past literature. An ample model of brand equity has been developed, but this paper constructed a model that critically investigates which dimensions have strongly supported on brand equity. The hypotheses have been tested separately in this study. The framed hypotheses are;

H1:   Brand equity directly and significantly impacts brand preference.

H2:   Brand equity directly and significantly impacts brand image.

H3:   Brand equity directly and significantly impacts brand awareness.

3. Research Methodology

For the purpose of the research, a well-structured Questionnaire was developed having closed-ended questions using both dichotomous and multiple choices on the data required based on the objectives & hypothesis of the study. The responses were collected through mail and by-hand. A total of 280 questionnaires were distributed and sound responses were collected. Out of 280 responses, 28 responses were found to be invalid because of being partially filled. Hence, only 252 (90 percent) responses were taken in the study. The study has been adopted to examine three brand equity dimensions such as brand preference, band image (*Riaz, 2015*) and brand awareness (*Atilgan et al., 2005*), respectively. The respondents were asked to respond to each items of the questionnaire using 5-point Likert Scale (1- Strongly Disagree to 5- Strongly Agree).

3.1 Sampling Procedure & Technique

Population selected for the study constituted a member of the family. Data was collected from different cities of Odisha, namely Bhubaneswar, Cuttack, Rourkela, and Berhampur. Simple random method was adopted to assemble the sample from the respondents. A pilot study was carried out taking 60 respondents. It refers to taking up mini versions or checking feasibility of the study (*Teijingen & Hundley, 2002*). It is also used to refine the ideas in mind and to understand whether the research goals and designs are realistic or not and to make necessary changes wherever needed. The validity of framed questionnaire was determined through Cronbach's alpha. The value of Cronbach's alpha was 0.872 that specifies the questionnaire to be reliable for the study.

3.2 Tools for Analysis

The paper employed Structural Equation Model (SEM) technique to evaluate and estimate the proposed hypotheses. SEM is a multivariate statistical technique that is used to analyse the structural relations among observed and latent variables. It is a multivariate technique of second-generation which merge confirmatory factor analysis and multiple regression synchronously (*Yeh & Li, 2009*).

4. Data Analysis

The data was collected using a primary survey that was analysed in various steps. Confirmatory Factory Analysis (CFA) is used to understand the convergent and discriminant validity of measurement scale as well as to understand the factors loadings. Structural Equation Modelling (SEM) is used to estimate the structure model of brand equity of the durable goods based on consumer's perception and maximum likelihood estimation method is used for this purpose in AMOS 20.0 software.

Results

In total, 19 elements were loaded in this study. These 19 elements were categorized under four constructs for analyzing the consumer buying behaviour of durable goods. After determining four constructs BI, BP, BA and BE, the second-order model approach are used for this study.

4.1 Measurement Model

The Confirmatory Factor Analysis (CFA) was adopted to test the measurement model. The model was conducted to analyse the structural relationship with four different constructs. The CFA was used to determine the samples of data that fits the model as well as confirm the validity of the model and also study the relationship among constructs, for this maximum likelihood method were conducted and convergent and divergent validity of the sample were also checked.

In this paper, 19 elements were taken for the study. The 19 elements were categorized under four constructs i.e. BA, BI, BP and BE. All the elements Cronbach's alpha was tested to know the reliability and internal consistency of the items. The Cronbach's alpha value is .872 shown in table 1. The threshold acceptable Cronbach's alpha value greater than 0.7 (*Bamert & Wehrli, 2005*; *Hair at el., 2009*) and it indicates that all the elements were reliable in this study.

Table 1 Case processing summary

	n	%
Case valid	252	100
Excluded	0	0
Total	252	100
Reliability statistics		
Cronbach's α	0.872	
No. of items	19	

The convergent validity of the four constructs was checked by using Average Variance Extract (AVE), Maximum Shared Squared Variance (MSV), Composite Reliability (CR) and Average squared Variance Explained (ASV) methods and correlation matrix. All the methods were used to know its reliability and validity. The AVE values of all constructs were greater than .5, the CR value represents more than 0.7 and also greater than the AVE value (*Torres et al., 2015*) presented in table 2. The MSV and ASV value shows greater than AVE value. In accordance with the results inference can be drawn that the constructs were uni-dimensional thus advocating that all the constructs met acceptable degree of reliability and convergent validity for this study.

Table 2 Correlation matrix, Reliability and Variance Extracted Estimates

Constructs	CR	AVE	MSV	ASV	BP	BA	BI	BE
BP	0.872	0.581	0.469	0.402	0.763			
BA	0.726	0.538	0.479	0.326	0.572	0.581		
BI	0.702	0.533	0.479	0.375	0.685	0.692	0.577	
BE	0.750	0.515	0.408	0.253	0.639	0.415	0.422	0.561

Table 3 provides a four factor CFA model results, parameter estimate and associated item were evaluated in the measurement model. The model estimates the overall chi-square value of 636.34 with 144 degree of freedom with probability value of .000 suggesting all items achieved statistically significant at minimum level (p-value < .001). The standardized factor loading are > .5 and are highly significant at .001. The output result given in the table 3 also present the R^2 values of individual items were above 0.20 (*Torres et al., 2015*) thus encouraging the model. The covariance among constructs reveals that all the path analysis of constructs CR values were showing more than 1.96 and the probability value is also significant at 1 percent level. In reviewing the model fit summary, it can be seen that the goodness of fit index (GFI) = .884, comparative fit index (CFI) = .859, adjusted goodness of fit index = .814, and root mean square approximation (RMSEA) = .07, met the threshold acceptance level.

In each dimension of brand equity, there are six observable variables in brand awareness, with the standardized regression weight loading between .251-.874 (Table 3). In this, "I have used and known about this brand very well" shows the highest coefficient contribution i.e. .874, suggesting that those durable goods used by the consumers are well known. It helps consumers to identify the goods brand quickly, thereby strengthening the brand awareness.

There are five observable variables in the brand image dimension in total, among them "The product of this brand provides good service" and "The quality of this brand is always consistent" obtain the highest standardized weight .732 and .712, respectively. This result shows that the quality and service of durable goods plays a vital role in enhancing the consumers brand image of durable goods. Consumers always prefer high quality and best service provider while purchasing the durable goods is a main reason to choose the branding product and distinguish the brand among the competitors.

In the dimension brand preference, in total there are five observable variables and the standardized contribution lies between .608 - 897. "When it comes to purchase of consumer durable, this brand is my first preference" is the highest standardized contribution of .897. The result shows that the consumers always prefer branding products as their first choice in the brand preference. It can be seen that 'This brand meets my requirement in every possible way' scores the lowest in the brand preference. The standardized weight is .608, indicating that for consumers; it is not an important archetype of brand preference to recommend the durable goods.

Table 3 Four factor CFA Model: Parameter Estimates

Construct	Items	Stand. Reg. Wgt.	SE	CR (R^2)	P-value
Brand Awareness	(BA 1) I have heard of this brand many a times.	.511	.103	3.91 (.074)	***
	(BA 2) I have seen promotions of this brand.	.551	.086	3.62 (.063)	***
	(BA 3) I have seen using these brand products by my friends & relatives.	.574	.107	6.61 (.225)	***
	(BA 4) I have used and known about this brand very well.	.874	.133	10.2 (.765)	***
	(BA 5) I can differentiate and recognise this brand from all the others.	.635	.130	8.53 (.403)	***
	(BA 6) Whenever I think of buying any consumer durable, I always remember this brand.	.657	-	- (.431)	***
Brand Image	(BI 1) This brand has a distinct image in my mind.	.543	.140	5.41 (.261)	***
	(BI 2) I can quickly recall the logo and the tag	.532	.132	4.72	***

	line.			(.239)	
	(BI 3) The quality of this brand is always consistent.	.712	.185	7.26 (.507)	***
	(BI 4) The product of this brand provides good service.	.732	.169	7.34 (.536)	***
	(BI 5) This brand is durable and reliable.	.532	-	- (.283)	***
Brand Preference	(BP 1) I will definitely prefer this brand over other's if it is available in the store/ market.	.768	.152	9.66 (.589)	***
	(BP 2) I like preferring this brand more than any other brands.	.794	.150	9.89 (.631)	***
	(BP 3) When it comes to purchase of consumer durable, this brand is my first preference.	.897	.146	10.62 (.805)	***
	(BP 4) When buying a specific product, I will always prefer this brand.	.716	.123	9.21 (.512)	***
	(BP 5) This brand meets my requirement in every possible way.	.608	-	- (.370)	***
Brand Equity	(BE1) Purchasing this brand will always appear to be a better choice.	.849	.357	4.911 (.721)	***
	(BE2) It would be reliable and make sense to buy this brand rather than another.	.520	.122	.275 (.200)	***
	(BE3) If there is no much difference in any ways, I would prefer buying this brand.	.567	-	- (.217)	***

Note: *** (p < .001), Stand. Reg. Wgt.- Standardized Regression Weight, SE- Standard Error, CR- Critical Ratio. Model Fit: Chi-Square = 636.341; df= 144; GFI = .884; AGFI = .814; CFI = .859; RMSEA = .08

4.2 Structural Equation Model Test and Analysis

After the measurement model the validity of the scale items had been estimated and then, the causal relationship among four constructs were analysed. It continued with evaluation of a structural model to test the research hypotheses framed in this study. In total, 43 variables exist in the model. Out of 43 variables, 19 items are observed variables and 24 items are unobserved variables. Among the 24 unobserved variables, 20 error terms of observed variables (e1 to e20), 3 second-order factor and 1 residual term. In the structural model, brand preference, brand awareness, brand image as exogenous variables and brand equity as an endogenous variable. The first trail was to test overall model fit and draw structural path. The results of the study revealed that the chi-square was statistically significant with $\varkappa^2 =$ 825.072, df= 147, p-value < 0.001. The remaining goodness of fit statistics based on the acceptable level, Goodness of Fit Index (GFI) = 0.847, Root Mean Square Error of Approximation (RMSEA) = 0.08, Adjusted Goodness of Fit Index (AGFI) = 0.80, Parsimony

Goodness of Fit Index (PGFI) = 0.80, Comparative Fit Index (CFI) = 0.845, Incremental Fit Index (IFI) = 0.848. The presented result disclosed that the model exhibit a sensible fit and support the proposed model.
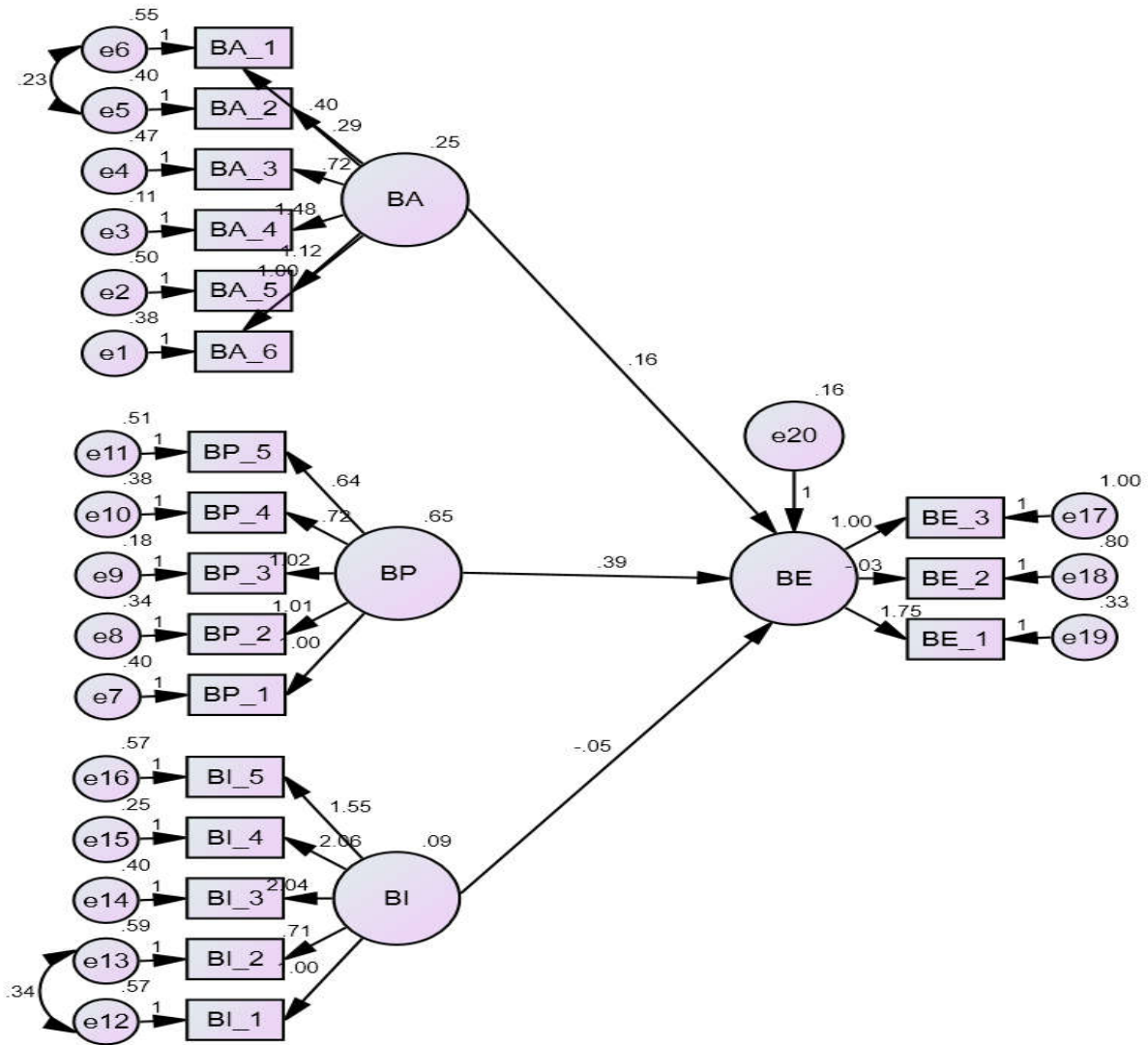

Figure 1 Structural Equation Model (SEM)

In addition, the model modification in structural equation modeling is considered as a substantial improvement in model fit. In reviewing the modification indices (MI) has been observed between e5 to e6 and e12 to e13 (Figure 1) based on error covariance having the largest MI. Goodness of fit statistics related to figure 1 revealed that incorporation of the error covariance between e5 to e6 and e12 to e13 made a substantial large improvement in the model fit. The additional error covariance is decrease the degree of freedom by 2. In particular, the difference in chi square between the two models, the chi-square value decreases from 998.42 to 825.072 and RMSEA from .088 to .08, while the CFI value increased from .773 to .845. The re-specified model exhibits improvement in model goodness

of fit. It examines the difference in chi-square value of 173.38 ($\Delta\ \varkappa^2 = \varkappa^2_{(149)} - \varkappa^2_{(147)}$). Also the study examines AIC and BCC estimation for model fit among the structured models. Those values disclose that the model fit is obtained by contrasting the measurement weights showing equal values having very minor deviation across the models (see table 5). Inference from the outcome represents that there is no significant difference between AIC and BCC groups among the models which recommend the model is best fit.

5. Discussion of the Results and Practical Implications

This study examined the framed hypotheses through an empirical analysis, thereby establishing a structured modelling that can understand the impact of brand equity regarding durable goods, which has not been found in previous studies but a well developed model has been used in other sectors so as to establish the framework to evaluate the brand equity. Furthermore, the study focuses on the brand equity of consumer durable goods and studied the perception of consumers associated with durable goods in different products. India is an emerging and attractive market for consumer durables (*Hasan, 2014*).

Based on the data analysis results, the study states the following findings; firstly, brand awareness and brand preference have significant impact on brand equity of durable goods whereas brand image was not significant. Among them, brand preference has the most significant impact on brand equity while brand awareness has the least. Therefore, the marketer should put more focus in developing brand preference, given the standardized path coefficient of .614 demonstrated in the table 4. The dimension of brand preference includes anything associated with brand choice such as availability, easy purchase, expectation, efficiency, etc.

Table 4 Structure Model Results

Path Relationship	Stand. Path coeff.	SE (CR)	p-value	Test Results
Brand Awareness ---> Brand Equity	.155[**]	.078 (2.04)	.041	supported
Brand Preference ---> Brand Equity	.614[***]	.089 (4.37)	.000	supported
Brand Image ---> Brand Equity	-.027	.122 (-.374)	.709	not supported

Dependent variables	R^2
BE	.401

Notes: Significant at: ***<0.001 level, CR: Critical Ratio; Stand. Path Coeff.: Standardized path coefficient. Model Fit: Chi-Square = 825.072; df= 147; GFI = .867; AGFI = .814; CFI = .845; RMSEA = .08

Table 5 Model Comparisons in the Structured Model

Model	Akaike information criterion (AIC)	Browen-Cudeck criterion (BCC)
Proposed model	911.07	918.518
Saturated model	380.00	412.900
Independence model	2250.567	2253.857

Secondly, when it comes to the dimension of brand image the research finds that the distinctive images, logos and tag-lines play a proactive role in making the consumers identify the products brand and solve the consumer's problem quickly. The brand image is not only identity but also brand connotation and personality.

In the dimension of brand awareness given standardized coefficient .155 shown in the table 4, the study finds that the brand awareness has the least impact on brand equity. The study output result discloses that brand awareness may not strongly affect, but have a partial influence on brand equity. It is so because the p-value was .041 which is very close to .05. The findings of the study are applicable for both researcher and marketer as it may steer in business practice and assist in further research.

Thus, the marketer should put more emphasis on brand image in order to elevate brand equity. Also, it should provide special recognition to brand preference, as it is a component having strongest influence on brand equity in regards to durable goods. As a consequence, the main attempt should be to enhance brand image and brand awareness that would ultimately improve brand equity in context of durable goods.

6. Conclusion

The present research contributes to both the theoretical conceptualisation and analytical implications. The study identifies the consumer buying behaviour on durable goods is determined by brand equity dimensions. In addition, the measurement model recommended that all the factors covariance was significant and the causal relations among the construct was suggested in this study.

The findings disclose that the dimensions namely brand awareness and brand preference puts a direct and significant impact on brand equity. In a nutshell, from a marketer's perspective the manager should target brand preference so as to boost brand equity and should recompense special attention to brand image, as it raises a strong impact on brand equity.

The study has some limitation by not including brand loyalty dimension, which might improve construct validity. Although, this work estimates three dimensions of brand equity only but it measured brand equity with regards to consumer durable goods. Furthermore, this study has used single commodity that restricts the generalisation of the result. Thus, future

research should focus on brand loyalty dimension and test the relevance in building brand equity. In addition, different product category and extends geographic regions to develop and test their measurement model is strongly recommended.

Declaration of Conflicting Interests

None

Funding

References

Aaker, D. A. (1991). *Managing brand equity: Capitalising on the value of brand*. The Free Press, New York. NY.

Anandarajan, S., & Sakthivel, G. (2016). Consumer behaviour towards durable and non-durable goods. *Asia Pacific Journal of Research*, *2*(xxxvii), 187–192.

Anselmsson, J., Johansson, U., & Persson, N. (2007). Understanding price premium for grocery products : A conceptual model of customer-based brand equity. *Journal of Product & Brand Management*, *16*(6), 401–414.

Atilgan, E., Aksoy, S., & Akinchi, S. (2005). Determinants of the brand equity: A verification approach in the beverage industry in Turkey. *Marketing Intelligence & Planning*, *23*(3), 237–248.

Bailey, R., & Ball, S. (2006). An exploration of the meanings of hotel brand equity. *The Service Industries Journal*, *26*(1), 15–38.

Bakshi, M., & Mishra, P. (2017). Drivers og brand equity of television news channels: Evidence from emerging market. *Marketing Intelligence & Planning*, *35*(1), 147–162.

Bamert, T., & Wehrli, H. P. (2005). Service quality as an important dimension of brand equity in Swiss services industries. *Managing Service Quality*, *15*(2), 132–141.

Bezborah, P., & Chakraborty, S. (2015). Brand preference of consumers for select consumer durables- A study in select muncipal wards of Tinsukia town. *Paripex - Indian Journal of Research*, *4*(7), 278–280.

Bhatia, A. (2013). Consumer behaviour towards durable goods in rural areas of Himachal Pradesh with special reference to inducion stove. *International Journal of Retailing & Rural Business Perspectives*, *2*(4).

Bhattacharya, S., & Mitra, S. (2007). Consumer behviour and impact of brand- A study on south zone of Kolkata city. *Voice of Research*, *1*(2), 1–4.

Brochado, A., & Oliveira, F. (2018). Brand equity in the Portuguese vinho verde "green wine" market. *International Journal of Wine Business Research*, *30*(1), 2–18.

Busen, S. M. S., & Mustaffa, C. S. (2014). The Role of Interactive Advertisements in Developing Consumer- based Brand Equity : A Conceptual Discourse. *Procedia - Social and Behavioral Sciences*, *155*(October), 98–103.

Chang, H. H., & Liu, Y. M. (2009). The impact of brand equity on brand preference and purchase intentions in the service industries. *The Service Industries Journal*, *29*(12), 1687–1706.

Chen, Y.-C. (2017). The relationships between brand association, trust, commitment, and satisfaction of higher education institutions. *International Journal of Education Management*.

Christodoulides, G., & Chernatony, D. L. (2010). Consumer-based brand equity conceptualization and measurement. A literaure review. *International Journal of Market Research*, *52*(1), 43–66.

Cobb-Walgren, C. J., Ruble, C. A., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, *24*(3), 25–40.

Dharmaraj, R. (2017). Astudy on consumer buying behaviour towards durable products in Arni, Thiruvannamalai dist. Tamilnadu. *Shanlax International Journal of Commerce*, *5*(2), 39–46.

Eswari, C., & Subramanian, C. (2017). A study on purchase behaviour of consumer durable goods with special reference to Pudukkottai. *International Journal Of Marketing Research Review*, *5*(1), 1–11.

Filieri, R. (2015). Marketing Intelligence & Planning Article information : *Marketing Intelligence & Planning*, *33*(3), 238–257.

Girard, T., & Pinar, M. (2020). An empirical study of the dynamic relationships between the core and supporting brand equity dimensions in higher education. *Journal of Applied Research in Higher Education*.

Habib, M. D., & Sarwar, M. A. (2021). After-sales services, brand equity and purchasing intention to buy second-hand product product. *Rajagiri Management Journal*.

Hair JR, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis* (Seventh Ed).

Hasan, A. (2014). Consumer Brand Preference for Consumer Durable Goods With Reference to Lucknow District. *International Journal of Economics & Management Science*, *4*(1), 1–7.

Hoeffler, S., & Keller, K. L. (2002). Building brand equity through corporate societal marketing. *Journal of Public Policy & Marketing*, *21*(1), 78–89.

Im, H. H., Kim, S. S., Elliot, S., & Han, H. (2012). Conceptualizing destination brand equity dimensions from a consumer-based brand equity perspective. *Journal of Travel and Tourism Marketing*, *29*(4), 385–403.

Ioannou, M., & Rusu, O. (2012). Consumer-based brand equity: A cross-cultural perspective. *Journal of Promotion Management*, *18*(3), 344–360.

Jeon, J.-E. (2017). The impact of brand concept on brand equity. *Asia Pacific Journal of Innovation and Entrepreneurship*, *11*(2), 233–245.

Jung, J., & Shen, D. (2011). Brand equity of luxury fashion brands among Chinese and U.S. young female consumers. *Journal of East-West Business*, *17*(1), 48–69.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, *57*(3), 92–101.

Koirala, K. D., & Shrestha, S. K. (2015). Interrelationship between brand equity dimensions: A SEM approach to leather shoes brand. *The International Journal of Nepalese Academy of Management*, *3*(10), 16–30.

Lahoti, Y. L., & Jacob, A. S. J. (2013). A study of Indian rural buying behaviour for selected consumer durables. *International Journal of Scientific & Engineering Research*, *4*(7), 730–738.

Lang, L. D., Buu, L. T., & Hien, N. Van. (2020). The role of sponsorship and public relations in brand equity creation: An exploratory of Vietnamese consumers perception of soft drinks. *Journal of Food Products Marketing*, *26*(6), 385–400.

Liu, A. X., Hsu, C. H. C., & Fan, D. X. F. (2020). From brand identity to brand equity: A multilevel analysis of the organization–employee bidirectional effects in upscale hotels. *International Journal of Contemporary Hospitality Management*, *32*(7), 2285–2304.

Mourad, M., Meshreki, H., & Sarofim, S. (2020). Brand equity in higher education: Comparative analysis. *Studies in Higher Education*, *45*(1), 209–231.

Nyadzayo, M. W., Johnson, L. W., & Rossi, M. (2020). Drivers and outcomes of brand engagement in self-concept for luxury fashion brands brands. *Journal of Fashion Marketing and Management: An International Journal*.

Pratihari, S. K., & Uzma, S. hena. (2018). CSR and corporate branding effect on brand loyalty: A study on Indian banking industry. *Journal of Product & Brand Management*.

Rahman, M. S., Hossain, M. A., Hoque, M. T., Rushan, M. R. I., & Rahman, M. I. (2010). Millennials' purchasing behavior toward fashion clothing brands: Influence of brand awareness and brand schematicity. *Journal of Fashion Marketing and Management: An International Journal*.

Rajeswari, R., & Pirakatheeswari, P. (2014). A study on consumer behaviour and factors influencing the purchase decision of durable goods with reference to Salem District. *International Research Journal of Business and Management-IRJBM*, *VII*(11), 10–18.

Riaz, H. A. (2015). Impact of brand image on consumer buying behaviour in clothing sector: A comparative study between males and females of Central Punjab (Lahore) and Southern Punjab (Multan). *Kuwait Chapter of Arabian Journal of Business and Management Review*, *4*(9), 24–35.

Satapathy, S. (2014). An analysis for service quality enhancement in electricity utility sector of India by SEM. *Benchmarking: An International Journal*, *21*(6), 964–986.

Shen, H., Yuan, Y., Zhang, Q., & Zhao, J. (2014). An empirical study of customer-based brand equity model for China economy hotels. *Journal of China Tourism Research*,

10(1), 21–34.

So, J. T., Parsons, A. G., & Sheau-Fen, Y. (2013). Corporate branding, emotional attachment and brand loyalty: The case of luxury fashion branding. *Journal of Fashion Marketing and Management*, *17*(4), 403–423.

Soenyoto, F. L. (2015). The impact of brand equity on brand preference and purchase intentions in Indonesia's Bicycle Industry: A case study of Polygon. *IBuss Management*, *3*(2), 99–108.

Tabrizi, P. K. M., & Valanejad, S. (2018). The relationship between brand equity , brand preference and purchase intention. *Case Studies Journal*, *7*(3), 63–68.

Teijingen, E. R. Van, & Hundley, V. (2002). The Importance of Pilot Studies. *Nursing Standard (through 2013)*, *16*(40), 33.

Torres, P. M., Gomes, A. M., & Verissimo, L. J. (2015). Determining the causal relationships that affect consumer-based brand equity The mediating effect of brand equity. *Marketing Intelligence & Planning*, *33*(6), 944–956.

Tran, P. K. T., Nguyen, V. K., & Tran, V. T. (2020). Brand equity and customer satisfaction: A comparative analysis of international and domestic tourists in Vietnam. *Journal of Product and Brand Management*.

Wang, L. (2020). Determinants of consumers purchase attitude and intention toward green hotel selection. *Journal of China Tourism Research*, 1–20.

Wang, Y.-C., Hsu, K.-C., Hsu, S.-H., & Hsieh, P.-A. J. J. (2011). Constructing an index for brand equity: A hospital example. *The Service Industries Journal*, *31*(2), 311–322.

Wood, L. (2000). Brands and brand equity: Definition and management. *Management Decision*.

Yeh, Y. S., & Li, Y.-M. (2009). Building trust in m-commerce: Contributions from quality and satisfaction. *Online Information Review*, *33*(6), 1066–1086.

Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, *28*(2), 195–211.

Zarei, G., & Pachal, Z. mahmoodi. (2019). Examining the effect of brand equity dimensions on domestic tourists' length of stay in Sareyn: The mediating role of brand equity. *Asia Pacific Journal of Tourism Research*, *24*(5), 404–421.