

A Cross Validation of Consumer-Based Brand Equity (CBBE) with Private Labels in Spain

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Abstract In recent years a number of Consumer-Based Brand Equity (CBBE) models and measurement scales have been introduced in the branding literature. However, examinations of brand equity in Private Labels (PL) are rather limited. This study aims to compare the validity of the two prominent CBBE models those introduced by Yoo and Donthu (2001) and Nam, Ekinci, and Whyatt (2011). In order to test the models and make this comparison, the study collected data from 236 respondents who rated private labels in Spain. A list of 30 different fashion and sportswear PL was introduced to respondents. These brands do not make any reference to the retail store in which they are sold. Research findings suggest that the extended CBBE model introduced by Nam et al. (2011) and Ciftci, Ekinci, and Whyatt (2014) is more reliable and valid than Yoo and Donthu's model for assessing PL. Theoretical contributions and managerial implications are discussed.

Keywords Consumer-based brand equity • Customer satisfaction • Service quality • Private labels

1 Introduction

Although the definition of Private Label (PL) is diverse in retail marketing, PL refers to brands owned by retailers rather than manufacturers (Burt & Davies, 2010; Frank & Boyd, 1965). The PL experiment dates back to the nineteenth century (Herstein & Gamliel, 2004). According to the *Social Science Citation Index* (SSCI)

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the first article on PL was published in the 60s. From 1962 to 1989 fewer than 12 articles appeared on the subject, and just 42 published between 1990 and 1999. Since 2000, interest in PL has increased, with 221 cited articles in print to 2012, of which 55 % were published in 2007-2012 (Molinillo, Ekinci, Whyatt, & Occhiocupo, 2014). This increase may be due to the growth in the number of relevant journals and in the number of issues per volume. The growth in PL research also mirrors the increase in PL market share in the U.S. (Nielsen, 2011) but especially in Europe where retailer brands have got at least 30 % market share of all products sold in 15 countries and 51 % in Spain (Nielsen, 2011; Private Label Manufacturers Association, 2014).

Although PL have become increasingly of interest for academics and practitioners, examinations of brand equity in PL are rather limited (Cuneo, Lopez, & Yagie, 2012). Furthermore, existing applications of the prominent brand equity models introduced by Aaker (1991) and Keller (1993) and measurement scales developed by Yoo and Donthu (2001) demonstrate poor validity in service organizations and different cultures (e.g. Boo, Busser, & Baloglu, 2009; Ciftci et al., 2014). Nam et al. (2011) argue that Aaker's (1991) and Keller's (1993) models are not suitable for service-dominant brands because of the inherent characteristics of services (intangibility, inseparability, heterogeneity). Furthermore, Aaker's (1991) model does not fully recognize symbolic aspects of brands, even though symbolic consumption is an essential component of brand equity. To address this deficiency, Nam et al. (2011) introduced three symbolic consumption related dimensions: selfcongruence, brand identification and lifestyle-congruence. Although the validity of this model was supported by two empirical studies, it was applied to service dominant brands, such as hotels, restaurants and fashion retail brands. Nevertheless, a consensus has not yet been reached as to whether these models can be applicable to PL operating in different cultures (Ciftci et al., 2014). For instance, Rubio, Villasenor, and Yague (2015) show that loyalty, perceived quality and perceived value contribute to improve the brand equity of the PL and Calvo-Porrall and Levy- Mangin (2014) suggest that store image should be included in Aaker's model.

The aim of this study is twofold: (1) to assess the external validity of Yoo and Donthu's (2001) and Nam et al.'s (2011) CBBE model in PL and Spanish consumers which is different from the American, British, Korean and Turkish where these models were developed and tested (e.g. Ciftci et al., 2014). This study differs from previous studies because it compares the validity of the two prominent CBBE models in PL and a new cultural setting. Then, it contributes to PLs literature by introducing a measurement scale for assessing PL's brand equity. In the following sections the two CBBE models are reviewed. Then, the results of the validity analysis using Confirmatory Factor Analysis (CFA) are presented. Finally, conclusions are drawn and implications for managing global brand equity in PL are discussed.

2 Background

The underlying reason for increasing interests in measuring CBBE in industry and academia is the positive effect of brand equity on the consumer's brand choice, brand commitment (Cobb-Walgreen, Beal, & Donthu, 1995), brand extension (Pitta & Katsanis, 1995) and the firm's financial performance (Tolba & Hassan, 2009). Over the last three decades, CBBE has been examined by various models that involve different brand equity dimensions (Jung & Sung, 2008). Due to different conceptualisations of CBBE, there is a lack of consensus on how brand equity should be measured (Maio Mackay, 2001). Nonetheless, the theories of consumer brand equity introduced by Aaker (1991) and Keller (1993) are widely acknowledged. Keller (1993, p. 2) defines brand equity as "the differential effect of brand knowledge, which conceptualized brand

awareness and brand image, on consumer response to the marketing of the brand” whereas Aaker (1991, p. 15) refers that brand equity is “a set of assets and liabilities linked to a brand”. According to Aaker (1991), CBBE has four dimensions: perceived quality, brand awareness, brand loyalty and brand associations. Perceived quality is described as “the consumer’s judgment about a product’s overall excellence or superiority” (Zeithaml, 1988, p. 3). Brand awareness refers to consumers’ brand recall or brand recognition (Keller, 1993). Brand association is the brand knowledge stored in the consumer mind and brand loyalty is “the attachment that a customer has to a brand” (Aaker, 1991, p. 39). However, Aaker (1991) introduce this theory for drawing managers’ attentions to brand management in an ideal world rather than how brand equity should be measured.

Utilizing Aaker’s (1991) and Keller’s (1993) models of brand equity, Yoo and Donthu (2001) developed a multi dimensional scale to measure CBBE and tested the validity of their scale using goods dominant brands (athletic shoes, film for cameras, and colour television sets) in three different cultures (Korean, Korean American and American). They claim that the data support the CBBE model as their scale was found to be valid and reliable. Although applications of Yoo and Donthu’s (2001) measurement provided reliable results, the discriminant validity of the three measurement scales (perceived quality, brand loyalty and brand associations/awareness) was questionable (Washburn, Brian, & Priluck, 2000). Washburn and Plank (2002) state that scale items measuring brand association and brand awareness are not distinct. In addition to these criticisms, several researchers point out that Yoo and Donthu’s (2001) measure is not suitable for the service dominant brands and different cultures due to the unique characteristics of services (e.g. Lee & Back, 2010; Nam et al., 2011). Service dominant brands are different from goods dominant brands (Kim, Kim, & An, 2003) because of the inherent characteristics of services: intangibility, perishability, heterogeneity and inseparability of service production and consumption (Zeithaml, Parasuraman, & Berry, 1985). Therefore, adoption of existing CBBE models for service brands and different cultures are recommended (Lee & Back, 2010; Nam et al., 2011). Accordingly, Nam et al. (2011) introduced a CBBE model for assessing service dominant brands.

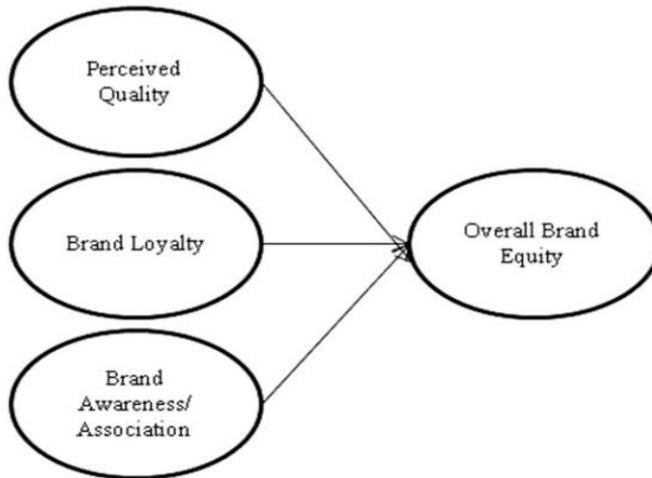


Fig. 1 Consumer-based brand equity: Yoo and Donthu's model

As can be seen from Fig. 1, Yoo and Donthu (2001) propose that the three brand equity dimensions influence overall brand equity. They argue brand loyalty is one of the components of CBBE. They suggest that brand awareness and brand associations are the same.

Nam et al. (2011) argue that brand loyalty is one of the components of CBBE, but that it is also an outcome. Kim, Ko, Xu, and Han (2012), Xu and Chan (2010) and Pike, Bianchi, Kerr, and Patti (2010) acknowledge a causal relationship between brand loyalty and other dimensions of CBBE. Buil, Martinez, and Chernatony (2013) find that brand loyalty is influenced by brand associations, brand awareness, perceived quality and brand associations. Nam et al. (2011) suggest that CBBE has seven dimensions: physical quality, staff behaviour, ideal self-congruence, brand identification and lifestyle-congruence, consumer satisfaction and brand loyalty. Physical quality and staff behaviour are service quality (SQ) related dimensions in line with its multidimensional nature (Ekinci, Dawes, & Massey, 2008, Gronroos, 1984). Nam et al.'s (2011) model is missing brand awareness dimension which has been considered as a prominent dimension of CBBE in both Aaker's (1991) and Keller's (1993) model. Brand awareness and the two quality dimensions represent the cognitive aspect of brands, whereas ideal self-congruence, brand identification and lifestyle-congruence represent the symbolic aspect of brands. Consumer satisfaction embodies the consumer's post purchase experience with brands and mediates the relationships between the six dimensions of brand equity and brand loyalty.

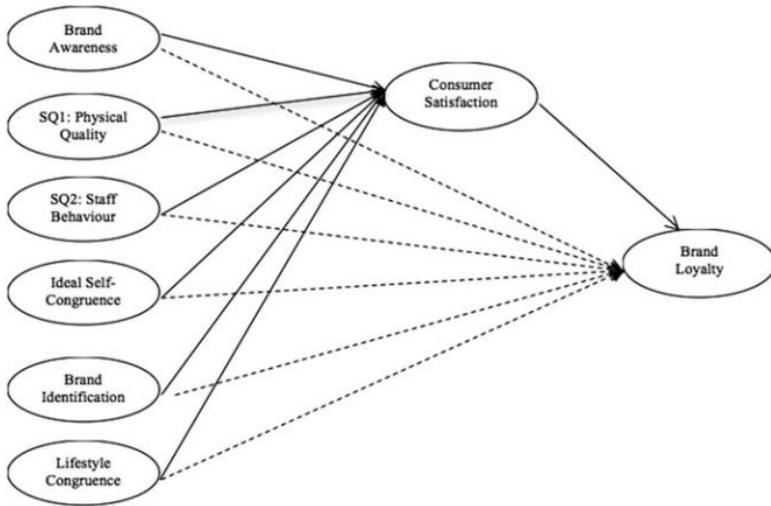


Fig. 2 Consumer-based brand equity: extended model of Nam et al.

Nam et al. (2011) argue that if consumers do not have purchase experience with brands, consumer satisfaction can be removed from the model. Consumer loyalty refers to the consumer's behavioural purchase intentions or recommending the brand. Therefore, this study examines the extended model of Nam et al. (Ciftci et al., 2014), which adds brand awareness to measure CBBE (Fig. 2).

3 Methodology

Data were collected by a personal survey through structured questionnaire. We asked a Spanish marketing research company to distribute the questionnaire which includes the measurement scales introduced by Yoo and Donthu (2001) and Nam et al. (2011). We also used the back translation method to ensure the meaning of the scale items in two languages. Regarding the sampling procedure, in order to obtain a representative sample quota sampling was employed. In total, 236 respondents participated in the survey in 2014. At the beginning, respondents were asked to think about either fashion or sportswear brands. Then, the respondents were given a list consisted of 30 different fashion and sportswear PL. These brands do not make any reference to the store in which they are sold. Respondents were asked to choose a brand from the list that they were familiar with.

73 % of the respondents stated that they have purchased the brands within the last 12 months. Most of the respondents were female (53 %) and received income (annually) between 6000 and 11,999 Euros (23 %). Most of these participants have attained undergraduate degree (24 %) or A-level (23 %) or GCSE (24 %). The age-group distribution were somewhat similar between age group: 15-24 (24 %), 25-34 (19 %), 35-44 (19 %), 45-54 (16 %), 55-64 (11 %), and above 65 (11 %).

4 Findings

Before any analysis was conducted, normality tests were performed using the value of skewness of each item. The results suggested that the distribution of the data was normal since the values of the skewness are around the absolute value of -1 and $+1$ (Hair, Black, Babin, & Anderson, 2010).

Following Anderson and Gerbing (1988), we tested the Yoo and Donthu's model (2001) and Nam et al.'s (2011) by employing a two-stage approach in Structural Equation Modeling (SEM)—the measurement model and then followed by the structural model. The two-stage approach was conducted with AMOS 21 employing Maximum Likelihood (ML) method.

4.1 Measurement Model

A measurement model was created in order to assess the validity and reliability of the constructs. Table 1 below displays the fit statistics of the two models. The goodness-of-fit (GoF) statistics of the measurement model are good for both models. The factor loadings of each of the items within the constructs are shown in Tables 2 and 3, which can be found in the appendix. Based on confirmatory factor analysis, we tested for convergent validity and discriminant validity. The convergent and discriminant validity were tested following Fornell and Larcker (1981)

Table 1 Fit statistics of the measurement model

Model	χ^2	<i>df</i>	χ^2/df	<i>GFI</i>	<i>NFI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>
Yoo and Donthu (2001)	98.92	38	2.60	0.92	0.93	0.96	0.08	0.05
Nam et al. (2011)	349.86	202	1.73	0.88	0.90	0.96	0.06	0.04

Table 2 Descriptive statistics and correlations (Yoo & Donthu, 2001)

Construct scale		Descriptive		Reliability		Correlations			
		Mean	<i>SD</i>	<i>a</i>	CR	1	2	3	4
1	Perceived quality	5.41	1.18	0.77	0.79	0.66			
2	Brand awareness	5.31	1.18	0.76	0.77	0.26	0.53		
3	Brand loyalty	3.67	1.36	0.86	0.86	0.20	0.22	0.67	
4	Brand equity	4.38	1.43	0.89	0.90	0.30	0.25	0.66	0.74

Note The diagonal values in bold indicate the average variances extracted (AVE). The scores in the lower diagonal indicate squared inter-construct correlations (SIC)

Table 3 Descriptive statistics and correlations (Nam et al., 2011; Ciftci et al., 2014)

Construct scale		Descriptive		Reliability		Correlations							
		Mean	SD	<i>a</i>	CR	1	2	3	4	5	6	7	
1	Physical quality	5.56	0.91	0.85	0.86	0.60							
2	Staff behaviour	5.40	1.07	0.92	0.92	0.17	0.80						
3	Brand identification	2.00	1.40	0.91	0.91	0.00	0.06	0.83					
4	Lifestyle congruence	3.62	1.45	0.92	0.93	0.04	0.01	0.06	0.81				
5	Ideal self-congruence	4.05	1.36	0.89	0.89	0.11	0.01	0.05	0.42	0.74			
6	Consumer satisfaction	4.98	0.93	0.78	0.78	0.30	0.09	0.03	0.02	0.05	0.54		
7	Brand loyalty	5.30	1.16	0.84	0.84	0.40	0.07	0.00	0.13	0.15	0.26	0.73	
8	Brand awareness	5.31	1.18	0.76	0.77	0.18	0.05	0.01	0.18	0.11	0.08	0.42	0.53

Note The diagonal values in bold indicate the average variances extracted (AVE). The scores in the lower diagonal indicate squared inter-construct correlations (SIC)

suggestions by using the Average Variance Extracted (AVE) scores. To assess reliability, we used Cronbach's Alpha (α) and Composite Reliability (CR) scores. The values of the AVE, α , and CR scores are shown in Tables 2 and 3 below.

According to Fornell and Larcker (1981), convergent validity is achieved if the AVE score is above the 0.50 thresholds. The results show that the AVEs are all above 0.50, indicating that convergent validity is achieved. Next, discriminant validity was assessed. If the AVE score is above the squared inter-construct correlation (SIC), discriminant validity is achieved (Fornell & Larcker, 1981). As shown in Tables 2 and 3, most of the AVEs are above the SIC scores, indicating discriminant validity is achieved. Reliability is also achieved since both the α and CR scores were above the threshold of 0.70 (Malhotra, 2010).

4.2 Structural Model

A structural model was built to test all of the research hypotheses within the two models. The fit statistics of the two models for the structural model are the same with the fit statistics of the two models for the measurement model.

The results of Yoo and Donthu's model suggest that only perceived quality (SPC = 0.20, $t = 3.00$, $p < 0.01$) and brand loyalty (SPC = 0.69, $t = 9.66$, $p < 0.001$) are positively associated with overall brand equity. The hypothesis that states brand awareness has a positive relationship with overall brand equity is not statistically significant (SPC = 0.08, $t = 1.14$, n.s.).

The results of Nam et al.'s model show the support of five links between some of the brand equity dimensions and brand loyalty. Physical quality has a positive relationship with consumer satisfaction (SPC = 0.50, $t = 5.05$, $p < 0.001$). The link between brand identification and consumer satisfaction is also supported (SPC = 0.14, $t = 1.91$, $p < 0.10$). Consumer satisfaction is positively associated with brand loyalty (SPC = 0.23, $t = 2.90$, $p < 0.01$). Results also show that physical quality (SPC = 0.32, $t = 3.61$, $p < 0.001$) and brand awareness (SPC = 0.41, $t = 4.83$, $p < 0.001$) have positive relationships with brand loyalty. Staff behaviour, ideal self-congruence and lifestyle congruence do not have a statistically significant influence on consumer satisfaction or brand loyalty.

5 Discussion

The concept of CBBE is a strategic tool for businesses when assessing brand performance and developing brand strategies. The majority of studies conducted on Consumer-Based Brand Equity (CBBE) are based on the conceptualisation introduced by Aaker (1991) and Keller (1993). However, no consensus has yet been reached regarding the validity of CBBE. Yoo and Donthu's (2001) measure applied in goods oriented brands has prompted the question of whether the scale was appropriate for private labels and different cultures. This study confirms the validity of the Nam et al.'s (2011) CBBE model in a different culture (Spanish) and a new branding context (PL). It also outperforms the CBBE model introduced by Yoo and Donthu (2001). In summary, the current study contributes to knowledge by

assessing the external validity of Nam et al.'s (2011) CBBE model in PL, comparing their model to Yoo and Donthu's (2001) model.

This study presents a valid and reliable scale for measuring brand equity in PL. Hence managers can develop internal as well as external benchmarks based on this measure. They can observe their brand equity trends from the customers' viewpoint and compare the PL performance over time. They will also be able to observe their strengths and weaknesses compared to global brands. This study has limitations that suggest directions for further research. The sample is small to generalize its findings to research population and other cultures. Data could be collected from different countries (i.e., other western and eastern countries) and from a variety of PL in order to tackle with this limitation. Future research should address the brand trust as a dimension of CBBE.

Appendix 1: Scales and factor loadings (Yoo & Donthu, 2001)

Scales		Measurement	Factor loadings
Perceived quality	PQ1	The likely quality of this brand is extremely high	0.68
	PQ2	The likelihood that this brand would be functional is very high	0.92
Brand awareness	BA1	I can recognize this brand among other fashion or sportswear brands	0.74
	BA2	I am aware of this brand	0.84
	BA3	Some characteristics of this brand come to my mind quickly	0.58
Brand loyalty	BL1	I consider myself to be loyal to this brand	0.75
	BL2	This brand would be my first choice	0.84
	BL3	I will not buy from other fashion or sportswear brands if this brand is available in the store	0.86
Overall brand equity	BE1	It makes sense to buy this brand instead of any other, even if they are the same	0.80
	BE2	Even if another fashion or sportswear brand has the same features as this brand, I would prefer to buy this brand	0.93
	BE3	If another fashion or sportswear brand is not different from this brand in any way, it seems smarter to purchase this brand	0.86

Appendix 2: Scales and factor loadings (Nam et al., 2011; Ciftci et al., 2014)

Scales		Measurement	Factor loadings
Brand awareness	BA1	I can recognize this brand among other fashion or sportswear brands	0.76
	BA2	I am aware of this brand	0.78
	BA3	Some characteristics of this brand come to my mind quickly	0.63
Physical quality	PHQ1	This brand offers products of very good quality features	0.79
	PHQ2	This brand offers products of consistent quality	0.72
	PHQ3	This brand offers very durable products	0.76
	PHQ4	This brand offers very reliable products	0.82
Staff behaviour	SB1	Employees who are selling this brand are competent in doing their jobs	0.83
	SB2	Employees who are selling this brand are helpful	0.95
	SB3	Employees who are selling this brand are friendly	0.90
Brand identification	BI2	If a story in the media criticizes this brand, I would feel embarrassed	0.95
	BI3	When someone criticizes this brand's products, it feels like a personal insult	0.88
Lifestyle congruence	LC1	This brand's products reflect my personal lifestyle	0.85
	LC2	This brand's products are totally in line with my lifestyle	0.92
	LC3	This brand's products support my lifestyle	0.93
Ideal self-congruence	IC1	The typical customer of this brand has an image similar to how I like to see myself	0.82
	IC2	This brand has an image similar to how I like to see myself	0.94
	IC3	This brand has an image which represents how I would like others to see me	0.81
Consumer satisfaction	CS2	Worse than I expected - Better than I expected	0.68
	CS3	Worse than similar brands I purchase - Better than other brands I purchase	0.71
	CS4	Terrible - Delighted	0.81
Brand loyalty	BLN1	I will recommend this brand to someone who seeks my advice	0.92
	BLN2	Next time I will purchase a product from this brand again	0.79

Appendix 3: Results of the hypotheses testing (Yoo & Donthu, 2001)

	Relationships	SPC	t-value
H	Perceived quality ! Overall brand equity	0.20	3.00**
H ₂	Brand awareness ! Overall brand equity	0.08	1.14
H ₃	Brand loyalty ! Overall brand equity	0.69	9.66***
Variance explained (R ²)			
Overall brand equity		0.71	

** $p < 0.01$, *** $p < 0.001$

Appendix 4: Results of the hypotheses testing (Nam et al., 2011; Ciftci et al., 2014)

	Relationships	SPC	t-value
H	Physical quality ! Consumer satisfaction	0.50	5.05***
H ₂	Staff behaviour ! Consumer satisfaction	0.05	0.69
H ₃	Brand identification ! Consumer satisfaction	0.14	1.91*
H ₄	Lifestyle congruence ! Consumer satisfaction	-0.06	-0.60
H ₅	Ideal self-congruence ! Consumer satisfaction	0.04	0.36
H ₆	Brand awareness ! Consumer satisfaction	0.05	0.55
H ₆	Consumer satisfaction ! Brand loyalty	0.23	2.90**
H _{7a}	Physical quality ! Brand loyalty	0.32	3.61***
H _{7b}	Staff behaviour ! Brand loyalty	-0.03	-0.53
H _{7c}	Brand Identification ! Brand loyalty	-0.07	-1.21
H _{7d}	Lifestyle congruence ! Brand loyalty	0.09	1.10
H _{7e}	Ideal self-congruence ! Brand loyalty	0.05	0.69
H _{7f}	Brand awareness ! Brand loyalty	0.41	4.83***
Variance explained (R ²)			
Consumer satisfaction		0.33	
Brand loyalty		0.62	

Note *SPC* Standardized path coefficient; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

References

- Aaker, D. A., & Keller, K. L. (1990). Consumer evaluations of brand extensions. *Journal of Marketing*, 54(1), 27-41.
- Ailawadi, K., & Keller, K. L. (2004). Understanding retail branding: Conceptual insights and research priorities. *Journal of Retailing*, 80(4), 331-342.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(March), 411-454.
- Alexander, N., & Colgate, M. (2005). Customers' responses to retail brand extensions. *Journal of Marketing Management*, 21(3), 393-419.