BRAND EQUITY AND CONSUMER RESPONSES: CONCEPTUAL FRAMEWORK AND PRELIMINARY TESTING OF SCALES

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ABSTRACT

This study aims to review the literature relating to brand equity and customer responses. The relationships between brand equity dimensions and brand equity, as well as the impact of brand equity on consumer responses, are shown through a proposed model. Based on extant literature and previous empirical research, the following hypotheses are postulated: (1) brand awareness, perceived quality, brand associations and brand loyalty have a positive influence on overall brand equity; (2) overall brand equity has a positive influence on willingness to pay a price premium, attitude towards extensions, brand preference, purchase intention and customer satisfaction; and (3) brand preference has a significant positive effect on purchase intention. Moreover, this paper also aims to test the initial scales of research concepts that are adopted from previous studies. Some suggestions for future research are also provided.

Keywords: Brand equity, customer-based brand equity, customer responses, customer satisfaction.

INTRODUCTION

The concept of brand equity has received much attention from marketers in both academia and practice since the 1980s. Brand equity has an important and strategic role in the gaining of competitive advantage (Atilgan et al., 2005). Many previous studies have asserted that brand strength can create differential responses in consumers (Hoeffler and Keller, 2003). The relationship between brand equity and consumer responses has been mentioned in many studies (Lassar et al., 1995; Netemeyer et al., 2004; Hoeffler and Keller, 2003; Ailawadi et al., 2003; Rangaswamy et al., 1993; Czellar, 2003; Chen and Chang, 2008; Buil et al., 2013; Naeini et al., 2015), yet these studies have merely focused on the effect of brand equity with regard to one or a few manifestations of customer responses. Buil et al. (2013) and Naeini et al. (2015) have recently proposed a model of this relationship with the most varied manifestations of customer response, including willingness to pay high price, brand extensions, brand preferences and purchase intention. Furthermore, customer satisfaction is also a customer response which has received much attention from both academicians and practitioners (Kotler, 2000; Zeithaml et al., 2006; Levy and Weitz, 2007; Kim, 2010; Kang, 2011; Faed et al., 2013; Liberati and Mariani, 2013). The relationship between brand equity and customer satisfaction has become one topic that has received much attention from marketers (Aaker, 1991; Keller, 1993, Blackston, 2000; Pappu and Quester, 2006; Ha et al., 2010; Torres and Tribo, 2011). However, no studies have examined the impact of brand equity on customer satisfaction in addition to the above manifestations of customer responses in the same research model. As such, there exists a gap in the literature of brand equity and customer responses.

Therefore, this research will synthesize the theoretical basis of brand equity, brand equity dimensions and customer responses. Based on this analysis, this study will propose a conceptual model to better understand the impact of components on brand equity while investigating the effect of brand equity on consumer willingness to pay price premiums, consumer attitudes toward brand extensions, brand preferences, purchase intention and customer satisfaction. The initial scales of the research concepts will then be assessed through preliminary testing.

LITERATURE REVIEW

Brand Equity and its Dimensions

Brand Equity

Brand equity has been one of the main priorities in marketing research (Marketing Science Institute, 2002). With regard to marketing literature, brand equity has been considered from two main perspectives: that of the firm and of the consumer (Keller, 1993; Atilgan et al., 2009). Firm-based brand equity (FBBE) is defined as “the incremental cash flows which accrue to branded products over and above the cash flows which would result from the sale of unbranded products” (Simon and Sullivan, 1993). However, FBBE is only a consumer response outcome to a brand name (Christodoulides et al, 2010). From the perspective of the consumer, brand equity emphasizes the consumer’s evaluation of a particular brand name (Keller 1993, Shocker et al., 1994), a phenomenon denoted as consumer-based brand equity (CBBE). The conceptualizations of CBBE have been mainly derived from cognitive psychology and information economics. The perspective of the consumer is naturally perceived as more favourable than that of the firm itself, as there is little to no significance if a particular brand has no value for the customer (Cobb-Walgren et al., 1995). In this research, we limit our focus to the consumer perspective; hereafter, the concept of consumer-based brand equity will simply be referred to as “brand equity”.

Brand equity is a multi-dimensional and complex concept (De Chernatony, 1988). As such, it is important to understand the concept of brand equity for both researchers and practitioners. Farquhar (1989) defined brand equity as the added value endowed by the brand to the product. Similarly, Aaker (1991) provides a definition of brand equity: “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”. Drawing upon a cognitive psychology approach, Keller (1993) also views brand equity as the “differential effect of brand knowledge on consumer response to the marketing of the brand”. Furthermore, there are many definitions for the concept of brand equity which are summarized in the following table. They are primarily inherited from the definition of Aaker (1991), which is cited and applied frequently by researchers (Tong and Hawley, 2009). This research is also based on Aaker’s definition.

Table 1: Definitions of Brand Equity

Farquhar (1989)	The added value endowed by the brand to the product.
Aaker (1991)	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.
Keller (1993)	The differential effect of brand knowledge on consumer response to the marketing of the brand.
Lassar et al. (1995)	The enhancement in the perceived utility and desirability a brand name confers on a product.
Yoo et al. (2000)	The difference in consumer choice between the focal-branded product and an unbranded product given the same level of product features.
Vázquez et al., (2002)	The utility that the consumer associates to the consumption and use of the brand.
Kotler and Keller (2006)	A bridge between the marketing investments in the company’s products to create the brands and the customers’ brand knowledge.
Christodoulides and De Chernatony (2010)	A set of perceptions, attitudes, knowledge, and behaviors on the part of consumers that results in increased utility and allows a brand to earn greater volume or greater margins than it could without the brand name.

Dimensions of Brand Equity

There is little agreement on exactly what the dimensions of brand equity entail (Christodoulides and De Chernatony, 2010; Veloutsou et al., 2013). Aaker (1991) proposes brand equity with the five dimensions of brand awareness, perceived quality, brand associations, brand loyalty and other proprietary brand assets. However, the fifth dimension is not directly relevant to the consumer; consequently, it is usually omitted. Keller (1993) focuses on two components of brand knowledge signified as brand awareness and brand image. In addition, Lassar (1995) proposes five basic components of brand equity: performance, social image, value, trustworthiness and attachment. According to Atilgan (2009), brand equity consists of perceived quality, brand loyalty, brand associations and brand trust. Other dimensions have also been proposed by many researchers.

However, Aaker’s model (1991) is clearly the most popular brand equity model, and has been used by a large number of studies (Yoo et al., 2000; Washburn and Plank, 2002; Pappu, 2005; Tong et al., 2009; Atilgan, 2009; Buil et al., 2013; Chieh Lu et al., 2015; Vinh and Huy, 2015). It can be understood easily and adheres to the concept of overall brand equity as evaluated by customers. Therefore, this research uses the brand equity model of Aaker (1991) consisting of four core dimensions: brand awareness, perceived quality, brand associations, and brand loyalty.

Brand awareness. Brand awareness is “the ability of the potential buyer to recognize and recall that a brand is a member of a certain product category” (Aaker, 1991). According to Keller (1993), brand awareness refers to the ability to identify the brand easily in the customer’s mind. Thus, brand awareness includes brand recognition and brand recall (Aaker, 1991; Keller, 1993). Precisely, brand recall relates to a brand name that can be recalled correctly by customers when they see a kind of product. In contrast, brand recognition refers to the ability of a customer to distinguish a brand based on information which they have seen or heard before.

Perceived quality. Perceived quality is defined as “the consumer’s [subjective] judgment about a product’s overall excellence or superiority” by Zeithaml (1988). This term does not refer to the objective (or physical) quality of the products. Perceived quality is a subjective quality based solely on the consumer’s perception, while objective quality is based on the product or production process. Thus, perceived quality has a higher degree of abstraction than objective quality (Aaker, 1996; Keller, 1993; Zeithaml, 1988). High perceived quality occurs when customers recognize the difference and superiority of the brand in relation to the competitor's brand.

Brand associations. Aaker (1991) defined brand associations as “anything linked in memory to a brand”. Brand associations are complicated and closely inter-connected. The concept consists of multiple ideas, episodes, instances, and facts that establish a solid network of brand knowledge (Yoo et al., 2000). It is formed by the customer’s belief in the brand created through direct experience with the product or based on available associations (Aaker, 1991). The concept of brand associations represents the functional attributes and experience provided by a particular brand. Invisible attributes such as creativity, differentiation, dynamism and prestige are also considered under the umbrella of brand associations. The combination of tangible and intangible attributes creates brand identity, in turn leading to brand associations (Aaker, 1996).

Customer loyalty. The concept of customer loyalty in past decades has usually been investigated from two perspectives: behavioural and attitudinal loyalty (Nam et al., 2011). Behavioural loyalty emphasizes the frequency of repurchase (Ehrenberg et al., 1990). According to the attitudinal perspective, loyalty relates to the psychological commitment such as a purchase intention without undertaking the repurchase behaviour (Jacoby, 1971; Jarvis and Wilcox, 1976). The behavioural perspective has been strongly criticized, while the attitude perspective is more appropriate for studying loyalty due to the fact that customers can be loyal to a product even if they do not buy that product (Chen and Gursoy, 2001). Thus, in the study, brand loyalty is viewed from attitudinal perspective. Brand loyalty is defined as "the attachment that a customer has to a brand" (Aaker, 1991). According to Yoo et al. (2001), brand loyalty refers to loyalty to a specific brand, as exemplified by the brand always being the first choice when customers intend to buy. Brand loyalty is the result of brand trust or the promise of building high-value connections between customers and brands (Chaudhuri and Holbrook, 2001).

Consumer Responses and their Manifestations

Consumer Responses

Keller (1993) argues that customer responses are seen as a set of perceptions, preferences, and behaviours of consumers, as illustrated by brand choice, response to a coupon promotion, and evaluations for brand extension. According to Keller (2001), the concept of customer responses reflects the temporary or more permanent state changes as a result of exposure to marketing communication. Customer responses to marketing communication can be divided into different categories which reflect the process or outcomes associated with exposure to the communication. These responses can differ from consumer perceptions, preferences or behaviour. They may be shown in response to any kind of marketing activity for the brand. The study by Hoeffler and Keller (2003) categorizes the different customer responses to five elements of marketing: products, extensions, prices, communications and channels. Customers will react differently to these marketing activities due to the influence of brand knowledge.

Manifestations of Consumer Responses

Although customer responses have been mentioned diversely in theory, there are five customer responses that typically receive the attention of researchers in relation to brand equity: willingness to pay a price premium; attitude towards brand extensions; brand preferences; purchase intention; and customer satisfaction.

Willingness to pay a price premium. "Price premium" is defined as the circumstance where the sum that customers are willing to pay for products from a particular brand is higher than the sum they are willing to pay for similar products from other relevant brands (Aaker, 1996). Similarly, Buil et al. (2013) asserted the willingness to pay a price premium "reflects the amount a consumer is willing to pay for a brand in comparison with other brands offering similar benefits". However, actual consumer prices do not reflect the price premium (Anselmsson et al., 2007). Price premium is relevant for all brands (even for low-cost brands), because it is a relative measure.

Attitude towards brand extensions. Brand extension is considered as one effective strategy to enhance competitive edge, and an important factor in the brand management process (Vukasovic, 2012). Aaker and Keller (1990) defined brand extension as when "a current brand name is used to enter a completely different product class". Similarly, Kotler and Armstrong (2002) defined brand extension as using a successful brand name to launch new or modified products in a new category. When a company introduces a new product to the market under the umbrella of a well-known brand, marketing costs and failure rates decrease (Keller, 1993). Consumer attitudes towards new products and brand extensions are derived from consumer perceptions of brand extension and the ability to purchase new products (Wilkie, 1994).

Brand preferences. Brand preference is one indicator demonstrating the power of brand in the consumer's mind. Brand preference is also defined as "the bias a customer holds toward a particular brand" (Chang and Liu, 2009). Hellier et al. (2003) defined brand preference as "the extent to which the customer favors the designated service provided by his or her present company, in comparison to the designated service provided by other companies in his or her consideration set". Measuring brand preference is an attempt to determine the impact of marketing activities in the minds of current and potential customers.

Purchase intention. Purchase intention has become a central issue in customer behavior research and has received much attention from researchers (Chang and Liu, 2009). The only predictor of customer's behaviors is their intention (Fishbein and Ajzen, 1975). Therefore, purchase intention is defined as the current customer's ability to purchase that brand in the future (Cronin et al., 2000; Tolba and Hassan, 2009). It refers to the probability of a customer choosing a particular brand when they purchase an item from a class of products (Crosno, 2009). Purchase intention can also be defined as the probability of purchasing a product by customers in the future (Naeini et al., 2015). Future purchase intentions are often used to represent the actual purchase behavior of consumers (Newberry et al., 2003; Keller, 2003).

Customer satisfaction. One of the most frequently researched topics in marketing is customer satisfaction (Pappu and Quester, 2006). Customer satisfaction has received much attention from both academicians and practitioners (Costabile, 1996; Kotler, 2000;

McQuitty et al., 2000; Zeithaml et al., 2006; Levy and Weitz, 2007; Kim, 2010; Abedniya et al., 2011; Kang, 2011; Faed et al., 2013; Liberati and Mariani, 2013). Oliver (1997) defined satisfaction as "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with prior feelings about the consumer experience". Similarly, satisfaction was defined as the circumstance in which the product/service meets consumer needs and expectations (Zeithaml and Bitner, 2000). Customer satisfaction expresses the level of feeling a person has after comparing its perceived performance with expectations (Kotler, 2000). One of the definitions which has gained the widest acceptance states that satisfaction is a customer's post-purchase evaluation of a product or service (Cronin and Taylor, 1992; Westbrook and Oliver, 1991). Although customer satisfaction has been defined in various ways, these definitions have some common elements: (1) consumer satisfaction is an emotional or cognitive response; (2) consumer satisfaction as a response related to a particular focus (expectations and/or consumption experience); and (3) consumer satisfaction as a response that occurs at a particular time (after consumption, after choice, based on accumulated experience) (Giese, 2000; Aquilani, 2015). Consumer satisfaction is the key important factor behind the success of all businesses and entrepreneurs (Pappu et al., 2005).

Conceptual Framework and Research Hypotheses

Relationships among Brand Equity Dimensions and Overall Brand Equity

This study uses overall brand equity as a separate construct between the dimensions of brand equity and manifestations of consumer responses. It helps us understand how individual dimensions contribute to brand equity. Overall brand equity is similarly defined in relation to other brand equity definitions.

Brand awareness is an important dimension (Tong, 2009) and the first step to creating brand equity (Buil et al., 2013a). Brand awareness can be a sign of quality and commitment, allowing consumers to become familiar with a brand and helping them consider it at the point of purchase (Aaker, 1991). Furthermore, many researches present empirical evidence for the relationship between brand awareness and brand equity (Pappu et al., 2005; Tong, 2009; Atilgan, 2009; Buil et al., 2013a; Chieh Lu et al., 2015). Thus, the following hypothesis is proposed:

H1. Brand awareness has a positive influence on overall brand equity.

Perceived quality is the "core/primary" dimension across the CBBE model (Aaker, 1996; Farquhar, 1989). For marketers, high perceived quality can support high prices, leading to greater profits for the company and reinvestment in brand equity (Yoo et al., 2000). High perceived quality gives consumers a good reason to buy the brand, and as such it encourages customers to choose this brand. Therefore, the higher the perceived quality, the higher the brand equity (Yoo et al., 2000). The influence of perceived quality on brand equity has been verified through previous studies (eg, Yoo et al., 2000; Buil et al., 2013a; Saydan, 2013; Ahmad and Sherwani, 2015; Azadi et al., 2015). Hence, the following hypothesis of the relationship between perceived quality and brand equity is proposed:

H2. Perceived quality has a positive influence on overall brand equity.

Brand loyalty is a major component of brand equity (Yoo et al., 2000). Moreover, brand loyalty can affect the behavior of customers toward buying the same product or brand; such customers will decline switching to other brands (Yoo et al., 2000). If a customer is loyal to a brand regardless of its outstanding features, this brand has a significant value to the customer. According to Atilgan et al. (2005), brand loyalty has a positive direct influence on brand equity. Similarly, previous studies offer empirical evidence for the relationship between brand loyalty and brand equity (Shocker et al., 1988; Washburn and Plank, 2002; Pappu, 2005; Tong et al., 2009; Chieh Lu et al., 2015). Therefore, the following hypothesis is proposed:

H3. Brand loyalty has a positive influence on overall brand equity.

With brand association, companies can differentiate and position their products, as well as build appropriate attitudes and beliefs about the brand (Dean, 2004). This can lead to increased brand equity (Yoo et al., 2000, Chen, 2001). According to Rio et al. (2001), brand association is an important factor in creating brand equity. Similarly, the results of studies by Pappu (2005), Tong et al. (2009), Atilgal (2009), Buil et al. (2013) have also proved the relationship between brand association and brand equity. Therefore, the following hypothesis is suggested:

H4. Brand association has a positive influence on overall brand equity.

The Effect of Overall Brand Equity on Consumer Responses

Customer response is one of the major factors related to brand equity (Keller, 1993). Brand equity will increase if consumer responses are favourable to a product and its marketing activities (Belén del Río et al., 2001). Therefore, it is essential and challenging to research the relationship between brand equity and customer response (Broyles et al., 2009; Wang et al., 2008). This study focuses on the four consumer responses mentioned above: willingness to pay a price premium, attitude towards extensions, brand preference, and purchase intention/customer satisfaction.

Price premium seems to have a central place in branding theory, but there is still relatively little systematic and empirical research on exactly which specific brand image elements build price premiums. Previous studies have shown brand equity has a significant impact on a customer's willingness to pay a price premium (Lassar et al., 1995; Netemeyer et al., 2004). "Price premium" is considered as a core component of brand equity (Netemeyer et al., 2004). Consumers are willing to pay a higher price because they perceive some unique value in the brand which no other brands can provide (Chaudhuri, 1995; Buil etal., 2013). Many results from various studies (Buil et al., 2013; Monavvarian et al., 2015; Naeini et al., 2015; Satvati et al., 2016) have pointed out that the price premium that consumers are willing to pay for brands depends positively on their overall brand equity. Thus, the following hypothesis is postulated:

H5. Overall brand equity has a positive influence on consumer willingness to pay price premiums.

Consumer attitudes toward brand extensions are very necessary to establish brand equity (Pitta and Katsanis, 1995). However, there is a limitation in current research on consumer attitudes toward brand extensions (Klink and Smith, 2001). Consumers will be more likely to accept an extension of the brand into new categories when this brand has strong brand equity (Veloutsou et al., 2013). Czellar (2003) demonstrated that brand equity plays a key role in evaluating the brand extension and supported strongly the transfer of knowledge and affect from the parent brand to the brand extension. Companies with higher brand equity have less difficulty in attracting customers for product extensions due to a sense of familiarity and trust from a well-known brand name (Milberg and Sinn, 2008). Brand equity not only promotes better acceptance of brand extensions but also reacts to the negative effects. Furthermore, results from various studies (Buil et al., 2013; Monvarian et al., 2015; Naeini et al., 2015; Satvati et al., 2016) have shown the relationship between brand equity and attitudes toward brand extensions. Therefore, the following hypothesis is proposed:

H6. Overall brand equity has a positive influence on consumer attitudes towards brand extensions.

There are many studies investigating the impact of brand equity on brand preference (Hoeffler and Keller, 2003; Myers, 2003; Cobb-Walgren et al., 1995). Results have shown a strong relationship between brand equity and brand preference. Customers will show greater appreciation and preference for the brand if it is a strong brand. Research by Tolba and Hassan (2006) showed that brand equity has a direct impact on the brand preferences of consumers. Similarly, results of the studies by Prasad and Dev (2000), Devlin et al. (2002), Chernatony et al. (2004), Chen and Chang (2008), Chang and Liu (2009), and Buil et al. (2013) have also proven the relationship between brand equity and brand preference. As such, the following hypothesis is raised:

H7. Overall brand equity has a positive influence on consumer brand preferences.

Customers interpret and process information through brand equity; as such, a brand creates confidence in purchase intention and also enhances customer satisfaction. The effect of brand equity on consumer purchase intentions is effective because customers will be likely to buy brands which provide a higher value (Aaker, 1991). Cobb-Walgren et al. (1995) found that higher brand equity led to greater purchase intention. According to Broyles et al. (2009), one consequence of brand equity noted in the extant literature is its positive influence on purchase behavior (Aaker 1991; Farquhar 1989; Guerrero et al. 2000; Keller 1993). Many results from various studies (Chen and Chang, 2008; Chang and Liu, 2009; Buit et al., 2013) pointed out that overall brand equity has a positive effect on purchase intention. Furthermore, the relationship between brand preference and purchase intentions is proven through research by Hellier et al. (2003). This relationship is derived from the Theory of Reasoned Action, a concept which explains the relationships between attitudes, intentions, and behaviors (Fishbein and Ajzen, 1975). According to this theory, a favorable attitude toward the brand leads to the intention to purchase (Buil et al., 2013). Consequently, brand preference has a direct and positive impact on the purchase intention. Thus, the following hypotheses are proposed:

H8. Overall brand equity has a significant positive effect on purchase intention.

H9. Brand preference has a significant positive effect on purchase intention.

Over the past two decades, the relationship between brand equity and customer satisfaction has become one topic receiving much attention from marketers (Black, 2006). Researchers have found a positive relationship between customer satisfaction and brand equity (Aaker, 1991; Keller, 1993, Blackston, 2000; Pappu and Quester, 2006; Ha et al., 2010; Torres and Tribo, 2011). However, very few studies have been conducted in the opposite direction (Broyles et al., 2009; Huang et al., 2014). According to Broyles et al. (2009), one of the consequences of brand equity is customer satisfaction. When someone compares a brand's usage outcomes to one's expectations (Cadotte et al., 1987; Oliver, 1980) and their resultant psychological state of mind (Oliver, 1999), it is a cognitive process. If someone perceives that a brand meets their expectations, they will feel satisfied (Oliver, 1999). Brand equity is a measure of customer satisfaction in most cases (Jang, 2010). This means that if the brand equity is high, it will increase customer satisfaction (Oliver, 1999; Budiarti, 2013). According to Bilal (2014), through empirical research in the fashion industry, brand equity is the determining factor for customer satisfaction. These results are similar to other studies by Ghazizadeh et al. (2010), Pappu and Quester (2006), Martenson (2007), Rehman (2016), and Tanveer (2016). From there, the following hypothesis is proposed:

H10. Overall brand equity has a significant positive effect on customer satisfaction.

Conceptual Framework
Based on the relationships between brand equity dimensions, overall brand equity and customer responses, a conceptual framework is illustrated in Figure 1.

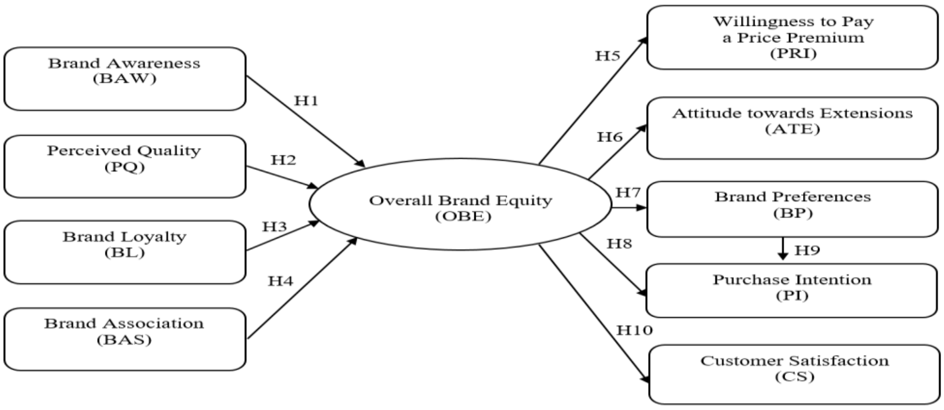

Figure 1: Conceptual framework

PRELIMINARY TEST

Scale development and measurement methods

The measures for constructs in the framework were derived from previous studies. Brand awareness was measured with five items adopted from the works of Buil et al. (2013) and Boo (2009). To measure perceived quality, this research uses three items from the scale of Tong & Hawley (2009), one item from Yoo et al. (2000) and two items from the authors of this paper. The three items for measuring brand loyalty are adopted from Yoo et al. (2000). A measure for brand association of four items is adopted from Tong & Hawley (2009) and Yoo et al. (2000). Similarly, the overall brand equity measure is taken from Tong & Hawley (2009) and Yoo et al. (2000). Regarding consumer responses to brand equity, three items from the scale of Buil et al. (2013) are adopted to measure the willingness to pay a price premium. Attitude towards extensions is measured by using three items from the scale of Martínez (2009). Base on the scale of Davies et al. (2006), brand preference is measured using three items. To measure purchase intention, the study adapts a three-item scale from the scale of Cronin et al. (2000). Finally, customer satisfaction is measured using four items adapted from the previous studies of Oliver (1989) and Cronin et al. (2000). The respondents assessed all items on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Cronbach’s alpha and the item-total correlation for all scales were used to assess the initial reliability of the measures. Subsequently, to explore the dimensionality of each construct, exploratory factor analyses (EFA) were performed.

Sample Selection and Data Collection

The empirical data in this research consists of questionnaire responses from consumers who have used soy milk belonging to the Vinasoy brand in Vietnam. The survey was carried out from February 2018 to March 2018. The questionnaire was firstly written in English and then translated into Vietnamese. The survey was conducted using two methods: paper and online questionnaires, with 98 valid responses. Males and females represented 18.4% and 81.6% of respondents, respectively. 20.4 % of respondents were younger than 19 years old; 56.1 % were 19 to 35 years old; 17.3% were 35 to 50 years old; and 6.1% were over 50. Regarding income per year, it was found that 69.4% fell below 48 million VND with a proportionate 30.6% earning 48 million VND and up.

RESULTS OF PRELIMINARY TESTING

Cronbach’s alpha analysis

This method allows the elimination of inappropriate variables and limits garbage variables in the research model. Accordingly, only variables with Corrected Item-Total Correlation greater than 0.3 and Cronbach's alpha greater than 0.6 are considered acceptable (Nunnally and BernStein, 1994). Table 2 show that Cronbach’s alpha for all the constructs were above 0.70, the highest being the perceived quality scale (0.923) and the lowest being the brand extension scale (0.733). The results also show that as variable CS3 had an item-to-total correlation under 0.3 (0.298), it was removed. At the same time, if BAW4 was removed, Cronbach’s alpha of brand awareness would increase to 0.908. However, the item-to-total correlation of BAW4 was 0.304 (over 0.3); thus, this observed variable was retained for EFA. The item-to-total correlations of the remaining observed variables were all above the threshold of 0.30. In other words, the reliabilities of all constructs were acceptable.

Table 2: Construct reliability of preliminary test

Construct components and items		Cronbach's alpha	Item-to-total correlations
Brand awareness	BAW1	**0.856**	0.727
	BAW2		0.789
	BAW3		0.721
	BAW4		0.304
	BAW5		0.852
Perceived Quality	PQ1	**0.923**	0.814
	PQ2		0.731
	PQ3		0.687
	PQ4		0.885
	PQ5		0.838
	PQ6		0.720
Brand association	BAS1	**0.867**	0.692
	BAS2		0.714
	BAS3		0.701
	BAS4		0.762
Brand loyalty	BL1	**0.832**	0.667
	BL2		0.684
	BL3		0.724
Overall brand equity	OBE1	**0.909**	0.753
	OBE2		0.834
	OBE3		0.776
	OBE4		0.812
Willingness to pay a price premium	PRI1	**0.773**	0.645
	PRI2		0.645
	PRI3		0.536
Attitude towards extensions	BEX1	**0.733**	0.645
	BEX2		0.549
	BEX3		0.487
Brand preference	BP1	**0.825**	0.732
	BP2		0.590
	BP3		0.733
Purchase intention	PI1	**0.835**	0.714
	PI2		0.745
	PI3		0.631
Customer satisfaction	CS1	**0.799**	0.755
	CS2		0.690
	CS3		0.298
	CS4		0.744

Exploratory factor analysis

This work employed 37 items from the Cronbach's Alpha results to extract the dimensions of factors via exploratory factor analysis (EFA). The method of principal component extraction with VARIMAX rotation was applied. Results suggested 10 factors extracted at Eigenvalues = 1.234 and the total variance extracted was 67.892%, KMO = 0.700 (> 0.5) and Sig = 0.000. Thus, these ten factors were kept and named on the basis of the attribute covered (Table 3). However, the one item with factor loadings less than 0.5 was excluded, namely BAW4. All remaining items had factor loadings greater than 0.5 and were significant. As such, they continued to be used for the following analyses.

Table 2. Factors identified by principal components factor analysis

Pattern Matrix[a]										
	Component									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
PQ1	0.937									
PQ4	0.912									
PQ5	0.910									
PQ3	0.737									
PQ6	0.697									
PQ2	0.636									
OBE3		0.897								
OBE2		0.887								
OBE4		0.780								
OBE1		0.722								
BAW5			0.849							
BAW1			0.831							
BAW2			0.802							
BAW3			0.691							
BAW4										
BAS4				0.915						
BAS2				0.769						
BAS1				0.717						
BAS3				0.700						
CS1					0.858					
CS2					0.836					
CS4					0.831					
PI1						0.854				
PI2						0.841				
PI3						0.721				
BP1							0.820			
BP3							0.793			
BP2							0.738			
BL3								0.887		
BL2								0.755		
BL1								0.746		
PRI1									0.789	
PRI3									0.648	
PRI2									0.612	
BEX1										0.811
BEX2										0.720
BEX3										0.581
Eigenvalue	**7.318**	**3.618**	**3.557**	**2.580**	**2.380**	**2.270**	**2.060**	**1.740**	**1.538**	**1.234**
Extracted Sums of Squared Loadings	**19.074**	**8.911**	**8.866**	**6.091**	**5.674**	**5.307**	**4.559**	**3.701**	**3.118**	**2.591**

CONCLUSIONS AND FUTURE RESEARCH

Brand equity is considered to be instrumental in helping brands attain a competitive advantage. An important factor in an organization's performance regarding its financial goals is the creation and maintenance of strong brand equity. Thus, it is necessary to study how brand equity forms, and its consequences (Yoo et al., 2000). Based on literature and practical research results, the present study formed the proposed model of the relationships between brand equity dimensions, overall brand equity and customer responses. In particular, first, this study used Aaker's model (1991) to explain the relationships between brand equity dimensions' brand awareness, perceived quality, brand associations and brand loyalty and overall brand equity. The hypothesis is proposed that each of these components has a positive influence on overall brand equity. Secondly, the relationships between overall brand equity and some customer responses such as willingness to pay a price premium, attitude towards extensions, brand preference, purchase intention and customer satisfaction are also researched. The hypothesis suggests that overall brand equity has a positive influence on the above customer responses. At the same time, brand preference has a significant positive effect on purchase intention. Results of preliminary testing show that the measurement scales of the constructs satisfy criteria regarding a satisfactory level of reliability in basic research.

This study aims to contribute to the literature regarding the impact of brand equity on customer satisfaction and customer responses (willingness to pay a price premium, attitude towards extensions, brand preference, and purchase intention) in the same proposed model. There is little research which has focused on this relationship in the extant literature.

This study only serves to propose a conceptual framework between variable concepts and the preliminary testing of scales. Consequently, two directions are suggested for future research: (1) Firstly, continuing to validate the initial scales of concept researches by using different types of products; and (2) testing the proposed hypothetical in the specific market and then comparing the results with previous research projects and theories.

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