

## MARKETING | RESEARCH ARTICLE

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# How brand personality, brand identification and service quality influence service brand equity

Sandra Maria Correia Loureiro<sup>1\*</sup>, Rui Lopes<sup>1</sup> and Hans Ruediger Kaufmann<sup>2,3</sup>

**Abstract:** During the past couple of decades, brand equity has emerged as one of the key concepts in marketing. Literature concerned with consumer brand relationship is calling for more studies in order to increase understanding of brand equity dimensions. Therefore, this study aims to contribute to the existing body of knowledge by examining the strength of relational variables on brand equity perceived by consumers. Findings support the proposed model in the service industry revealing that brand loyalty, brand identification, trust, brand personality and brand awareness are the variables that have a greatest impact on brand equity. Thus, this study is the first to measure the strength of assorted relational variables, and variables related with identification and personality on brand equity for brands in the service industry. In this vein, brand managers should be aware of the importance of building a brand regarding the way they communicate the features of the brand.

**Subjects:** Behavioral Sciences, Economics, Finance, Business & Industry, Social Sciences

**Keywords:** brand equity, brand identification, perceived quality, trust, brand loyalty, brand awareness, brand associations, brand personality



### ABOUT THE AUTHOR

Sandra Maria Correia Loureiro is professor at the University Institute of Lisbon (ISCTE-IUL) and a researcher in the UNIDE and SOCIUS research centre. Her current research interests include consumer–brand relationship, online environment and purchase and tourism experience. Her papers were published in a variety of peer-reviewed journals, such as *International Journal of Hospitality Management*, *Journal of Travel & Tourism Marketing*, *Journal of Service Management* or *Journal of Brand Management* and at well reputed international conferences, such as EMAC, ANZMAC, GAMMA-GMC and World Marketing Congress. She has acted as a reviewer for several international journals and conferences. She has participated in several research projects funded by the EU and FCT (Foundation for Science and Technology). She also won the Best Paper Premier Award 2012 of the Global Marketing Conference (comprises EMAC, ANZMAC, KSMS and Japan association of marketing). Recently, she won the Highly Commended paper award at 7th EuroMed conference.

### PUBLIC INTEREST STATEMENT

Loyalty and identification to a brand are the core assets to enhance brand equity. Brand managers should establish a good relationship bond with consumers, demonstrating respect for the consumers' problems. When consumers have the good/service as their first choice, consider themselves loyal to a certain brand and intend to buy that brand in the next purchase, then the predisposition of being proud of using the good/service and the preference for the brand instead of other brands are higher.

## 1. Introduction

Brand equity has been a frequent research topic in marketing with seminal works of Farquhar (1989), Keller (1993) and Aaker (1991). The concept of brand equity is often related to the Farquhar's approach (1989), which defines it as added value for the company, for the delivery, or for the consumer. Aaker (1991) defines it as the sum of assets that are associated with the brand name, such as awareness, loyalty, perceived quality and other proprietary assets. To Kapferer (1998), brand equity is a reflection of the consumer and a mental image of proposed values (brand identity). Keller (2003) claims that the basis of brand equity lies in brand knowledge and its positive associations. de Chernatony (2003) defines it as a process, both internal and external to the organization, of offering a value proposal represented by the brand. These definitions have the idea in common that brand equity adds value to the good or service.

Previous researchers have examined the effects of additional variables on brand equity and its consequences (e.g. Buil, de Chernatony, & Martinez, 2013; Huang & Sarigöllü, 2012; Loureiro & Miranda, 2011; Nam, Ekinci, & Whyatt, 2011; Yoo, Donthu, & Lee, 2000). Nevertheless, to the best of our knowledge, no study has examined the strength of the influence of brand identification, brand personality and relational variables on perceived brand equity in different consumption situations. The call for studying the interaction effect of Aaker's (1991) brand equity dimensions and other variables on brand equity have been made by previous researchers (e.g. Buil, de Chernatony, & Martinez 2013; French & Smith, 2013; Nam et al., 2011; Yoo, Donthu, & Lee 2000). Therefore, this study intends to contribute to the existing body of knowledge by examining the effect of seven variables on brand equity perceived by consumers.

The remainder of this paper is structured as follows: the next section presents the theoretical background of brand identification, brand personality, brand equity and the core assets of brand equity as proposed by Aaker (1991). Thereafter, the methodology of the empirical study is described and the findings are presented. Finally, the conclusions, limitations and suggestions for further research are drawn.

## 2. Theoretical background

### 2.1. Core assets of brand equity

According to Aaker (1991) and Keller (1993), there are four core assets of brand equity: perceived quality, brand loyalty, brand awareness and brand associations. Whereas Aaker (1991) identifies four major consumer-related bases of brand equity, Keller (1993) proposes a knowledge-based framework for creating brand equity based on two dimensions: brand awareness and brand image, which integrate brand associations.

Yoo, Donthu, and Lee (2000) demonstrated that the level of brand equity is related positively to the extent, to which brand quality, brand loyalty, brand associations and awareness are evident in the product (e.g. athletic shoes, camera films and colour television sets). Especially, high perceived quality would drive a consumer to choose the brand rather than other competing brands. Therefore, to the degree that brand quality is perceived by consumers, brand equity will increase.

The concept of perceived quality has been widely studied in the field of relationship marketing. Zeithaml (1988) defined perceived service quality as the customer's assessment of the overall excellence or superiority of the service. Grönroos (1984) defines service quality as an overall perceived judgement. Thus, perceived quality has been considered as an overall evaluation of the service. Although Aaker's (1991) study recognizes perceived quality as one of the components of brand equity, it does not differentiate between goods or services and does not refer to the dimensions to be considered. Therefore, in order to contemplate perceived quality for services, this study considers two dimensions: physical (functional) quality and staff quality (e.g. Ekinci, Dawes, & Massey 2008; Grönroos 1984).

**H1:** Perceived quality has a positive effect on brand equity.

Brand awareness and brand associations are related to the strength of the brand node or trace in memory, as reflected by the consumers' ability to identify the brand under different conditions (Huang & Sarigöllü, 2012; Keller, 1993; Rossiter & Percy, 1987). These awareness/associations represent the favourable, strong and unique associations in consumers' memory. Brand associations and brand awareness are positively related to brand equity because they can be a signal of quality and commitment and they help a buyer consider the brand at the point of purchase, which leads to a favourable behaviour towards the brand.

**H2:** Brand associations have a positive effect on brand equity.

**H3:** Brand awareness has a positive effect on brand equity.

Several researchers agree on that high brand equity is associated with high brand preference and loyalty (e.g. Cobb-Walgren, Ruble, & Donthu, 1995; de Chernatony, Harris, & Christodoulides, 2004; Devlin, Gwynne, & Ennew, 2002). Accordingly, the Chang and Liu's (2009) model empirically supported that brands with higher levels of brand equity would generate higher levels of customer brand preference. In turn, higher customer brand preference was associated with more willingness to continue using the service brand (brand loyalty). Brand loyalty makes consumers purchase a brand routinely and resist switching to another brand. Hence, to the extent that consumers are loyal to the brand, brand equity will increase (Yoo, Donthu, & Lee, 2000).

**H4:** Brand loyalty has a positive effect on brand equity.

## 2.2. Trust

Trust has been studied primarily in the context of relationship marketing (e.g. Doney & Cannon 1997; Ganesan & Hess 1997; Morgan & Hunt 1994). Morgan and Hunt (1994, p. 23) conceptualize trust "as existing when one part has confidence in an exchange partner's reliability and integrity". In this context, Rousseau, Bitkin, Burt, and Camerer (1998, p. 395) defined trust as a "psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviours of another".

In their seminal work, Ambler (1997) presents trust as an affective and not a cognitive, analytical construct which can be a proxy for brand equity. Hence, trust in a brand can positively influence brand equity.

**H5:** Trust has a positive effect on brand equity.

## 2.3. Brand personality

Since celebrities started to endorse brands, a personification of brands arose. These people help marketers position their brands because they lead the consumer to identify themselves with the celebrity. It has long been recognized that brands, as any person, could have a personality (Azoulay & Kapferer, 2003). In literature, it is claimed that we must discuss brand personality since individuals chose a brand the same way they chose a friend. Researchers go even further, stating that individuals tend to attribute facets of a personality to brands, talking frequently about them. Summarizing, Aaker (1997) points out that brand personality is the set of human characteristics associated with a brand. Later, Azoulay, and Kapferer (2003, p. 151) further develop this definition classifying brand personality as "the set of human personality traits that are both applicable to and relevant for brands", regarding the cultural context in which they occur, as highlighted by Valette-Florence and De Barnier (2013). This contextual development stems from the evolution of the studies associated with psychology and social sciences that concluded that a personality is described by traits that differ from cognitive aspects of the person or from her/his skills and abilities (Azoulay & Kapferer, 2003).

In more detail, Aaker (1997, p. 347) developed the widely known brand personality scale, which identifies five possible dimensions or "sets of human characteristics associated with a brand", which are: Sincerity, Excitement, Competence, Sophistication and Ruggedness. These five dimensions are

built based on the “Big Five” human personality structure (Norman, 1963; Tupes & Christal, 1958) and include 15 “facets”. However, this scale has been criticized (Avis, 2012). Azoulay and Kapferer (2003) argue that the scale is based on a loose definition of personality. Geuens, Weijters, and De Wulf (2009) postulate that the scale includes characteristics such as “upper class” which confuse “brand personality” with “user profiles”. So, Geuens et al.’s (2009) five-factor, twelve-item measure of brand personality is organized to contain only personality items and, as matched to Aaker and Fournier’s (1995) scale, shows higher affinity to the “Big Five” personality model. Alpatova’s and Dall’Olmo Riley’s (2011) research compares the two brand personality scales in their concise and operational versions [15 items vs. 12 items for Aaker and Fournier’s (1995) and Geuens et al.’s (2009) scales, respectively]. Their results support Geuens et al.’s (2009) scale, which could be used for any product category and for analyses of an industry, individual brand and respondent level. Therefore, this study follows the Geuens et al.’s (2009) scale.

Taking into account that individuals associate themselves with those who have traits in common, it is logical to associate themselves with brands with which they identify as argued by Stockburger-Sauer, Ratneshwar, and Sen (2012) and that will be explored on the next section. Hence, brand equity “derives from the set of brand associations and behaviours that have been developed towards the brand” (Delgado-Ballester & Munera-Alemán, 2005, p. 188). The positive influence of brand personality on brand equity becomes apparent.

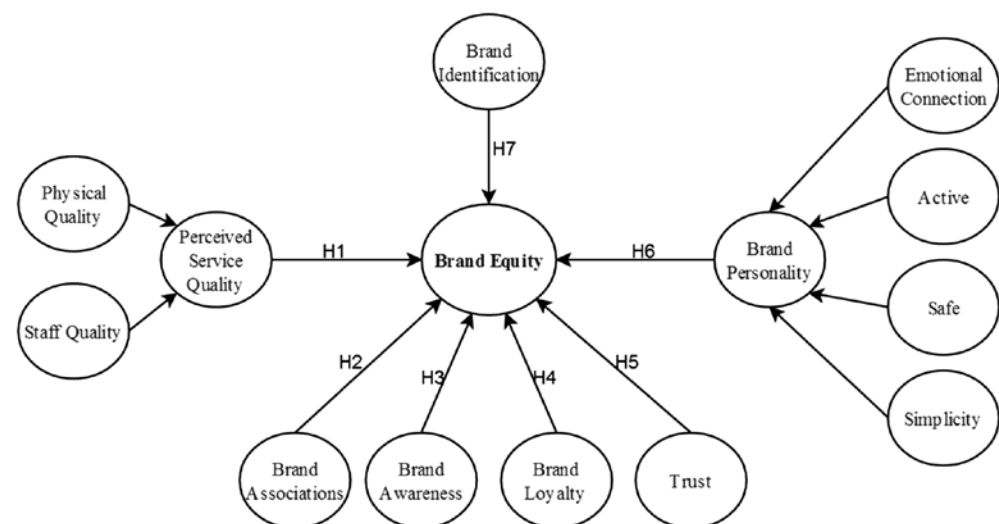
**H6:** Brand personality has a positive effect on brand equity.

#### 2.4. Brand identification

Based on the organizational identification theory, it can be explained why an individual becomes a member of a social group. Therefore, an individual tends to be part of a social group in which she/he feels identified and to which she/he belongs (Mael & Ashforth, 1992). Accordingly, consumers define their social identity by buying brands or associating with brands (Del Rio, Vazquez, & Iglesias 2001; Kaufmann, Correia Loureiro, Basile, & Vrontis, 2012). When the brands have a good reputation within the group to which the consumers belong or aspire to belong, latter positively value those brands (Long & Shiffman, 2000). Brand consumption also differentiates a consumer’s social identity from other social identities (Kim, Han, & Park, 2001).

Hence, brand identification allows the consumer to integrate or dissociate with the group which constitute their social circle as shown by Tuškej, Golob, and Podnar (2013). Therefore, a consumer who identifies herself/himself with certain brands will be more willing to stay close to that brand and will be proud to promote the brand and, thus, the perceived brand equity will increase.

Figure 1. Hypothesized model.



**H7:** Brand identification has a positive effect on brand equity.

Summarizing, Figure 1 depicts the hypothesized effect of seven variables on brand equity perceived by consumers.

### 3. Methodology

#### 3.1. Measures

This study presents the findings of empirical research sampling consumers of supermarkets as well as electricity and mobile communications brands. This choice was made due to an intended focus on brand equity in service sectors.

In order to test the hypotheses previously developed, an online questionnaire was elaborated to be answered by consumers of those brands. Once designed, it moved to the pre-test stage with the purpose of verifying the clarity of the sentences. Before collecting data, a pre-test was made with a sample of 10 students. Their suggestions were accepted and introduced in the questionnaire in order to provide for enhanced clarity (Walsh & Beatty, 2007). The questionnaire comprises 41 items, and each respondent was invited to answer the questions according to a Likert scale from one (completely disagree) to five (completely agree). The items followed a random order so that the consumer did not associate the items with a specific construct.

The constructs were measured with multi-item scales. Brand equity was measured by using a scale from Yoo and Donthu (2001) and Lassar (1995). The perceived quality, brand identification were measured by using an established scale from Nam et al. (2011). Brand personality was measured with a scale based on Aaker (1997), Geuens et al. (2009) and Lin (2010). The construct brand loyalty came from the study of Yoo and Donthu (2001). Trust was measured by using five items based on paper of Delgado-Ballester and Munuera-Alemán (2005). As to brand awareness, a scale from Loureiro and Miranda (2011) was used and brand association was based on Azoulay and Kapferer (2003) and Chang and Chieng (2006) (see Table 1).

#### 3.2. Sample characterization

The online questionnaire was accessible from 5 April to 31 May of 2012. University students (from several universities in Portugal) were instructed to recruit five people to fill in the survey. Four of these five people had to be non-students and represent a range of ages, genders and professions (based on the method of Walsh & Beatty, 2007). The data collection process lasted eight weeks. With a total of 415 responses, 152 people answered to the supermarkets' brand questionnaire, 100 people to the electrical brands questionnaire and 163 to the telecommunication questionnaire. Most respondents fell into the 26–35 age group. Gender was split almost equally.

#### 3.3. Data analysis

A structural equation model approach using Partial Least Squares (PLS) was employed to test the hypotheses proposed in the current study. PLS is based on an iterative combination of the principal components analysis and regression (Chin, 1998). PLS employs a component-based approach for estimation (Lohmoller, 1988). PLS also places minimal restrictions on the sample's size and residual distributions and support formative factors (Chin, 1998; Wold, 1985).

In particular, PLS was chosen as it is appropriate for explaining complex relationships because it avoids the two problems of inadmissible solutions and factor indeterminacy (Fornell & Bookstein, 1982). In the present study, a non-parametric approach called bootstrapping was used to assess the precision of the PLS estimates and support of the hypotheses. A set of 500 samples were created to obtain 500 estimates for each parameter in the PLS model (Chin, 1998; Fornell & Larcker, 1981). Tenenhaus, Vinzi, Chatelin, and Lauro (2005) proposed a global measure of goodness of fit (GoF) for PLS path modelling, which ranges from 0.00 to 1.00.



**Table 1. The questionnaire's construct, items and sources**

Construct		Item	Source
Brand associations	AS1	I think x service method is modern	Azoulay and Kapferer (2003), Chang and Chieng (2006)
	AS2	x has a professional and well-trained staff	
	AS3	x uses a modern design in their facilities	
	AS4	Materials associated to x are visually appealing	
Brand awareness	BW1	Some characteristics of x come quickly to my mind	Loureiro and Miranda (2011)
	BW2	I can recognize x among other competitors	
	BW3	I can quickly recall the symbol or logo of x	
Brand loyalty	L1	x is my first choice	Yoo and Donthu (2001)
	L2	I consider myself to be loyal to x	
	L3	Next time I will choose x	
Trust	T1	My overall trust in the products (good/service) of x is high	Delgado-Ballester and Munuera-Alemán (2005)
	T2	x seems to be very helpful with regard to the interests of consumers	
	T3	I consider the company and people who stand behind x to be very trustworthy	
	T4	I believe that x does not take advantage of consumers	
	T5	I have more confidence on the service of x	
Perceived quality—physical	QPh1	The quality of the facilities of x is extremely high	Nam, Ekinci, and Whyatt (2011)
	QPh2	From x I can expect superior performance	
	QPh3	The quality of the products (good/service) of x is extremely high	
Perceived quality—staff	QS1	Employees of x listen to me	Nam et al. (2011)
	QS2	Employees of x are helpful	
	QS3	Employees of x are friendly	
Brand identification	BI1	When someone criticizes x, it feels like a personal insult	Nam et al. (2011)
	BI2	If a story in the media criticizes x, I would feel embarrassed	
	BI3	X reflects my personal lifestyle	
Brand equity	E1	I am proud of use (good/service) x	Yoo and Donthu (2001), Lassar (1995)
	E2	Even if another brand has the same features as x, I would prefer x	
	E3	If there is another brand as good as x, I prefer x	
	E4	If there was a brand like x it would be smart not to change	
Brand personality—safe	PSa1	I consider x honest	Aaker (1997), Geuens et al. (2009) and Lin (2010)
	PSa2	I feel safe when I bought any product (good/service) of x	
	PSa3	I see x as reliable for me	
	PSa4	I feel secure when I consume something from x	
Brand personality—active	PA1	X is dynamic	Aaker (1997), Geuens et al. (2009) and Lin (2010)
	PA2	The marketing campaign of x is dynamic	
	PA3	X is active	
Brand personality—emotional connection	PE1	X is tough to overcome	Aaker (1997), Geuens et al. (2009) and Lin (2010)
	PE2	X makes me feel sentimental	
	PE3	For using x I feel that everybody accepts me	
Brand personality—simplicity	PS1	X is always simply	Aaker (1997), Geuens et al. (2009) and Lin (2010)
	PS2	I think x is charming	
	PS3	x is ordinary in values it transmits	

#### 4. Results

A PLS model should be analysed and interpreted in two stages: first, the measurement model or the adequacy of the measures is assessed by evaluating the reliability of the individual measures, the convergent validity and the discriminant validity of the constructs; second, the structural model is evaluated. In order to evaluate the adequacy of the measures, the current study used the aggregated data sets collected from offline and online stores, since the comparisons of the measure models for desegregated data do not show statistical differences. Item reliability is assessed by examining the loadings of the measures on their corresponding construct. Item loadings of scales measuring reflective constructs should be 0.70 or more, which indicates that over 50% of the variance in the observed variable is explained by the construct (Wetzels, Odekerken-Schröder, & van Oppen, 2009). In this study, we verified that all item loadings exceed 0.70.

All Cronbach’s alpha values are above 0.7, and all composite reliability values (Table 2) are above 0.8. All constructs are reliable since the composite reliability values exceeded the threshold value 0.7. The measures demonstrate convergent validity as the average variance of manifest variables extracted by constructs (AVE) are above 0.5, indicating that more variance of each indicators are explained by their own construct. In order to be discriminant among the construct, the square root of AVE should be greater than the correlation between the construct and other constructs in the model (Fornell & Larcker, 1981). Table 2 shows that this criterion has been met.

The structural results are presented in Figure 2. All path coefficients were found to be significant at 0.010 or 0.050 levels, except two: the relationship between perceived service quality and brand equity and brand associations and brand equity. Therefore, H1 and H2 are not supported.

However, as models yielding significant bootstrap statistics can still be invalid in a predictive sense (Chin, 1998), measures of predictive validity (such as  $R^2$  and  $Q^2$ ) for focal endogenous constructs should be employed. The value of  $Q^2$  ( $\chi^2$  of the Stone–Geisser Criterion) is positive, so the relations in the model have predictive relevance (Fornell & Cha, 1994). The model also demonstrated a good level of predictive power ( $R^2$ ), especially for brand equity, as the modelled constructs explained 76.5% of the variance in brand equity. In fact, the good value of GoF (see Figure 2) reveals a good overall fit of the structural model.

**Table 2. Measurement model and test for discriminant validity**

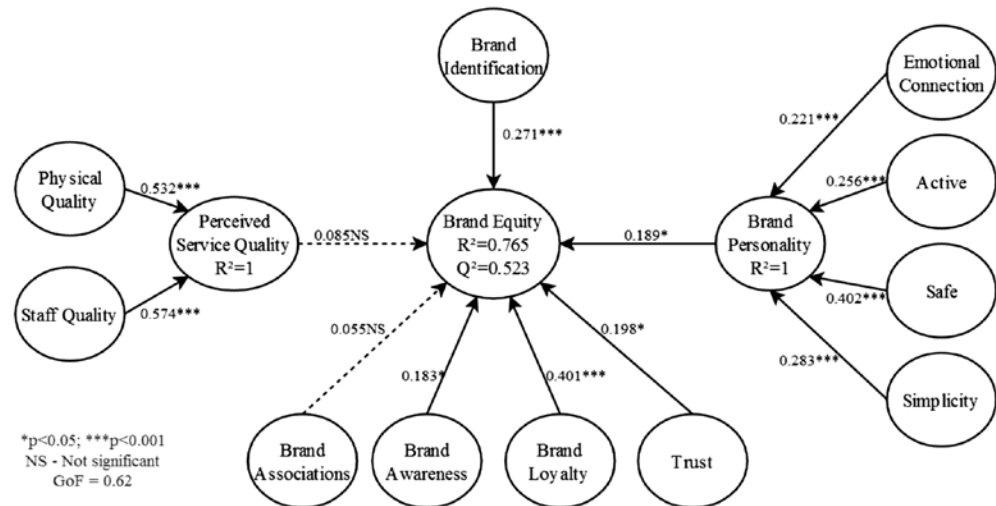
	Mean	C.R.	Alpha	AVE	1	2	3	4	5	6	7	8	9	10	11	12
1. Association	3.5	0.918	0.889	0.691	<b>0.831</b>											
2. Awareness	3.6	0.856	0.765	0.665	0.619	<b>0.815</b>										
3. Equity	2.9	0.908	0.864	0.711	0.572	0.477	<b>0.843</b>									
4. Trust	3.2	0.881	0.831	0.597	0.683	0.613	0.672	<b>0.773</b>								
5. Active	3.6	0.913	0.858	0.778	0.657	0.662	0.514	0.649	<b>0.882</b>							
6. Identification	2.3	0.880	0.796	0.711	0.269	0.238	0.676	0.580	0.287	<b>0.843</b>						
7. E. Connection	2.7	0.855	0.751	0.664	0.362	0.350	0.699	0.647	0.404	0.651	<b>0.815</b>					
8. Loyalty	3.0	0.937	0.898	0.832	0.574	0.603	0.681	0.630	0.550	0.517	0.619	<b>0.912</b>				
9. Physical	3.5	0.869	0.798	0.623	0.619	0.695	0.671	0.616	0.603	0.443	0.581	0.688	<b>0.789</b>			
10. Safe	3.4	0.923	0.888	0.749	0.628	0.638	0.622	0.641	0.670	0.471	0.527	0.608	0.683	<b>0.866</b>		
11. Simplicity	3.4	0.877	0.789	0.704	0.613	0.677	0.607	0.696	0.678	0.470	0.548	0.610	0.634	0.617	<b>0.839</b>	
12. Staff	3.4	0.914	0.860	0.781	0.676	0.608	0.548	0.678	0.619	0.298	0.304	0.492	0.670	0.632	0.623	<b>0.884</b>

Notes: C.R: composite reliability; AVE: average variance extracted.

Diagonal elements in the “correlation of constructs” matrix are the square root of AVE. For adequate discriminant validity, diagonal elements should be greater than corresponding off-diagonal elements.



Figure 2. Structural model.



### 5. Conclusions and implications

This study contributes to the body of literature on consumer-based brand equity in two ways. Firstly, based on past literature, we developed a model to analyse the effect of seven variables on brand equity. Specifically, a conceptual model was proposed where perceived service quality, brand personality, brand loyalty, brand identification, trust, brand associations and brand awareness are suggested as antecedents of brand equity. Thus, our study is the first attempt to measure the strength of assorted relational variables, and variables related with identification and personality on brand equity. Secondly, this study gives insight to support the proposed model in service industry.

Interestingly, the strength of the effect of brand loyalty and brand identification on brand equity is greater than the effect of other five variables analysed. As Yoo, Donthu, and Lee (2000) highlight, brand loyalty means that consumers purchase a brand routinely and resist switch to another brand. Hence, to the extent that consumers are loyal to the brand, brand equity will increase. More explicitly, when consumers have the good/service as their first choice, consider themselves loyal to a certain brand and intend to buy that brand in the next purchase, then the predispositions of being proud of using the service, preferring the brand instead of other brands for the same service and of being convinced that consuming that brand is better than another one increase. Confirming Long and Shiffman (2000), consumers positively value brands when those have a good reputation among the groups to which the consumers belong or aspire to belong. Therefore, a consumer who identifies herself/himself with certain brands will tend to stay close to that brand and will be proud to promote the brand, and the perceived brand equity will increase. Moreover, a consumer who perceives a bad review to a brand like a personal insult, and feels embarrassed seeing the media criticizing the brand and thinks that the brand reflects her/his personal lifestyle, is more likely to be proud of the brand, and prefers that brand to others.

As repeatedly mentioned, according to Aaker (1991) and Keller (1993), there are four core assets of brand equity: perceived quality, brand loyalty, brand awareness and brand associations. Compared to Aaker's (1991) four major consumer-related bases of brand equity and Keller's (1993) knowledge-based framework based on two dimensions, our study results innovatively reveal that of these four constructs, brand loyalty and brand awareness are the only two with significant effect on brand equity. So, the loyalty towards a brand, manifested by behaviours of first choice and following choice, are central aspects to favour the brand equity. But, despite the importance of brand loyalty and even the brand awareness in our results, the perceived service quality and brand associations have importance too.

Concerning the strength of the influence of brand identification and brand personality on perceived brand equity, brand identification exercises a stronger effect on brand equity. The current study is developed in a country experiencing an economic crisis, where consumers tend to choose, more than ever, motivated by price. In such conditions, consumers are more willing to switch brands based on price. For this reason, brand managers should be aware that brand loyalty and brand identifications can be very powerful in leveraging the brand. Therefore, managers should be very careful when relating to their customers and communicating the identity of the brand in a way that penetrates to the core feeling, lifestyle and way of being of the consumers. Establishing good relationship bonds between consumers and their brands and demonstrating respect for the consumers' problems are essential factors to keep them, more than lower prices, even in time of crisis.

### 5.1. Limitations and further research

This study presents several limitations which can be regarded as avenues for future research. First, the study was conducted in the service industry only. Although the choice of these service brands has been planned deliberately, in a forthcoming research it can be extended to other brands or to brands of the same sector of activity in order to make comparisons between sectors.

Second, the data collected for the survey was limited to Portugal, using a snow ball process. Despite this technique being used in the marketing arena, especially in exploratory studies, care is suggested as to generalization.

Third, the instruments used to measure the constructs can be improved or even expanded to consider other dimensions and other variables influencing the brand equity.

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