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Title[a]

Marketing Communication as a Precedent for Brand Equity

An Examination into the Market of Durable Products

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Marketing Communication as a Precedent for Brand Equity

An Examination into the Market of Durable Products[b]

ABSTRACT

In this paper we establish a theoretical and empirical basis that shows the influence of marketing communications, as a marketing effort, on the determination of the product's brand equity. The theoretical review supports applying analysis techniques based on structural equations models, to empirically confirm the relationship between marketing communication efforts and the dimensions of brand equity: perceived quality, brand loyalty, brand awareness and brand image. This measurement model is verified on a sample group of families who purchased the chosen lasting goods, which in this case was a washing machine.

KEY WORDS: brand equity, marketing communications, dimensions of brand equity, measurement model.

INTRODUCTION

In this paper we analyze the importance of the perceived marketing communication spending on the brand equity of the lasting goods. This is framed within a line of research for the development and contrasting of a brand equity measurement model by way of (1) the influence that the marketing effort of the companies (measured by pricing behavior, distribution and communication) plays on the brand equity components (perceived quality, brand loyalty, brand awareness) and (2) the relationships that are established between them.

Our proposal begins with the preparation of a conceptual model based on theory and on existing brand equity research. From this, we have built a theoretical model of causal relationships between marketing communications spending and the dimensions of brand equity. To verify our model the structural equations model (SEM) is applied.

In our research the latent variables are the dimensions of brand equity, according to Aaker's proposal[1]. The work of Yoo, Donthu and Lee[2], for their part, hypothesized the influence that the brand's perceived marketing effort has on the dimensions of brand equity.

Our model has been verified against an empirical investigation of a sample group of washing machine purchasers (lasting goods), which responded to a questionnaire on attitudes. Once their reliability and validity have been confirmed, the responses are used to build the structural model.

CONCEPTUAL BRAND EQUITY MODEL

This paper starts with the proposal formulated by Aaker[3] on the brand equity concept and the components that integrate and explain it: perceived quality, brand loyalty, brand awareness. In this context, brand equity is defined as a set of assets and liabilities linked to the brand, which adds or subtracts value to or from a product in its relationship with customers. Various

authors (Leuthesser[4]; Farquhar[5]; Nomen[6]) indicate that brand equity is a strategic aspect of marketing management and can be (1) created, (2) maintained and (3) intensified by strengthening one of its dimensions. Likewise, it is recognized that any marketing action has a potential effect on brand equity, since it represents the accumulated impact of the investment carried out on the brand.

Establishing the hypotheses for verification

In developing the proposed structural model, brand equity is influenced by the different marketing efforts made by companies. These causal relationships condition the formulation of hypotheses that explain (1) the direct effect of previous marketing communications on brand equity and (2) the effect of marketing communications tools on the dimensions of brand equity.

In our research two marketing communications variables were collected from the marketing-mix which measure, on the one hand, the positive effect of perceived advertising spending on brand equity and, on the other hand, the negative effect of using price deals on this value. The perceived advertising spending contributes to the successful creation of brand equity, as stated in some studies (Maxwell[7]; Chay and Telis[8]; Simon and Sullivan[9]; Boulding, Lee and Staelin[10]). For its part, the use of price deals has a negative effect on brand equity, since it is considered that the consumer perceives a negative relationship between brand equity and the need to use incentives for sales that affect the established level of prices[11,12]. Therefore, brand equity is influenced by the effect of two marketing communications tools used by the company: advertising and price deals (see Figure 1).

"take in Figure 1"

Our work is centered on determining the effect of these previous actions on brand equity. This is measured through consumer perceptions.

- *Hypothesis 1 (λ >0): The perceived advertising spending that the company undertakes for the product brand positively affects the perception of brand equity.*

- *Hypothesis 2 (λ <0): Price deals used by the company negatively affect the perception of brand equity.*

Moreover, when consumers perceive a high spending on advertising, this contributes to indicate the level of confidence that marketing managers have in the product[13]. However, perceived advertising spending has positive effects not only on brand equity as a whole, but also on each of the elements it is made up of: loyalty, awareness, perceived quality and brand image[14]. This means that causal relationships are established between the different advertising actions and the dimensions of brand equity.

The relationship between perceived quality and marketing communications spending was justified by different studies (Milgrom and Roberts[15]; Kirmani and Wright[16]; Aaker and Jacobson[17]; Archibald, Haulman and Moody[18]). The first paper came to the conclusion that marketing communications is one of the main external indicators of product quality. The next works show the favorable relationship between marketing communications spending and the firm's investment in the brand, which involves a higher perception of quality. The relationship between the investment in marketing communications and quality is not only noticed in the perceived brand quality, but also in the support to the purchase decision by increasing the product value, as shown by Archibald *et al.*; i.e., the recipient of the advertising considers the perceived advertising spending on the brand as reaffirming the right purchase decision. This relationship is summarized in the following hypothesis:

- *Hypothesis 3* (γ_{11} >0): *The perceived advertising spending that the company undertakes for the product brand positively affects the perception of the brand.*

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The perception of high advertising spending (1) increases the probability of the brand being included in the group of alternatives that the consumer has to choose from, so that (2) the decision-making process is simplified at the same time that a consumer habit is created and (3) brand loyalty behavior becomes a possibility[19].

- *Hypothesis 4 ($\gamma_{21} > 0$): The perceived advertising spending that the company undertakes for the product brand positively affects brand loyalty.*

Advertising recall as a basis for reaching brand awareness is found to relate positively to the strength of the advertising spending[20,21]. Brands achieve awareness through marketing communications and, as a part of that, advertising is mentioned as the main promotional tool for products in the consumer market.

- *Hypothesis 5 ($\gamma > 31$): The perceived advertising spending that the company undertakes for the brand positively affects brand awareness.*

The associations linked to the brand are mental pictures that the consumer perceives after recognizing the brand in the messages sent by the company. The positive associations that form a high brand image arrive at the consumers through advertising and advertising strength[22], and they succeed in transmitting the desired image to them.

- *Hypothesis 6 ($\gamma_{41} > 0$): The perceived advertising spending that the company undertakes for the brand positively affects brand image.*

Sales deals in general, and especially price deals, have been considered to weaken brand equity in spite of the short-term benefit that they provide to the consumer[23]. They are, therefore, an erroneous way of trying to build a strong brand, as they are easily imitated and counteracted by competitors[24]. As well, their temporary nature creates a feeling of short-lived benefit in the consumer that ends once the deal finishes. In fact, in the long-term, brand

image can be portrayed as of poor quality and worn out. Activities based on lowering prices can place brands in danger by provoking consumer confusion; instability and variability leads to an image of unstable quality[25]. In this regard, using price deals means deterioration in brand equity in both (1) perception of the brand's quality and (2) its image. As such, the established hypotheses are:

- *Hypothesis 7 (γ_{12} < 0): Using price deals for the brand has a negative effect on its perceived quality.*

- *Hypothesis 8 (γ_{42} < 0): Using price deals for the brand's product has a negative effect on its image.*

No relationships are noted between price deals and other brand equity dimensions: loyalty and brand awareness. Although purchase behaviors motivated by a price deal do show a consumer's habit to buy, the pseudo-loyalty appears to respond to a behavior based on the attractiveness of the promotion price: when this disappears and the promotion finishes, the consumer loses interest in the brand.

Finally and as Aaker and Álvarez del Blanco[26] have indicated, the awareness indirectly affects behavior as it has a positive influence on perceptions and attitudes towards the brand. Furthermore, it assumes a link between the different brand associations that make up the image. In this sense we posit a hypothesis that establishes a relationship between brand awareness and brand image:

- *Hypothesis 9 (β_{43} > 0): High levels of brand awareness positively affect the forming of the product's brand image.*

Following the establishment of the existing relationship between perceived advertising spending and price deals on the dimensions of brand equity, we present the proposed structural model which collects the hypotheses set forth. See Figure 2.

"take in Figure 2"

PROPOSED MEASUREMENT SCALES[c]

In order to develop the measurement process for the different elements involved, we have followed Bollen's recommendation[27]: (1) identify the dimensions and latent variables that represent the concept to be measured; (2) create indicators based on the past theoretical position; and (3) specify the relationship between the observable indicators or variables and the latent concepts or variables that they explain.

The consumer normally has a perception of the brand in terms of the marketing communications spending made on it by the company. Advertising expenditure, as the main marketing communications tool in the consumer market, should be kept in consideration when determining its effect on consumers and the perception that its messages are provoking among different target individuals. The scale developed to measure the advertising spending perceived by the consumer consists of seven indicators. Price deals are measured with a very similar scale to that used to measure the effect of advertising.

We define perceived quality, as a subjective judgment made by the consumer regarding the excellence or superiority of a product[28]. The consumer's opinion about the product's quality and its attributes with regard to its expected performance forms the measurement scale indicators of the brand quality perceived by individuals.

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[c] The complete formulation of the measurement scales used in the research can be seen in Appendix 1.

Brand loyalty plays an outstanding role in generating brand equity, not only because of its capacity to keep loyal customers[29,30], but also because of its maneuvering capacity that gives a loyal portfolio to the company[31].

High levels of brand name recognition are those that present the brand with a high degree of brand awareness. For this reason, knowledge and recognition of the brand compared to its competitors are indicators that serve to form the measurement scale for this dimension.

The brand associations that form its image are related to a series of tangible and intangible attributes associated with the brand, which conditions a favorable attitude to choosing the brand. These aspects linked to the brand are collected as an item in the scale.

EMPIRICAL RESEARCH

This paper attempts to test a measurement model for brand equity. Therefore, in order to test the effectiveness of the proposed method, our research should focus on one product category and the brands that operate in this market. The choice of washing machines as the product category is justified based on three criteria: (1) the influence of brands in the consumer market and the buyers' sensitivity to them are higher; (2) the market distribution between washing machine brands in Spain shows various brands in tough competition, with none of them having significant differences from the others; (3) the high rate of usage (between 98 and 99%) of this product in Spanish homes.

The technical datasheet for the research, included in Table I, summarizes the design of the empirical work performed. The proportional affixation was performed based on the different urban areas of the city.

"take in Table I"

Analysis and evaluation of the measurement tools

This section evaluates the measurement scales used in our research (Likert, 1-7). We performed the reliability and validity analysis by estimating its validity, one-dimensional qualities, and internal consistency.

The process adhered to in the measurement scale evaluation is summarized in the following way: (1) we applied *Cronbach's Alpha* statistic, supplied by the SPSS 9.0 program, to measure the reliability of the scale and refine it; and (2) we performed the confirmatory factor analysis aimed at (2.1) testing the one-dimensional qualities of the scales, (2.2) testing the construct validity of each of them, and (2.3) providing a more robust reliability measurement through internal consistency.

Evaluation of the marketing communications tools scales

The initial scales of seven indicators are refined through the reliability analysis provided by the *Cronbach's Alpha* statistic. Once the scales have been estimated through the ADF method (AMOS 3.61) and the indicators that do not pass the required individual reliability level are removed, we obtain the results for the convergent validity and individual reliability. The results indicate a positive evaluation of the scales; acceptable values with regard to measurement model adjustment and the internal consistency measured by the compound reliability and the extracted variance (Table II).

"take in Table II"

Evaluation of the dimensions of brand equity scales

The "perceived quality" scale presents nine initial indicators. After the model estimation, the different indicators with low individual reliability are iteratively removed through the squared

correlation coefficient. Once the scale is re-estimated with six indicators, an acceptable global adjustment is obtained (Table III).

"take in Table III"

In order to measure "brand loyalty" we have applied a reliability analysis to the initial scale of eleven indicators, which have yielded an acceptable correlation of all the items with the initial scale (except the LM7 indicator). The removal of the LM7 indicator improves *Cronbach's Alpha* of the scale. After the re-estimation we obtain suitable values in the convergent validity and individual reliability of the indicators. There is, however, a poor adjustment with regard to the goodness measures. We remove the indicators iteratively. Finally, the results suggest a valid and reliable scale of eight indicators.

A reliability analysis is firstly performed on the initial scale of four indicators that measure "brand awareness." Two indicators do not exceed the required value; however, (1) given that the levels are not too far off and (2) to avoid losing information, it is decided to maintain the scale with four indicators[d].

The "brand image" scale initially presents twelve indicators; *Cronbach's Alpha* statistic shows an acceptable level. Once the model is estimated through the ADF procedure and the less reliable indicators are sequentially removed, the scale is finally formed by seven indicators.

ANALYSIS OF THE STRUCTURAL MODEL AND RESULTS

Following the evaluation and analysis of the measurement tools, we carried out the analysis of the structural model. The two structural models that collect the hypotheses set forward in this paper were correctly specified and identified; the presence of a favorable marketing effort influence on the variable to be explained was confirmed between perceived advertising

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[d] The reliability analysis through the *Cronbach's Alpha* statistic shows us that the total scale correlation does not improve after removing any indicator.

spending and brand equity. For its part, a negative relationship between using deals and brand equity was established. Likewise, positive causal relationships were reached between perceived advertising spending on lasting goods and each of the dimensions of brand equity. Finally the relationship identified between price deals and perceived quality and brand image components was of an unfavorable influence.

Once the measurement model was tested for suitability, the estimation of structural models follows. The validated indicators of the exogenous measurement model and the average values of the validated scale indicators for the dimensions of brand equity[e] are included. This measurement is adopted to make the estimation procedure for complete models possible[32]; its complexity makes it difficult to use all of the validated indicators. Therefore using the average values is accepted according to the work criteria of Podsakoff and McKenzie[33].

The global goodness of fit measures for the first of the models reach acceptable values in the main indicators. The parameters related to the adjustment of the first of the structural models are shown in Table IV. This table showed that the relation between perceived advertising spending and brand equity was the opposite of the one that we had formulated (γ= -0,108). The result does not allow us to verify Hypothesis 1. This hypothesis stated the favorable influence that perceived advertising spending has on the lasting goods in determining their brand equity. However, the second hypothesis is confirmed in the structural model, with a high and significant standardized parameter. Therefore, we confirm Hypothesis 2, according to which using price deals in marketing communications of lasting goods has a negative effect on brand equity.

"take in Table IV"

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[e] The average values used are a result of the validation of the scales used for measuring the dimensions of brand equity, these being, perceived quality, brand loyalty, brand awareness and brand image.

The second structural model studies the causal relationships between marketing efforts and the dimensions of brand equity. The effects formulated in the hypotheses that relate the perceived advertising spending with the four brand equity dimensions were favorable; that is to say, the effort made by the brand positively affects the perception of quality, the degree of brand awareness, the loyalty towards it and its image.

The relative effects on the relationship between price deals and perceived brand quality and its image are formulated with a negative character: as a company uses price deals in marketing its brand, a more negative perception of product quality is attributed to it, thus promoting the deterioration of the image.

The second structural model presents acceptable values when referring to global adjustment. The second model follows a development strategy, which has led us to remove insignificant relationships (Table V).

"take in Table V"

The evaluation of the model (performed through global adjustment and adjusting the final measurement model) shows high values for internal consistency of the exogenous variable; we can confirm the suitability of the final measurement model. Therefore, the study states (1) the suitability of the structural model that measures the effects of advertising spending on the dimensions of brand equity and (2) it confirms hypotheses *H3, H5 and H6.* The indirect effect that perceived advertising spending has on brand associations is also confirmed: this is carried out through the effect caused by the level of brand awareness *(Hypothesis H9).*

The causal relationship between the perceived advertising spending and the level of brand loyalty shows a low standardized coefficient and with the sign opposite to that expected; the t-value did not reach the value of 1.96 established as a minimum to the signification level of 0.05. Therefore, this relationship is removed and *Hypothesis H4 not verified* ($\gamma_{21} > 0$). Nor

was it confirmed that the higher the perceived advertising spending by washing machine manufacturers, the higher was the consumer's loyalty.

Hypothesis 7 suggested that deals have a negative effect on perceived quality. However, the opposite has been confirmed. In fact, instead of lowering the perceived quality of the brand, it heightens this perception. It is possible that price deals were understood as being promotional activities more in line with after-sale customer services than deals on prices. In this respect, we should assume our error. The established causal relationship between price deals and brand image *(Hypothesis 8),* formulated in terms of an unfavorable influence, cannot be confirmed due to a lack of meaning in its structural coefficient.

RESEARCH CONCLUSIONS AND LIMITATIONS

A company's advertising spending is represented by the perceived advertising spending as an exogenous variable in our structural model. A positive relationship is established between this spending and perceived quality, so that the more resources a company dedicates to enhance a particular brand, the higher perceived quality the brand is seen to have. As well, spending on advertising affects the perceived quality as it increases the associated value of the brand, which helps in the purchase decision[34].

It has not been demonstrated that the intensity of the marketing communications and the company's high perceived advertising spending for a brand have a positive effect on consumers' professed loyal behavior towards the brand. This situation can be explained due to (1) the product in question being lasting goods with scarce buying frequency and (2) the validated indicators for measuring brand loyalty mainly refer to the purchase intention. Likewise, in the case of lasting goods the level of brand satisfaction can affect perceived advertising spending. When brand satisfaction is low, the perceived spending acts opposite to the way noticed in the structural model.

Brand awareness is reached through a company's marketing communications efforts towards brand equity. Perceived advertising spending favorably conditions and affects brand awareness. In fact, brand recognition and awareness can imply a rise in the level of confidence regarding the product's expected performance. In lasting goods it is normal to look for a recognized brand with a high level of brand awareness to reinforce the purchase.

The associations that consumers make regarding a brand and its image are configured (1) by their own experience and the non-formalized information they receive about the product, and (2) by the information transmitted by the companies with regard to their product quality and excellence. Especially in the consumer market this information is transmitted through a company's advertising.

To summarize, the perceived advertising spending shows a favorable causal relationship for three of the four dimensions of brand equity. The higher the spending on advertising for the brand, (1) the better the quality of the product as perceived by the consumer, (2) the higher the level of brand awareness and (3) the more associations are linked to the product, forming its brand image.

Brand awareness favorably affects the perceived brand image for consumers. The group of associations linked to the brand increases the favorable attitude toward the product as its recognition and the level of awareness increases. This causal relationship is significant and quantitatively important for the researched goods, leading us to the conclusion that brand awareness and name recognition for washing machines on the consumers', favors attitudes toward the brand and improve its image.

Price deals as incentives to increase sales have shown a negative effect on brand equity. Although they can cause a short-term benefit to the consumer[35], from a strategic perspective (when the brand is evaluated) they show negative effects. These effects can negatively affect the perceived quality of the product, since the benefits that were gained through price

promotion incentives are perishable and do not transmit the security or the confidence that a brand should inspire with regard to its expected utility.

In our research, we have only been able to clearly determine one of the causal relationships proposed: the establishment of the negative effect of deals on brand equity. It is therefore difficult to establish a general conclusion for the relationship of this marketing effort with some of its components. For the other relationships (the effects of brand image and perceived quality), no proposals could be confirmed. As was already mentioned, this may be explained by the lack of understanding on the part of the sample group regarding the aspects formulated in the price deals related section in our questionnaire.

The results reached by some of the indicators in the comparison of both structural models did not exceed the minimum required limits. This can be explained by the fact that they are causal models which are preliminary and partial; the interaction of other marketing efforts needs to be studied, such as pricing, distribution strength and the image of the store.

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FIGURE 1
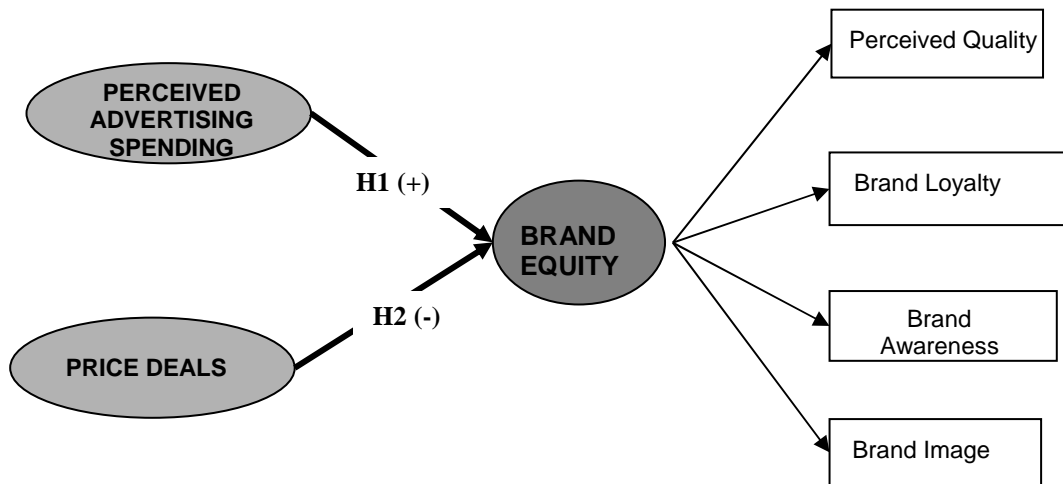Commercial Promotion Effects Model on Brand Equity

FIGURE 2
Theoretical Model: Promotion Effects on Dimensions of Brand Equity
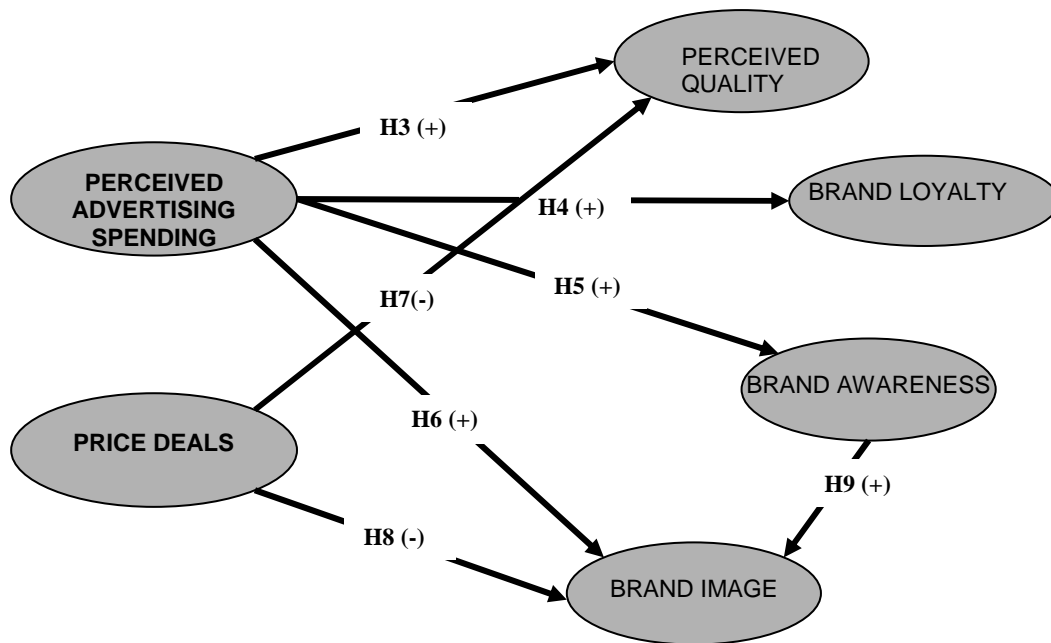
TABLE I
Research Check

Universe	Families equip washing machine
Geographic Location	Seville (Spain)
Survey methodology	Personal questionnaire (buying decider > 18 years old)
Type of Sampling	Proportional simple
Sample size	N = 268
Sampling error	± 5,98%
Level of significance	95% Z_α = 1,96 p=q= 50%
Date	October 2003

TABLE II
Commercial Promotion Scales Estimates

Item	Alpha de *Cronbach*	Standarized Loading	Individual reliability: R^2	Composite reliability	Variance extracted
Perceived	0,8605	> 0,7	> 0,5	0,9144	0,6827
Advertising. Spending PAS1, PAS2, PAS3, PAS5, PAS6	Fit measures	GFI=0,915; RGFI=0,918; RMSEA=0,182; CFI=0,812; NFI=0,799; IFI=0,816; AGFI=0,744			
Price Deals	0,7881	> 0,7	> 0,5	0,8209	0,5515
PD2, PD3, PD4, PD6	Fit measures	GFI=0,975; RGFI=0,976; RMSEA=0,129; CFI=0,945; NFI=0,935; IFI=0,946; AGFI=0,874			

TABLE III
Scales of Dimensions of Brand Equity Estimates

Item	Alpha de *Cronbach*	Standarized Loading	Individual reliability: R^2	Composite reliability	Variance extracted
Perceived Quality PQ1, PQ2, PQ3, PQ4,PQ8,PQ9	0,8847	> 0,7	> 0,5	0,9335	0,7024
	Fit measures	GFI=0,834; RGFI=0,838; RMSEA=0,135; CFI=0,728; NFI=0,700; IFI=0,738; AGFI=0,610			
*Brand Loyalty BL*1, BL2, BL4, BL5,BL6, BL9,BL10,BL11	0,9055	> 0,7	> 0,5	0,9641	0,7710
	Fit measures	GFI=0,880; RGFI=0,887; RMSEA=0,119; CFI=0,777; NFI=0,740; IFI=0,782; AGFI=0,785			
Brand Awareness BA1, BA2, BA3,BA4	0,8010	> 0,6	> 0,4	0,7314	0,5345
	Fit measures	GFI=0,989; RGFI=0,991; RMSEA=0,000; CFI=1,000; NFI=0,968; IFI=1,000; AGFI=0,947			
Brand Image BI1, BI3, BI5,BI6, AM1,AM2,AM3	0,8609	> 0,7	> 0,5	0,9391	0,6889
	Fit measures	GFI=0,901; RGFI=0,907; RMSEA=0,105; CFI=0,758; NFI=0,711; IFI=0,767; AGFI=0,802			

TABLE IV
First Structural Model Estimates

Variable	Composite reliability	Variance extracted
Perceived Advertising Spending	0,9679	0,8587
Price Deals	0,8628	0,6611

Causal Relationship	Hypothesis	Standarized Parameter	t-value
Perc. Adv. Spen. → Brand Equity	H1 confirmed (inverse)	$\gamma = -0,108$	−2,235
Price Deals → Brand Equity	H2 confirmed	$\gamma = -0,239$	−4,083
Fit measures	GFI=0,808; RGFI=0,840; RMSEA=0,138; CFI=0,568; NFI=0,527; IFI=0,572; AGFI=0,763		

TABLE V
Second Structural Model Estimates

Variable	Composite reliability	Variance extracted
Perceived Advertising Spending	0,9619	0,8360
Price Deals	0,9124	0,7294

Causal Relationship	Hypothesis	Standarized Parameter	t-value
Perc. Adv. Spen. → Perceived Quality	*H3.* confirmed	$\gamma_{11}=0,272$	6,506
Perc. Adv. Spen. → Brand Royalty	*H4.* not confirmed	$\gamma_{21}=-0,058$	−1,220
Perc. Adv. Spen. → Brand Awareness	*H5.* confirmed	$\gamma_{31}=0,338$	6,924
Perc. Adv. Spen. → Brand Image	*H6.* confirmed	$\gamma_{41}=0,175$	3,230
Price Deals → Perceived Quality	*H7.* confirmed (inverse)	$\gamma_{12}=0,348$	6,844
Price Deals → Brand Image	*H8.* not confirmed	$\gamma_{42}=-0,030$	-0,555
Brand Awareness → Brand Image	*H9.* confirmed	$\beta_{43}=0,377$	5,765
Fit measures	GFI=0,839; RGFI=0,858; RMSEA=0,122; CFI=0,656; NFI=0,609; IFI=0,661; AGFI=0,791		

Item	Enunciation	Variable (Sources)
PAS1	I think advertising is, in general, very good	**Perceived Advertising Spending** (Yoo, Donthu and Lee[36]; Martín[37])
PAS2	In general, I like the advertising campaigns for X brand	
PAS3	My opinion about X´s Advertising is very high	
PAS4	The ad campaigns for X seem very expensive, compared to campaigns for competing brands	
PAS5	I think X brand is intensively advertised, compared to competing brands	
PAS6	The advertising campaigns for X are seen frequently	
PAS7	I remember the last advertising campaigns for X	
PD1	I think price deals are, in general, very good	**Price Deals** (Yoo *et al.*; Martín)
PD2	In general, I like price deals for X brand	
PD3	My opinion about X´s price deal is very high	
PD4	Price deals for X are frequently offered	
PD5	Price deals for X are emphasized more than seems reasonable	
PD6	I think price deals for X are more frequent than competing brands	
PD7	Too many times price deals for X are presented	
PQ1	X is of high quality	**Perceived Quality** (Aaker and Álvarez del Blanco[38]; Lassar, Mittal and Sharma[39]; Yoo *et al.*)
PQ2	The likely quality of X is extremely high	
PQ3	The likelihood that X be satisfying is very high	
PQ4	The likelihood that X is reliable is very high	
PQ5	X must be of very good quality	
PQ6	X is a brand characterized by its continuous innovation	
PQ7	X is a quality leader within its category	
PQ8	Compared to its competitors, I appreciated X brand	
PQ9	Compared to its competitors, I respected X brand	
BL1	I consider myself to be loyal to X brand	**Brand Loyalty** (Aaker *et al.*; Yoo, *at al.*)
BL2	X would be my first choice	
BL3	I will not buy other brands if X is available at the store	
BL4	X brand fulfilled my expectations the last time I bought it	
BL5	I will buy X again	
BL6	I will suggest X to other consumers	
BL7	The price of another brand should be considerably inferior to not choose X	
BL8	In the case of not using it, I would like to buy X brand	
BL9	Even if another brand has the same features as X, I would prefer to buy X	
BL10	If there is another brand as good as X, I prefer to buy X	
BL11	If another brand is not different from X in any way, it seems smarter to purchase X	
BA1	I know what X looks like	**Brand Awareness** (Yoo *et al.*)
BA2	I can recognize X among other competing brands	
BA3	I am aware of X brand	
BA4	I know X brand	
BI1	Some characteristics of X come to my mind quickly	**Brand Image** (Aaker *et al.*; Lassar et al.; Yoo *et al.*)
BI2	I can quickly recall the symbol or logo of X	
BI3	X has a strong personality	
BI4	I have a clear impression of the type of people who use X brand	
BI5	X has a strong image	
BI6	The intangible attributes X brand are reason enough to buy it	
BI7	X provides a high value in relation to the price we must pay for it	
AB1	X is a very good brand	
AB2	X is a very nice brand	
AB3	X is a very attractive brand	
AB5	X is an extremely likeable brand	
AB6	X is a different brand	