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# The Effects on Purchase Intention: The Case of Fruit Juice

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#### Abstract

Promoting a company to the markets, the level of its competitiveness largely depends on how recognizable the company's brand among consumers is.

This research study aims to analyze the direct effects of brand equity and satisfaction and the moderating effects of the degree of implication, perceived risk and grade of information on purchase intention. For this purpose, we developed an empirical study in the field of fruit juice applying the Aaker's brand equity model.

We talk about the product that is bought and consumed with a certain frequency and from which there is a wide range of purchasing alternatives to choose from and that allows variability in loyalty levels. In addition, it is a product that is not only consumed in the home, but even the individual increasingly takes his or her own buying decisions about it.

Keywords: brand equity, dimensions of brand equity, satisfaction, perceived risk, purchase intention JEL Classification: M31

### **1. INTRODUCTION**

The competitive situation in which the food industry is located forces companies to seek solutions to take the best position in the market based on the use of their strengths. However, it is only possible if companies and all their resources guide their management towards the market and customer satisfaction, through creation and delivery of value. This implies that companies must improve and increase those attributes or benefits in their offer, which provide them with sustainable competitive advantages over competitors.

Today, brands are operating in a changing world: the growing convergence between standardization, globalization, technology and deregulation has led to the emergence of more players, more products, more brands, and more options and less time to choose. From this new perspective, the need to differentiate from the competition and create a unique and differentiating brand positioning in the consumer's mind emerges.

One of the main strategies used to achieve competitive advantages and achieve the differentiation of supply and increase expectations of value is creation of strong brands. The brand and its generalized importance is increasing in almost all sectors and all companies, although it is true that some companies are still reluctant to think that it is the brand where much of the power of business resides, others have strongly bet with it.

In recent years, consumer preferences and habits have changed considerably as a result of economic, social and cultural changes. Therefore, at the present time, consumers increasingly demand quality products. There are many advantages for companies that have strong brands, which provide a significant competitive advantage by establishing a barrier that prevents consumers from changing brands. The brand allows reducing the perceived risk and costs of searching for information involved in the purchase decision process.

In this field of research, the present study is framed. Its main objective is to carry out an analysis of the direct effects of brand equity and satisfaction and the moderating effects of the degree of implication, perceived risk and grade of information on purchase intention.

This research is organized as follows: it begins with the theoretical framework; then, the objectives are set out; next, the methodology is explained, and, at the end, the results are discussed and some conclusions and research limitations are mentioned.

# 2. THEORETICAL FRAMEWORK

The brand is only the tip of the business iceberg, a visible part and, therefore, the only key and visual reference that the public have of the company. The brand is the bridge between the company, its products and services and public, representing their own identity, values and style. Hence the importance of adequacy in all stages of a contact with the consumer. Therefore, continuity, consistency, commitment and long-term relevance are the key to success of a great brand.

Aaker (1991) developed a model of the brand equity that consists of brand awareness/notoriety, perceived quality, brand loyalty and brand association.

Zinnbauer and Bakay (2004) propose a model in which global brand equity is fundamentally explained by brand loyalty, although dimensions of notoriety, associations and quality expectations act indirectly on brand equity (Bravo, Fraj and Martínez, 2006).

The dimensions of brand equity, notoriety, perceived quality, associations and loyalty generate an incremental value in the brand with respect to all other brands, which is the equity of the brand. This preference leads the consumer to choose the brand, even before equality of attributes and conditions with other brands.

The brand equity is created, maintained and increased by the reinforcement of its dimensions, as a result of particular marketing activities (Yoo and Donthu, 2002). Yoo, Donthu and Lee (2000)'s model demonstrated empirically how the dimensions of notoriety, associations, perceived quality and loyalty generally determine the global brand equity.

The first dimension of brand equity is brand notoriety. Notoriety refers to the force with which the brand is presented in mind of the individual as a member of a category of products; it occurs when the association between the brand and the product class exists, where the potential consumer recognizes or associates the brand as part of a certain product class (De La Martiniére, Damecena and Merino, 2008). Therefore, we propose the following hypothesis: H1a: The brand notoriety of a product has a positive effect on the brand equity.

The second dimension of brand equity are brand associations of brand image. Brand associations help in the consumer decision process as they lay foundation for differentiation and extension of the name and provide a reason to buy, while creating positive brand feelings (Aaker, 1992). While notoriety only indicates whether the individual remembers or recognizes the brand, associations

represent the meaning that it has for the individual. These associations can be formed from communication actions of the company or through the experience acquired by the consumer through their contact with the brand. It is precisely this meaning that will motivate the individual to buy or not the brand according to their personality, needs and preferences and the social and cultural environment that surrounds them (Jiménez et al., 2004). Therefore, we can propose the following hypothesis: H1b: Brand associations of a product have a positive effect on the brand equity.

The third dimension is perceived quality. Perceived quality is a brand association considered as "a judgment of the consumer on the excellence or overall superiority of the product" (Zeithaml, 1988). It does not refer to objective quality elements, but is a perception of a differential quality not justified by the physical attributes of the product and therefore not imitable. Therefore, we propose the following hypothesis: H1c: The perceived quality of the brand of a product has a positive effect on the brand equity.

Finally, brand equity is largely created by brand loyalty. Consumer loyalty to a brand is often the basis of the equity of this brand. Loyalty generates income, since one of the bases of loyalty is the experience of use. In addition, loyalty is a good indicator of the future benefits of the brand, secures sales over time, and the higher the level of loyalty, the longer the sales will be in the future (Barreiro, 2000). Therefore, we can propose the following hypothesis: H1d: The brand loyalty of a product has a positive effect on the brand equity.

One of the most used constructs to define and appreciate the overall evaluation of a product and / or service is satisfaction (Grewal, 1995). It can be noted that satisfaction is an affective state of the consumer resulting from an overall assessment of all aspects of a relationship (Sanzo et al., 2003). Consumer satisfaction is the result that perceives those buyers who have experienced performance of the company that has met their expectations. Consumers are satisfied when their expectations are satisfied and pleased when those expectations are exceeded. Satisfaction / dissatisfaction with the product will influence their subsequent behavior. If the consumer is satisfied, they will be more likely to buy the same product again. The satisfied consumer will tend to communicate positive things about the brand to the people. Satisfied consumers are loyal for longer, buy more, are less sensitive to prices, and express them in terms favorable to the brand or company.

In this sense, consumer satisfaction has been regarded as one of the most important constructs and one of the main goals in marketing. Satisfaction has been considered on multiple occasions as a manifestation or consequence of the perceived value or the result of a well elaborated evaluation, as well as an antecedent of the attitudinal loyalty. The model of Fandos and Flavián (2006) shows how the brand equity influences satisfaction of purchase shown by the consumer. Based on these results, we propose the following hypothesis: H2: The brand equity of a product has a positive effect on the consumer satisfaction.

The consumer satisfaction is a key factor in establishing profitable relationships with them. Satisfied consumers re-buy the product, speak favorably to others about the product, pay less attention to competing brands and ads, and buy other products from the same company. An unsatisfied consumer responds differently. Negative rumors travel farther and faster than positive rumors, and can shortly damage consumers' attitudes towards a company and its products. We

must keep in mind that most unhappy clients never make a complaint or a claim, but they express their dissatisfaction with their friends. The statistical data show that an unsatisfied customer will tell an average of about twelve people, who in turn will tell others, and this will produce a multiplied effect that can obviously be highly detrimental to the company responsible for the aforementioned experience. Often this reality is forgotten, many companies think that if their customers do not complain that they must feel satisfied, not realizing that they may not be and simply have chosen to stop buying the brand. In addition, these companies must take into account that "it costs five times more to get a new customer than to maintain the current one".

Therefore, the cumulative satisfaction construct can better predict subsequent consumer behaviors (Calvo, Olsen and Tudoran, 2009). In this way, the greater the satisfaction, the greater the intention of (re)purchase or consumption of the product. Based on these results, the following hypothesis is proposed: H3: The consumer's satisfaction towards a product has a positive effect on the consumer's purchase intention.

The definition of brand equity proposed by Aaker is understood as the difference that the consumer finds in the purchase decision when he or she has to choose between a marked product and a favorite product without brand name, assuming that the two products are identical except in the brand name that identifies one against another. This concept of brand equity is multidimensional, since it consists of a series of elements that contribute to creation the product's value under the brand, so that a high value implies that consumers recognize the brand's name vis-àvis competitors, attribute a series of positive associations that shape its favorable image and feel identified as consumers loyal to the brand (Villarejo, 2003).

Therefore, brand equity increases preferences, buying intentions and consumer willingness to pay premium prices (Keller, 1993; De la Martiniére, Damacena and Merino, 2008). Branding studies show that brand equity is an important factor in the consumers' purchase intention increase and encourages them to buy more (Jing et al., 2015). In this case, we can propose the following hypothesis: H4: The brand equity of a product has a positive effect on the consumer's purchase intention.

The degree of implication is the degree of consumer interest in a product (Traylor, 1981; Antil, 1983), based on its inherent needs, values and interests (Zaichkowsky, 1987), and evoked by one or more linked stimuli to the consumer and help the consumer to cope with specific situations or goals "(Zaichkowsky, 1985, Juhl and Poulsen, 2000). On the basis of this, it is logical to think that consumers who have a low degree of implication towards a product will be less influenced by the brand, so that the relationship between the equity of the brand and the purchase intention will be lower. On the contrary, consumers who show a high degree of implication towards a product will be more influenced by the brand, so that the relationship between the relationship between the brand equity and the purchase intention is greater. Based on this, we can propose the following hypothesis: H5a: The degree of consumer implication towards a product increases the positive influence of brand equity on the consumer's purchase intention.

Consumers must constantly make decisions about what products or services they are going to buy and where they should purchase them. Since the results (or consequences) of such decisions are often uncertain, the consumer perceives some degree of "risk" when making a purchase decision. Perceived risk is defined as the uncertainty faced by consumers when they cannot foresee the consequences of their purchasing decisions. Howard and Sheth (1969) propose that one of determinants of purchase intention is trust, which is the inverse of perceived risk. Bettman (1973) proposes that consumer is buying intentions are highly influenced by the perceived risk of product purchase, as increased perceived risk decreases the utility expected and reduces the probability of choosing that brand with high perceived risk (Erdem, Zhao and Valenzuela, 2004). This means that when the level of risk associated with the purchase increases, consumers will try to reduce the nonconformity and will avoid acquiring the brand by decreasing purchase intentions. Hence, we propose the following hypothesis: H5b: The consumer perceived risk to a brand reduces the positive influence of brand equity on the consumer's purchase intention.

The search for information can be initiated to recognize the products, prices, stores and other aspects which relate to the product in question. An interested consumer may or may not seek more information. If the consumer impulse is strong and there is a satisfactory product nearby, it is likely that the consumer will buy it at that time. If not, the consumer could save the need in his memory or perform a search for information related to the need. The brand plays a differentiating role between the immense set of alternatives and reduces the effort that the consumer must realize to recognize the attributes that the product treasures (type, flavor, color, etc.). (Calvo and Blázquez, 2004). It is necessary to determine which sources of information are going to be used by these clients and, finally, to propose the strategy to be developed (Alonso and Grande, 2004). Based on this, it is logical to think that the greater the grade of consumer information about a brand, the greater the influence of the equity of this brand on the purchase intention. On the contrary, the lower the level of consumer information about a brand, the less the influence of the equity of that brand on the purchase intention. Therefore, we can construct the following hypothesis: H5c: The grade of information about a brand increases the positive influence of the equity of that brand on the consumer's purchase intention.



Fig. 1 - Conceptual Proposed Model. Source: own

## 3. METHODOLOGY, DATA

### 3.1 Product selection

In order to validate the testing of the hypotheses, we have to work with a product that fulfills the following characteristics: first, the product category must be one in which brands not only add value to the individual in the purchasing process, but also provide a functional and / or symbolic value in consumption greater than that offered by the standard product (Múgica and Yagüe, 1993, Del Río, 1999, Del Río, Vázquez and Iglesias, 2000, Delgado, 2000). There must also be certain variability in the ability of brands to offer such value to consumers in the market or the different segments. It has to be a product of frequent purchase and consumption as this type of products makes it possible to find individuals who differ in their level of knowledge and experience of consumption with different brands. It also facilitates the individual's answers to questions about the brand choice, the act of buying, etc., in view of the frequency with which they are made over time. The market for the chosen product should not present a high concentration of supply in order to avoid buying decisions oscillating between two or three brands. On the contrary, there must be a sufficiently varied brand structure with a minimum representation of each.

Bearing in mind all aspects, we finally opted to work with a type of a product such as fruit juice. We talk about the product that is bought and consumed with a certain frequency and from which there is a wide range of purchasing alternatives to choose from and that allows variability in loyalty levels. In addition, it is a product that is not only consumed in the home, but even the individual increasingly takes their own buying decisions about it individually.

### 3.2 Variables and measurement scales

The measurement of variables was carried out using a Likert-type scale of 5 points, with 1 being strongly disagree and 5 strongly agree. When measuring the brand equity dimensions, we considered a fully detailed review of the literature on this topic. First, in order to measure brand notoriety, our scale is made up of four items, of which the first three come from the proposal of Yoo, Donthu and Lee (2000) and a fourth one has been added with the character of controlling the observations of the sample (Villarejo, 2002).

Secondly, in order to evaluate brand associations, we have selected four items according to proposals of Aaker and Álvarez Del Blanco (1995); Yoo, Donthu and Lee (2000) and Yoo and Donthu (2001), which have also been used as reference in the literature (Villarejo, 2002; Bravo, Fraj and Martínez, 2006b). For measuring perceived quality, we used different items that were previously used by different researchers (Aaker, 1996; Oliver, 1997; Yoo and Donthu, 2001; Bravo, Fraj and Martínez, 2006).

In order to evaluate brand loyalty, we used a scale of four items, collected from the works of Yoo and Donthu (2001); Villarejo (2002) and Bravo, Fraj and Martínez (2006). And for measuring overall brand equity, we take as a starting point the items proposed by Keller (1993). It is a scale used by Yoo, Donthu and Lee (2000) as the differential response of consumers to a brand and an unbranded product when both have the same level of commercial stimulus and the same attributes. The response obtained is interpreted as marketing activities attributed only to the brand name.

In order to measure consumer satisfaction, we used the scales which were collected from works of Oliver (1997) and Delgado (2000). To measure purchase intention, we used the scale adopted from the work of Calvo, Olsen and Tudoran (2007) and for measuring the degree of implication, we used the scale proposed by Delgado (2000). In order to evaluate perceived risk, we used the scale that was adopted from the work of Calvo and Blázquez, 2006. The measure of the grade of information has been based on the proposed scale of three items that was adopted from the work of Calvo and Blázquez (2006).

#### 3.3 Sampling and fieldwork

In accordance with the objectives and hypotheses previously proposed, in order to obtain the information a questionnaire has been developed for the students residing in Spain, who usually make the purchase and consume fruit juice. A total of 180 valid surveys were obtained, resulting from the execution of 210 surveys, of which 30 surveys were canceled either because they had not consumed or bought fruit juice (there are 21 surveys representing 10%), or the surveys that have not been adequately completed (9 surveys representing 4.3%). These figures represent a sampling error of  $\pm$  6.37%, with a confidence level of 95.5% and in the worst case of p=q=0.5. We used statistical program SPSS version 15.0 for Windows.

In this study, descriptive statistics were used to display demographics information.

Gender: Based on the analysis of the research findings, 21.7 % of respondents were men and 44.7 % women.

Age: Based on the analysis of the research findings, 37.2% of respondents were between 18 and 20, 56.7% between 21 and 25, 3.3% between 26 and 30, and 2.8% over than 31.

Purchase frequency: Based on the analysis of the research findings, 41.1% of the respondents buy occasionally and 29.4% weekly, 18.9% buy twice or three times a week and 7.8% fortnightly; and, 2.8% buy fruit juice daily or 5-6 times a week.

### 4. ANALYSIS OF DATA AND RESULTS

#### 4.1 Scale of measurement: descriptive and reliability. Correlations of variables

After obtaining the data, we proceeded to analyze reliability of the scales. A procedure for measuring the reliability is determination of its internal consistency. The Cronbach Alpha ( $\alpha$ ) estimates the internal consistency of a measurement scale. The coefficient usually varies between 0 and 1, although it can take negative values when there are items that are negatively correlated (Santesmases, 2001). A coefficient value of less than 0.7 usually indicates a low internal consistency.

Variables	Indica- tors	Ave- rage	Typical devia- tion	Cronb. Alpha	Vari- ables	Indica- tors	Ave- rage	Typical devia- tion	Cronb. Alpha	
	NB1	4.20	1.094		Due	INT'1	2.07	0.802		
Brand	NB2	4.19	1.008	0.075	chase		3.97	0.895	0.700	
notoriety	NB3	4.34	1.033	0.875	inten-		4.02	0.909	0.700	
	NB4	4.52	0.798		tion	11113	3.69	1.052		
	I D1	2.02	1.0(2			IMP1	3.52	0.991		
	LDI	3.23	1.065		De-	IMP2	3.59	0.987		
Brand	LB2	2.96	1.167	0.794	im-	IMP3	3.64	1.214	0.882	
loyany	LB3	3.67	0.871		plica-	IMP4	3.09	1.051		
	LB4	3.21	1.078		tion	IMP5	3.23	1.080		
	QP1	3.22	0.960		Per-	RP1	2.13	0.759		
Perceived	QP2	3.57	0.975	0.890	ceived	RP2	2.42	0.906	0.561	
quanty	QP3	3.67	0.872		risk	RP3	2.96	0.976		
	AS1	3.72	0.916		Crada	INTE4	4.01	0.074		
Brand as-	AS2	3.97	0.991	0.662	of in-	INFI	4.01	0.974	0.624	
sociations	AS3	3.47	1.096	0.663	1.096	forma-	INF2	3.64	1.094	0.631
	AS4	3.25	1.108		tion	INF3	3.40	1.094		
	BE1	3.28	1.099		Brand	NB	4.31	0.844		
Brand	BE2	3.09	1.147	0.050	equity	LB	3.28	0.820	0.7/7	
equity	BE3	2.78	1.058	0.850	men-	QP	3.49	0.851	0.767	
	BE4	2.86	1.050		sions	AS	3.60	0.730		
	SAT1	3.92	0.689							
Brand	SAT2	4.58	0.685	0.716						
equity	SAT3	3.68	0.843							
	SAT4	4.58	0.700							

Tab. 1 - Scale of variables: descriptive and reliability. Source: own

Correlation is the association between changes in the values of two variables. The linear correlation coefficient is a measure of the degree of direction between two variables (Santesmases, 2001). It can take values between -1 and 1. A value of 0 indicates no correlation. If the coefficient is positive, it expresses a covariance of variables in the same direction, and a negative coefficient, the opposite.

The correlation coefficients between a set of variables can be presented as a correlation matrix, which is a double-entry table showing the correlation coefficients between all possible pairs of the variables considered in the analysis.

Table 2 shows all the correlations between the variables used in this work. Examination of the correlation matrix indicates that the brand equity is more correlated with loyalty (0.506), perceived quality (0.375), and brand associations (0.332) at a significance level of 0.01. Satisfaction

is more correlated with brand equity (0.424), loyalty (0.501), perceived quality (0.238) and brand associations (0.254) at a significance level of 0.01.

Table 2 also shows that the purchase intention is more correlated with the brand equity (0.442), satisfaction (0.439) and loyalty (0.571) at a significance level of 0.01. In addition, the degree of involvement/implication is more correlated with loyalty (0.489), perceived quality (0.457), and brand associations (0.4) at a significance level of 0.01. In the case of the perceived risk, it is observed that perceived risk has negative and significant correlations at a level of 0.01, of which more correlated are with loyalty (-0.574), satisfaction (-0.437), purchase intention (-0.42) and perceived quality (-0.411). Finally, in terms of the grade of information, it can be observed that it is more correlated with notoriety (0.21) at a significance level of 0.01.

	Notoriety	Loyalty	Perc. qual.	Associa-tions	Brand equity	Satisf.	Purch. intent.	Degree of imp.	Perceived risk	Grade of inf.
Notori- ety	1	0.117	0.509**	0.563**	0.103	0.150*	-0.068	0.281**	-0.197**	0.210**
Loyalty		1	0.448**	0.367**	0.506**	0.501**	0.571**	0.489**	-0.574**	-0.109
Per- ceived quality			1	0.757**	0.375**	0.238**	0.178*	0.457**	-0.411**	0.029
Associ- ations				1	0.322**	0.254**	0.214**	0.400**	-0.347**	0.063
Brand equity					1	0.424**	0.442**	0.223**	-0.392**	-0.086
Satis- faction						1	0.439**	0.214**	-0.437**	0.077
Pur- chase inten- tion							1	0.236**	-0.420**	-0.028
Degree of impli- cation								1	-0.231**	0.005
Per- ceived risk									1	0.083
Grade of in- forma- tion										1

Tab. 2 - Correlations of variables. Source: own

\*\* Correlation is significant at the 0.01 level.

\* Correlation is significant at the 0.05 level.

#### 4.2 Contrast of hypothesis

The coefficients used to evaluate our model have been  $R^2$  and F of Snedecor. The R-squared coefficient gives us a measure of the goodness of fit of a model or the factor of ability to explain the total variability (Luque, 2000). The measure of the effect of the independent variable or proportion of the variance explained by the treatments ( $R^2$ ) is expressed by the ratio between the sum of squares between groups and the total sum of squares. To compare the hypothesis that the amount of variation explained by the regression model is more than the mean value explained (i.e.  $R^2$  is greater than zero), the F ratio is used (Hair et al., 1999).

The first hypothesis proposed refers to the positive influence of notoriety, associations, perceived quality and brand loyalty (H1a, H1b, H1c, and H1d). However, from the obtained results (Table 3), it is observed that out of the four previous variables only the loyalty and perceived quality of the fruit juice brand have a positive and significant influence on the brand equity, which allowed us to accept the proposed hypotheses H1c and H1d. H1c: The perceived quality of the brand of a product has a positive effect on the brand equity. H1d: Brand loyalty of a product has a positive effect on the brand equity. However, the existence of a significant influence of notoriety and brand associations could not be verified, which led us to reject the hypotheses H1a and H1b.

The second hypothesis proposed refers to a positive influence of brand value on consumer satisfaction. Table 3 shows the regression of satisfaction as a function of the brand equity, where it is seen that there is a significant and positive relationship between satisfaction and brand equity. The value of R squared indicates 18% of a total variation of the satisfaction variable explained by the brand equity. In fact, the proposed hypotheses is accepted, which is: H2: The brand equity of a product has a positive effect on consumer satisfaction.

In order to evaluate the hypothesis H3, we can undertake the regression of the purchase intention in function of the satisfaction (Table 3). It is observed that there is a significant and positive relationship between the purchase intention and satisfaction. The value of R squared indicates that consumer satisfaction explains 19.3% of the purchase intention. In fact, the proposed hypothesis H3 is accepted: H3: The consumer's satisfaction towards a product has a positive effect on the consumer's purchase intention.

Analyzing the fourth hypothesis, we can observe the regression of the purchase intention in function of the brand equity. Specifically, it is observed that there is a significant and positive relationship between the purchase intention and brand equity. In fact, the following hypothesis is accepted: H4: The brand equity of a product has a positive effect on the consumer's purchase intention.

Dependent variable	Independent	Standardized coefficient		
	Loyalty	0.423***		
Brand consists	Perceived quality	0.185*		
brand equity	R squared	0.282		
	F-Snedecor (g.l)	34.243 (2)		

Tab. 3 – Regression	analysis.	Source:	own
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	Brand equity	0.424***
Satisfaction	R squared	0.180
	F-Snedecor (g.l)	38.998 (1)
	Satisfaction	0.439***
Purchase intention	R squared	0.193
	F-Snedecor (g.l)	42.497 (1)
	Brand equity	0.442***
Purchase intention	R squared	0.195
	F-Snedecor (g.l)	43.253 (1)

Notes: \*p<0, 10; \*\*p<0,05; \*\*\*p<0,01; NS - not significant

We come to estimate the moderating effect of the degree of implication, perceived risk and grade of information in relation of the brand equity with the purchase intention and that led to the formulation of the hypothesis H5.

If a dependent/independent variable relationship occurs that is affected by another independent variable, this is called the moderating effect. This effect occurs when the moderator variable (a second independent variable) changes the form of relationship between another independent variable and the criterion variable. It is also known as an interaction effect (Hair et al, 1999).

To test this hypothesis, we will use the multiple regression analysis. This technique enables us, for each of the hypotheses, to estimate two regression models. The first model (model 1) simply describes a causal relationship between the two main variables involved in the previous hypothesis (H4), so that there is no moderating effect on the degree of implication, perceived risk and grade of information. This model takes the following form:  $Y = \beta X$ 

To verify the existence of a possible moderating effect on the degree of implication, perceived risk and grade of information, the second of the models (model 2) adds three new terms (interactions). These terms represent an interaction effect between the moderator variable and the independent variable that appears in model 1 as detailed below:  $Y = \beta X + \gamma (Z * X)$ 

Therefore, the differentiating element between models 1 and 2 is the moderating role of the degree of implication, perceived risk and the grade of information that the individual has in the buying process.

However, by estimating the moderating effects separately on such relationship, but by using the dimensions of the brand value, it has been found that the degree of consumer involvement towards fruit juice increases the positive influence of the brand equity to the purchase intention through its positive influence on the brand associations. We can observe it in Table 4 and this allows us to accept the hypothesis H5a, but only through its positive influence on the associations of the brand: H5a: The degree of consumer implication/involvement towards a product increases the positive influence of the brand equity on the consumer's purchase intention.

Variables	Model 1 <sup>a</sup>	Model 2 <sup>b</sup>			
Independents					
Notoriety	-0.190***	-0.200***			
Loyalty	0.585***	0.552***			
Perceived quality	-0.155*	-0.141 NS			
Associations	0.230**	0.282***			
Moderating effects					
Interaction Associations- Degr. of impl. 0.175***					
R squared	0.372	0.400			
F-Snedecor (g.l)	25.374 (4)	22.698 (5)			
Significance level of F-Snedecor	0.000	0.000			
Change in R squared		0.028			
Change in F-Snedecor (g.l.)		7.899 (1)			
Signif. level of Change of F-Snedecor		0.006			

Tab. 4 - Regression analysis: Purchase intention (dependent variable). Source: own

Notes: \*p<0, 10; \*\*p<0,05; \*\*\*p<0,01; NS - not significant

Likewise, it has also been found that the perceived consumer risk in fruit juice reduces the positive influence of brand equity on the purchase intention through its negative influence on brand associations. We can observe it in this table and this allows us to accept the hypothesis H5b, but only through its negative influence on the associations of the brand: H5b: The consumer perceived risk to a brand reduces the positive influence of brand equity on the consumer's purchase intention.

Tab. 5 - Regression analysis: Purchase intention (dependent variable). Source: own

Variables	Model 1ª	Model 2 <sup>b</sup>		
Independents				
Notoriety	-0.195***	-0.169**		
Loyalty	0.592***	0.606***		
Perceived quality	-0.165*	-0.191 **		
Associations	0.240**	0.226**		
Moderating effects				
Interaction Associations - Perceived risk		-0.139**		
		•		
R squared	0.382	0.400		
F-Snedecor (g.l)	26.433 (4)	22.713 (5)		

Significance level of F-Snedecor	0.000	0.000
Change in R squared		0.018
Change in F-Snedecor (g.l.)		5.222 (1)
Signif. level of Change of F-Snedecor		0.024

Notes: \*p<0,10; \*\*p<0,05; \*\*\*p<0,01; NS-not significant

Finally, no significant moderating effect was found in relation to the grade of information, which does not allow us to accept the hypothesis H5c.

Tab. 6 - Regression analysis: Purchase intention (dependent variable). Source: own

Variables	Model 1ª	Model 2 <sup>b</sup>
Independents		
Notoriety	-0.186*	-0.180**
Loyalty	0.584***	0.577***
Perceived quality	-0.156NS	-0.154 NS
Associations	0.228**	0.229**
Moderating effects		
Interaction Notoriety - Grade of inform.		0.086NS
Interaction Loyalty - Grade of inform.		0.058 NS
Interaction Perc.quality - Grade of inf.		-0.042 NS
Interaction Associations - Grade of inf.		-0.065*
R squared	0.371	0.377
F-Snedecor (g.l)	25.328 (4)	12.731 (8)
Significance level of F-Snedecor	0.000	0.000
Change in R squared		0.007
Change in F-Snedecor (g.l.)		0.456 (4)
Signif. level of Change of F-Snedecor		0.768

Notes: \*p<0,10; \*\*p<0,05; \*\*\*p<0,01; NS – not significant

Figure 2 shows a final model with the results obtained from the empirical study developed in this research:



Fig. 2 – Final research model. Source: own

### 5. CONCLUSIONS

The basic objective of the present study is to analyze the influence of brand equity and its components on consumer satisfaction and purchase intention, as well as to analyze the moderating effects of the degree of implication, perceived risk and grade of information on the positive influence of brand equity on the consumer's purchase intention. Under such perspective, in order to contrast the hypotheses raised, an empirical study of the consumption of fruit juices was addressed.

From the results obtained, it is observed that the loyalty and perceived quality of the fruit juice brand has a positive and significant influence on the brand equity, which allowed us to accept the proposed hypotheses H1c and H1d. However, the existence of a significant influence of notoriety and brand associations could not be verified, which led us to reject the hypotheses H1a and H1b.

Also, the results indicate that the brand equity of fruit juice has a positive and significant influence on consumer satisfaction, which allowed us to accept the hypothesis H2.

In recent years, buying intention has played a significant role in the analysis of markets. The purchase intention has been used as a predictive measure of a subsequent or successive buying behavior (Grewal, Monroe and Krishnan, 1998). According to the results obtained, the positive and significant influence of consumer satisfaction of a fruit juice on the purchase intention is highlighted, so that the hypothesis H3 is contrasted.

The evaluation of perceptions and behavior in some works has enabled to verify that perceptions on which the equity of the brand underlies positively influences the choice of a consumer, his or her preferences and purchase intention. In this case, the results show that there is a positive and significant effect of the brand equity of fruit juice on the consumer's purchase intention; hence the hypothesis H4 is also contrasted.

In relation to the last hypothesis, based on the results obtained from the joint estimation of the moderating effect of the degree of implication, perceived risk and grade of information on the positive influence of the brand equity towards the purchase intention, we have found out that there is no significant effect. However, by estimating the moderating effects separately on such relationship, but by using the dimensions of the brand equity, it has been revealed that the degree of consumer implication towards fruit juice increases the positive influence of the brand equity to the purchase intention through its influence on the brand associations. Likewise, it has also been found out that the perceived consumer risk in fruit juice reduces the positive influence of brand equity on the purchase intention through its negative influence on brand associations. No significant moderating effect was found in relation to the grade of information. In summary, these results enabled us to test the hypotheses H5a and H5b and to reject the hypothesis H5c.

Finally, it is possible to point out some limitations that can be considered for future investigation.

In the first place, the methodology could be applied to a sample of consumers from other segments or on a national level. This would also enable us to contrast possible changes in determining the influence of the brand equity, its dimensions on satisfaction and purchase intention according to the guidelines of each segment or geographical area. Secondly, the study proposed in this paper could be extended to other categories of products, which would also enable us to compare the results obtained. Thirdly, in the present study, we have performed the analysis of the moderating variables (perceived risk and grade of information) to the brand; in the future, it would be better to make it to the product category.

Fourthly, in a further research, it would be better to prevent scaling of the scales with a low Cronbach alpha as in the cases of brand associations and perceived risk. Fifthly, the study could be extended by increasing the size of the sample to be able to use other methodologies, such as the analysis of structural equations to simultaneously contrast all the hypotheses in a single model. Sixthly, relationships between the different dimensions of brand equity and their separate influence on satisfaction and purchase intention could be analyzed.

Finally, it is necessary to point out that the brand equity, dimensions of the brand equity, satisfaction and the purchase intention of the consumers are conditioned by more variables than those that have been analyzed in our investigation. This work could be completed with the variables of the consumer and the company that moderate the brand equity and that increase satisfaction and purchase intention of the consumer. However, the untreated aspects can be largely shaped as future topics of research that remain open.

#### References

- 1. Aaker, D. (1991). *Managing brand equity. Capitalizing on the Value of a Brand Name*. Ed. Free Press, New York. Ed. Díaz de Santos, Madrid, 1994.
- 2. Aaker, D. (1992). The Value of brand equity. Journal of Business Strategy, 13(4), 27-32.
- 3. Aaker, D. and Álvarez Del Blanco, R. (1995). Estatura de la marca. Medir el valor por productos y mercados. *Harvard Deusto Business Review*, 69(6), 74-87.
- Aaker, D. (1996). Measuring Brand Equity across Products and Markets. *California Management Review*, 38(3), 102-120.
- 5. Alonso, J. and Grande, I. (2004). Comportamiento del Consumidor. 5a Ed. ESIC Editorial. Madrid.
- 6. Antil, J. (1983). Conceptualization and Operationalization of Involvement. Advances in Consumer Research Proceedings, 11(1), 203-209.
- 7. Barreiro, J.M. (2000). Gestión de las marcas por parte del detallista: implicaciones sobre su valor. *Investigation Project*. University of Santiago de Compostela. Campus de Lugo.
- 8. Bettman, J. (1973). Perceived Risk and Its Components: A Model and empirical test. *Journal of Marketing Research*, 10(3), 84-90.
- 9. Bravo, R., Fraj, E. and Martínez, E, (2006). Las fuentes de información en el comportamiento del joven consumidor. Una aplicación al estudio de valor de marca. *International Congress Marketing Trends*; Venecia.
- Bravo, R., Fraj, E. and Martínez, E. (2006b). La influencia de las fuentes de información externas en el valor de marca: una perspectiva desde el joven consumidor. *Cuadernos de Estudios Empresariales.* 16(1), 9-32.
- 11. Calvo, D. and Blázquez, L. (2004). Comercialización de vinos de calidad: marca de fabricante vs. marca de distribuidor. *ITEA*, 25(1), 121-127.
- 12. Calvo, D. and Blázquez, L. (2006). Importancia de la marca de origen en el mercado vitivinícola. XVIII Encuentro de Profesores Universitarios de Marketing, Almería.
- Calvo, D., Olsen, S. and Tudoran, A. (2007). Análisis de las preferencias de un producto de pescado de conveniencia: el caso Fishburger. Aplicación empírica para España y Noruega. XIX Encuentro de Profesores Universitarios de Marketing; Vigo.
- Calvo, D., Olsen, S. and Tudoran, A. (2009). Antecedentes de la satisfacción y papel moderador de la información: ¿Cumplimiento de espectativas o performance del producto? XXI Congreso Nacional de Marketing; Bilbao.
- De La Martiniére, M., Damacena, C. and Merino, M.H. (2008). Medición y determinantes del valor de marca en la perspectiva del consumidor. *Revista de Contabilidad y Negosios*, 6, 19-37.
- Delgado, E, (2000). El capital de Marca desde una Perspectiva Relacional: Propuesta de un Modelo de Análisis en Base a la Confianza en la Marca. Doctoral Thesis. University of Murcia.

- Del Río, A. (1999). El valor de marca en la estrategia de Marketing. Propuesta de una metodología para la medición desde la óptica del consumidor. Doctoral Thesis. University of Oviedo.
- Del Río, A., Iglesias, V. and Vázquez, R. (2000). La influencia de la marca sobre el comportamiento del consumidor y el efecto moderador de su orientación hacia las marcas comerciales. Revista Española de Investigación de Marketing. 4(2), 51 – 80.
- Erdem, T., Zhao, Y. and Valenzuela, A. (2004). Performance of store brands: A crosscountry analysis of consumer store brand preferences, perceptions, and risk. *Journal of Marketing Research*, 41(1), 86-100.
- Fandos, C. and Flavián, C. (2006). Influencia del Valor de Marca del Jamón con do Teruel sobre la Satisfacción y la Intención de Compra del Consumidor. *Estudios sobre Consumo*, 77(1), 77-88.
- Grewal, D. (1995). Product Quality Expectations: Towards an Understanding of Their Antecedents and Consequences. *Journal of Business and Psychology*, 9,(3), 225-240.
- Grewal, D., Monroe, K. and Krishnan, R. (1998). The effect of price comparison advertising on buyers' perceptions of acquisition Value, Transaction Value and Behavior Intentions. *Journal of Marketing*, 62(2), 46-59.
- 23. Hair, J., Anderson, R., Tatham, R and Black, W. (1999). *Análisis Multivariante*. Quinta edición. Prentice Hall. Iberia, Madrid.
- 24. Howard, J. and Sheth, J. (1969). The theory of buyer behavior. Wiley. Nueva York.
- 25. Jiménez, A. (coord) (2004). Dirección de los productos y marcas. Editorial UOC. Barcelona.
- 26. Jing, Z., Yanxin, J., Rizwan, S., Mingfei Du (2015). Building industrial brand equity by leveraging firm capabilities and co-creating value with customers. *Industrial Marketing Management*, IMM-07207.
- Juhl, H. and Poulsen, C. (2000). Antecedents and Effects of Consumer Involvement in Fish as a Product Group. *Appetite*, 34(3), 261-267.
- Keller, K. (1993). Conceptualizing Measuring Consumer-Based Brand Equity. *Journal of Marketing*. 57(1), 1-22.
- 29. Luque, T. (coord.) (2000). Técnicas de análisis de datos en investigación de mercados. Ed. Pirámide. Madrid.
- 30. Múgica, J.M. and Yagüe, M.J. (1993). Impacto del capital commercial en la competitividad empresarial. *Papeles de Economia Española*, 56,(1), 242-256.
- 31. Oliver, R. (1997). Satisfaction, A behavioral perspective on the consumer. New York; McGraw-Hill.
- 32. Santesmases, M. (2001). *DYANE*. Versión 2. Diseño y análisis de encuestas en investigación social y de mercados. Ed. Pirámide. Madrid.
- Sanzo, M., Santos, M., Vázquez, R. and Álvarez, L. (2003). The Effect of Market Orientation on Bayer-Seller Relationship Satisfaction. *Industrial Marketing Management*, 32(4), 327-345.

- 34. Traylor, M. (1981). Product Involvement and Brand Commitment. *Journal of Advertising* Research, 21(6), 51-56.
- 35. Villarejo, A.F. (2003). La importancia del grado de intensidad de la distribución en la determinación del valor de marca de un bien duradero. Revista Europea de Dirección y Economía de la Empresa, 12(3), 41-58.
- Villarejo, A.F. (2002). La Medición del Valor de Marca en el Ámbito de la Gestión de Marketing. *Editorial Centro Andaluz de Estudios Empresariales*. Sevilla. España.
- 37. Yoo, B. and Donthu, N. (2001). Developing and validation a multidimensional consumerbased brand equity scale. *Journal of Business Research*, 52(1), 1-14.
- Yoo, B., & Donthu, N. (2002). Testing cross-cultural invariance of the brand equity creation process. *Journal of Product & Brand Management*, 11(6), 380-398.
- 39. Yoo, B.; Donthu, N. and Lee, S. (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.
- 40. Zaichkowsky, J. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341-352.
- 41. Zaichkowsky, J. (1987). The Emotional Aspect of Product Involvement. Advances in Consumer Research, 14(1), 32-35.
- 42. Zeithaml, V. (1988). Consumer perceptions of price, quality and value. A means-end model and synthesis of evidence. *Journal of Marketing*, 52(2), 2-22.
- 43. Zinnbauer, M and Bakay, Z. (2004). Modelling brand equity in a modern business context. VII congreso mundial de IFSAM (International Federation of Scholarly Associations of Management), Göteborg, Suecia.

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