

ROBERT CASCIO¹

University of Central Florida (United States of America)

MARÍA PILAR MARTÍNEZ RUIZ²

University of Castilla-La Mancha (Spain)

ANA ISABEL JIMÉNEZ ZARCO³

Open University of Catalonia (Spain)

CESARE AMATULLI

¹ Department of Marketing - Office BA2-308P. College of Business Administration. University of Central Florida. 4000 Central Florida Blvd. Orlando, FL 32816-1400. United States. Email: email: rcascio@bus.ucf.edu

² Área de Comercialización e Investigación de Mercados. Facultad de Ciencias Sociales de Cuenca. Avenida de los Alfares, 44. Cuenca 16071 Spain. Tel.: +34 902 204 100 (ext. 4241). Email: MariaPilar.Martinez@uclm.es

³ Estudios de Economía y Empresa. Avenida del Tibidabo, 38-40. Barcelona 08035 Spain. Email: ajimenez@uoc.edu

ASSESSING THE MAXIMUM LEVEL OF CUSTOMER SATISFACTION IN GROCERY STORES: A COMPARISON BETWEEN SPAIN AND THE USA

ABSTRACT

The marketing literature has shown how certain grocery store attributes act as critical determinants in the differentiation of one store from another in consumer markets. From this introductory consideration, this work establishes the main factors that underlie these attributes in order to examine which of them present a greater influence on the maximum level of customer satisfaction. The study is performed in two countries from different continents, enabling the observation of differences not only between factor composition, but also their influence on customer satisfaction, depending on the focal country. To test the proposed analysis, we analyzed two different samples of customers that had completed purchases in grocery stores of Spain (Europe) and the United States (America). This work represents a useful contribution to the existing literature since it assesses differences in the main factors that contribute to customer satisfaction depending on the nationality of the customer. This work is especially useful to those grocery retailers that intend to operate in different continents, as it determines the main factors to take into consideration in order to successfully launch a transnational grocery store.

KEYWORDS

Customer satisfaction; grocery stores; store attribute perceptions; different countries.

INTRODUCTION

Grocery retailers confront today a more dynamic and competitive environment. From the side of the offer, the processes of fusion and acquisition experienced during the last two decades have resulted in a strongly concentrated, internationalized, and very competitive company structures (e.g., Dupuis and Prime, 1996; Arnold and Fernie, 2000; Burt et. al., 2002). As shown in the report elaborated by Deloitte (2008), only ten international groups control more than 30% of sales of the sector on a world-wide level (see Table 1). Table 1 evidences how most of these groups - six in particular – refer to US companies, whereas one inferior part from the same group - four in particular - corresponds to European companies belonging to the European Union.

Table 1. WORLD'S MAIN INDUSTRIAL GROUPS

Name of the company	2006 retail sales (US\$ mil)	Formats	Countries of operation	2001-2006 retail sales CAGR**
Wal-Mart (USA)	344,992	Cash & Carry/Warehouse Club, Discount Department Store, Hypermarket/ Supercenter/Superstore, Supermarket	Argentina, Brazil, Canada., China, Costa Rica, El Salvador, Guatemala, Honduras, Japan, Mexico, Nicaragua, Puerto Rico, UK, USA	11.1%
Carrefour (France)	9,861	Cash & Carry/Warehouse, Club, Convenience/Forecourt Store, Discount Store, Hypermarket, Supercenter/Superstore, Supermarket	Algeria, Argentina, Belgium, Brazil, China, Columbia, Dominican Republic, Egypt, France, French Polynesia, Greece, Guadeloupe, Indonesia, Italy, Malaysia, Martinique, Oman, Poland, Portugal, Qatar, Reunion, Romania, Saudi Arabia, Singapore, Spain, Switzerland, Taiwan, Thailand, Turkey, Tunisia, UAE	2.3%
Home Depot (USA)	90,83	Home Improvement, Non-Store	Canada, China, Mexico, Puerto Rico, USA, Virgin Islands	11,1%
Tesco (UK)	9,96	Convenience/Forecourt/Store, Department Store, Discount Department Store, Hypermarket/Supercenter/ Superstore, Supermarket	China, Czech Rep., Hungary, Japan, Rep. of Ireland, Malaysia, Poland, Slovakia, S. Korea, Thailand, Turkey, UK	12.5%
Metro (Germany)	4,85	Apparel/Footwear Specialty, Cash & Carry/Warehouse Club, Department Store, Electronics Specialty, Hypermarket/Supercenter/ Superstore, Other Specialty, Supermarket	Austria, Belgium, Bulgaria, China, Croatia, Czech Rep., Denmark, France, Germany, Greece, Hungary, India, Italy, Japan, Luxembourg, Moldova, Morocco, Netherlands, Poland, Portugal, Romania, Russia, Serbia and Montenegro, Slovakia, Spain, Sweden, Switzerland, Turkey, Ukraine, UK, Vietnam	4.0%
Kroge (USA)	66,111	Convenience/Forecourt, Store, Hypermarket/ Supercenter/ Superstore, Other Specialty, Supermarket	USA	5%
Target (USA)	59,490	Discount Department Store, Hypermarket/Supercenter/ Superstore	USA	8.3%
Costco (USA)	58,963	Cash & Carry/Warehouse Club	Canada, Japan, Mexico, Puerto Rico, S. Korea, Taiwan, UK, USA	8.0%
Sears (USA)	53,012	Department Store, Discount Department Store, Home Improvement, Hypermarket	-	-
Schwarz (Germany)	52,422e	Discount Store, Hypermarket/Supercenter/Superstore	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Rep., Denmark, Finland, France, Germany, Greece, Hungary, Rep. of Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, UK	12,0%

Source: *Deloitte (2008)*.

At the same time, changes in the retail landscape have been accompanied by significant changes in consumer behavior; consumers exhibit today different purchase behaviors as well as use and consumption habits. In this respect, the works of Berné (2006) and Berdié (2007), among others, show how certain socio-demographic factors (e.g., growing rate of immigration, growing rate of single-person homes, growing rate of women working outside the home, decreasing number of household members, and progressing aging of the population) make the grocery store customer very different from the one who existed only a decade ago.

In this scenario, retail distribution companies look constantly for resources and internal capabilities on which to construct their competitive strategies in order to remain competitive (González-Benito, 2002; Davis, Mentzer and Stank, 2007). However, the strength of the retailer in the market not always resides in the presence or absence of these special elements, but also in the ability to identify the way in which the customer perceives them as well as to establish the correct combination of these elements to be able to generate synergies (Betancourt, Cortiñas, Elorz, and Múgica, 2007).

Customer Service and Performance

There is no doubt that grocery retailers who operate in this industry are conscious of the importance of customer satisfaction on the success of its commercial strategies and in the achieved results (Gómez, McLaughlin and Wittink, 2004). Actually, many studies carried out in relevant literature have shown how satisfaction constitutes an antecedent of loyalty (Sivadas and Baker-Prewitt, 2000; Yu and Dean, 2001), which is of vital importance in the establishment as well as in the maintenance of tight bonds with customers (McCollough, Berry and Yadav, 2000). By itself, satisfaction does not explain loyalty (Reichheld, 1996; Soderlund, 1998; Piron, 2001), but one has to recognize that it constitutes a necessary step in the formation and maintenance of a high degree of customer loyalty (Bridson, Evans and Hickman, 2008; Berné and Martínez, 2007).

Several key attributes of the establishment identified in the literature are relevant so that grocery retailers can differentiate themselves from their competitors in the final markets. With reference to this, this work aims to identify what are the underlying factors of these attributes; analyzing the relationship that exists between (1) the perception of the customer on

the previous factors and (2) their satisfaction with their purchase. Furthermore, our interest is in the maximum level of customer satisfaction, which should be the objective of any retail manager in the industry (e.g., Al-Awadi, 2002; Barsky, 1995; Spiller, Bolten and Kennerknecht, 2006). Given the internationalized structure of the main grocery retail groups around the world, this research aims to assess differences between customer satisfaction factors as well as on their impact on the maximum level of customer satisfaction considering different customer nationalities. In particular, this study has examined two different customers samples from two continents –one from the North America and another from Europe — which has enabled the collection of not only the store factors that contribute most to the maximum level of customer satisfaction, but also the differences in customer satisfaction depending on the considered customer current residing location.

Structure of this Paper

The structure of the paper is as follows. In section 2, characteristic attributes of grocery stores identified in the relevant literature are reviewed. In section 3, we look at data obtained from two samples of customers gathered in retail grocery stores operating under the self-service regime in two different countries (the United States and Spain). After obtaining the store factors underlying these attributes, a series of hypotheses relating to the influence of these factors on the maximum level of customer satisfaction with the purchase experience are proposed. In section 4, we test the proposed hypotheses, using a binary logistic regression analysis, which identifies which factors offer the greater influence on the maximum level of customer satisfaction. The analysis has been carried out utilizing the two customers' samples.

This study has allowed us to obtain interesting conclusions and managerial guidelines relative to the management of this type of establishment in different continents (section 5), specifically the factors of the commercial establishment that the customers of the sample value to a greater extent, the underlying factors, and the sources of differentiation of these retailers.

ATTRIBUTES CHARACTERISTIC TO GROCERY STORES IDENTIFIED IN THE LITERATURE

Today, the differentiation of the establishment constitutes a key element in the success of the retailer who operates in the grocery industry (Davis, Mentzer and Stank, 2008; Ganesh, Reynolds and Lockett, 2007). If retailers can get the client to perceive the establishment and

its offer as superior to the competition, it is likely that an increase in satisfaction can be obtained. This is why from gathering the relationship between the perceptions of the attributes and customer satisfaction, it is necessary to previously identify: (1) which attributes of the establishment allow the retailer to differentiate with respect to the competition; (2) which factors underlie these attributes considering the importance attributed by the consumer; and (3) what relationship exists between the valuation of the factors the client makes and the satisfaction obtained with the purchase. Without this information and perspective, the retailer will not be able to design suitable commercial strategies that allow them to achieve competitiveness and survival in the long term.

The research of Berné (2006), Gómez et al. (2004) and Ganesh, Reynolds and Lockett (2007) attempts to answer the first two previously raised questions. In this way, it is possible to identify a series of attributes of the retail establishment (e.g., assortment, personnel, etc.) that, used properly by retail distributors to establish their strategies of differentiation, are valued in a positive way by the client and are susceptible to influencing the degree of satisfaction.

Quality

The relevant literature shows certain attributes related to the perceived quality of the products offered as criterion that is widely used by retail distributors as a differentiating element of its establishment (Binninger, 2007; Pan and Zinkhan, 2006). In relation to the quality, numerous works have demonstrated how the quality of merchandise sold influences the value perceived by the client. This constitutes an essential component in the way consumers make an evaluation of the establishment (e.g., Grewal et al., 2003). Without doubt, the merchandise that the establishment offers influences the retail distributor's reputation and the purchases of the consumer (Baker et al., 2002). In fact, some researchers have observed how consumers perceive the quality of the product in a different way based on the type of establishment in which the purchase was made (Darden and Schwinghammer, 1985; Pan and Zinkhan, 2006).

Assortment

ikewise, a large assortment -understood understood as the variety of products and the number of different items that are offered by a retail distributor (Levy and Weitz, 1995) -

constitutes a key descriptor for the strategy of the retail establishment that helps the retail distributors serve the different tastes and preferences of its clients (Dhar et al., 2001). A greater variety not only helps retail distributors attract more consumers, but can also stimulate them to increase purchases while they are in the establishment. An ample product assortment can also diminish the perceived costs (e.g., travel time, effort) associated with each act of purchase and, in addition, can facilitate the task of buying (e.g., through facilitation of the comparison between stores). In other words, a retail distributor who offers greater variety in product categories can improve the convenience of purchase, thereby increasing consumer satisfaction (Dellaert et al., 1998).

Store Brands

The existence of store brands constitutes assets of strategic nature for these retailers in how it contributes to increase the variety of stock and to achieve other objectives related to strategic positioning in the long term. As indicated by Binninger (2007) and Gómez and Rubio (2006), among others, the option to offer products with their own brand is considered by retailers as a means to obtain superior margins giving greater flexibility to use segmented pricing or to establish promotions. Likewise, the store brand is a powerful tool to create an image of a favorable establishment, because it is able to offer the client greater information on products and, at the same time, guarantee a good quality-price relationship on products (Corstjens and Lal, 2000), or value proposition. The importance of the brand is so within the retailing mix that nowadays distributors have left commercializing own brands for reasons of profitability to manage own brands with brand identity. Thus, in order to consolidate the brand identity, distributors have begun to intensify their efforts to increase the quality of their brands. They also intensify the presence of competing brands in their lines or to intensify their efforts in marketing communications (Medina, Méndez and Rubio, 2004).

Client attention

Client attention is another attribute of the retail establishment that influences client satisfaction. The desire for human interaction can take some consumers to establishments in which they find amiable and communicative personnel. In fact, some studies have shown how certain consumer groups enjoy speaking and socializing with other clients while purchasing as a means for seeking a social experience outside of the home. (e.g., Tauber, 1972). Generally,

these consumer groups experience great motivation from associating themselves with similar people, reducing their feelings of boredom and solitude. In fact, a shopping experience can be considered as an activity that consumers can do to alleviate solitude (Rubenstein and Shaver, 1980).

Supporting Services

Continuing with additional factors that influence customer satisfaction, the additional services offered by the retail distributor has been shown to explain some variance in this important dependent variable. Undoubtedly, convenience is a key benefit that buyers look for in a modern environment; customers' perceptions of convenience, including operating hours, the proximity of the establishment to home or work, and the availability of free, ample parking, will exert a positive influence on their satisfaction (Berry et al., 2002; González-Benito and González-Benito, 2005). The consumer's perception of time and effort required influences their perceptions of service convenience (Berry et al., 2002), and the retail facilities can be implemented to affect the perceptions on time and effort. For example, a location near to the home reduces transaction costs associated with the purchase (e.g., transportation costs, time expended, locating the establishment, etc.).

Store location

The law of retail gravitation (Reilly, 1931) suggests that the pull to a shopping center is inversely proportional to the travel time from the consumer's home to the center. The most recent theory "central place theory" (Craig et al., 1984) suggests that central business districts and regional shopping malls offer an agglomeration of goods and services that attract consumers from greater distances than the shopping malls in the vicinity that offer less goods and services. Empirical evidence supports these theories, showing that ease of access is highly correlation with consumer selection of commercial establishment (Bellenger et al., 1977). In addition to a convenient location, other convenience incentives provided by the retail distributors, such as longer opening hours or ample parking, can draw purchase patterns to an establishment (Hansen and Deutscher, 1977; 1978). Some research (e.g., Finn and Louviere, 1990) has observed that consumers show a predisposition to make their textile purchases in commercial centers that are associated with different combinations of services that responded

to their needs. Other works have shown how establishments that offered the above average service quality were more likely to be accepted by consumers (Malhotra, 1983).

Store Atmosphere

The atmosphere of the store also constitutes a distinctive element of retail establishments. Kotler (1973: 48) observed that the atmosphere of the commercial establishment, experienced by the senses, fundamentally sight, sound, and smell, constitutes one of the elements of the retail establishment that most influences the decision to buy. Some investigations carried out with information on shopping centers have shown that many consumers are prone to make their purchases based on their attitudes towards the atmosphere of the shopping mall (Finn and Louviere, 1990; 1996; Gentry and Burns, 1977). For example, recreational buyers that enjoy buying for leisure can buy impulsively and pay greater attention to the decoration of the establishment than the products themselves (Bellenger and Korgaonkar, 1980). Lambert (1979) suggests that these establishments should have to provide clean, upgraded restrooms and ensure an appropriate indoor temperature. Excitement that can be provoked from the ambience of the establishment and result in pleasure or displeasure; time and spending diminish in disagreeable environments and increase in pleasant environments (Donovan et al., 1994).

Pricing and Discounts

Lastly, and arguably, most importantly price has received substantial attention in the literature as an important element for determining the perception that the consumers have on a commercial establishment. Frequently retail distributors use price as a key component in their marketing strategy with the purpose of obtaining a certain image in the market. They design and they carry out pricing strategies oriented to obtain a low price image or a differentiated image. With the low price image objective, reduced prices are sometimes set on product categories (*loss leaders*) that are specially valued by consumers. This is consciously carried out with customers exhibiting a high degree of sensitivity towards price variations (e.g., Dunne and Kahn, 1997).

In spite of the importance given to price, the marketing literature does not establish a consistent position in relation to the perception that the client has on price; the findings are mixed. Authors such as Lichtenstein et al. (1993) show that price is perceived as a positive

cue, as it can indicate quality, prestige or status to the consumer. On the other hand, Dodds (1995) suggests that consumers perceive price in a negative way; rice is perceived purely as an economic sacrifice. Nevertheless, in both positive and negative respects, price perception acts as a marketplace cue that aids the consumer in their decision making process within increasingly complex market situations (Dodds, 1995).

In addition to price, another way to influence the value proposition is through the use of discounted prices – either in the form of specials or sales promotions; discounts can create certain beneficial effects for the retailer (Martínez-Ruiz et al., 2008). These include increasing sales in the product category, accelerating purchases in the retail store, or creating client traffic (e.g., Tigert 1983; Walters and Rinne 1986; Blattberg, Briesch and Fox, 1995; Martínez-Ruiz et al. 2006). Some investigations, however, have observed the existence of a positive relation between the monetary price paid and the perception of product quality – prestige pricing (e.g., Dodds et al. 1991; Rao and Monroe 1989). In particular, those consumers with limited resources of diagnosis of the information tend to make a higher use of the price as an indicator of quality (Rao and Monroe, 1988). Following this logic, some consumers can decide to make their purchase in a retail establishment that offers products with higher prices to reinforce the expectations of improved taste, freshness, or nutritional value in conditions of uncertainty (Tellis and Gaeth, 1990).

DATA DESCRIPTION AND HYPOTHESES DEVELOPMENT

In this section, we describe the process of collecting data as well as the statistical information obtained from this data. The data collected has allowed us to analyze the customer perception of different attributes characteristic of the commercial establishment as well as to know the factors that underlie these attributes. From these factors we have been able to establish hypotheses referring to the influence of these factors on consumer satisfaction with the purchase.

Sample and data collection

A questionnaire was administered in two cities belonging to different countries (Spain and the United States) and different continents (Europe and America). First, the questionnaire

was administered in Spain during the period between the 17th and 31st of March, 2008. This was conducted through personal interviews to customers in diverse retail grocery establishments with diverse formats located in the city of Cuenca. This city was selected as it constitutes a city whose population has a size representative of the size of most cities in Spain (La Caixa, 2008). The sampling method was non-probabilistic (convenience sampling). The buyers were contacted by the interviewers during morning and evening sessions when leaving the retail outlets. The interviews were carried out in different types of grocery stores, such as hypermarkets, supermarkets, discount stores and convenience stores. The number of valid questionnaires was 422. See technical specifications in Table 2.

Second, the questionnaire was administered in the United States during the period between 10th and 13th of February, 2009. The respondents were asked to recall their last shopping experience carried out in a retail grocery establishment in the city of Orlando, Florida. This city was also selected as it constitutes a city whose population has a size representative of the size of most cities in the United States of America (City-Data.com). The sampling method was also non-probabilistic (convenience sampling). See also Table 1.

Table 2. TECHNICAL SPECIFICATIONS OF THE RESEARCH

Research conducted in Spain	
Universe	52.980 individual residents the City of Cuenca (Spain)*
Unit sample	Consumers greater than 18 years of age (40,075)
Method of information collection	Personal survey
Place for carrying out the survey	Retail grocery store establishments located in the selected metropolitan area.
Sample size	422 questionnaires
Level of confidence	95% Z=1.96, p=q=0.5
Sample procedure	Non probabilistic: Convenience
Date of field work	17 th to 31st of March, 2008
Research conducted in the United States	
Universe	220,186 individual residents the City of Orlando (United States)**
Unit sample	Consumers greater than 18 years of age (171,745 people)
Method of information collection	Personal survey
Place for carrying out the survey	University of Central Florida
Sample size	400questionnaires
Level of confidence	95% Z=1.96, p=q=0.5
Sample procedure	Non probabilistic: Convenience
Date of field work	10 th to 13 th of February, 2009

*According to La Caixa (2008); **According to the US Census Bureau (2006)

Questionnaire and variables measurement

The questionnaire included questions designed to obtain general information about customer satisfaction, the purchase experience and customers' profiles. Specifically, the first question dealt with overall satisfaction, and questions 2–11 measured store attribute perceptions. Respondents rated the store from 1 (poor) to 5 (excellent). Because our interest is in the maximum level of customer satisfaction, not any other level, we obtained a dichotomous variable from the overall satisfaction measure to determine the maximum level of customer satisfaction. This latter variable, obtained a posteriori, equals 1 if the customer was totally satisfied with the purchase and 0 otherwise. To elaborate on the focal questions, we addressed main attributes identified in previous studies (e.g., Al-Awadi, 2002; Gómez et al., 2004; Spiller et al., 2006). Table 3 summarizes these variables and indicates whether they are explanatory, endogenous, or classification, as well as their scales and denominations.

Table 3. VARIABLES USED IN THE STUDY

Name of variable	Measurement scale	Type of variable in the model	Definition
Overall satisfaction	Metric	Endogenous	Satisfaction after shopping: Poor (1) – Excellent (5)
Reduced price	Metric	Explanatory	Price perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Sales promotions	Metric	Explanatory	Sales promotion perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Quality of the offer	Metric	Explanatory	Quality perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Commercialized brands	Metric	Explanatory	Brand perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Proximity to the home	Metric	Explanatory	Proximity perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Assortment	Metric	Explanatory	Assortment perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Customer attention	Metric	Explanatory	Customer service perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Additional services	Metric	Explanatory	Additional services perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Store atmospherics	Metric	Explanatory	Store atmospherics perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Opening times	Metric	Explanatory	Opening times perception regarding the shopping experience (5 point scale): Poor (1)- Excellent (5)
Notes: Because our interest is the maximum level of customer satisfaction, we obtained a dichotomous variable from overall satisfaction, equal to 1 if the customer was totally satisfied with the purchase and 0 otherwise.			

Considering the relationship between the different explanatory variables considered in the second group of questions, as well as the high degree of correlation existing among them, we follow the methodology proposed by Gómez et al. (2004). Factor analysis of principal components allowed us to identify a more reduced set of factors that, without being correlated to each other, explains the highest possible degree of variability in the responses.

Following this analysis, we verified the reliability of the scales used by Cronbach's Alpha. In the Spanish customer sample, the Cronbach's alpha applied to the previous variables shows a value of 0.71, and in the US sample it obtains a value of 0.68. These values indicate considerable internal consistency of the measurement scale (e.g. Nunnally, 1978). Using Varimax rotation, the statistical suitability using the Kaiser-Meyer-Olkin measurement was confirmed. In both samples, Bartlett's sphericity test (with a level of meaning of 0.000) rejects the hypothesis of no significant correlation, making adequate the application of the analysis of factor analysis appropriate. In addition, the Kaiser-Meyer-Olkin index values of 0.760 and 0.734 in the Spanish and US samples respectively, provide values above the established minimum of 0.5 (George and Mallery, 1995).

As seen in Table 4, there are slight differences in the composition of the first identified factor depending on the considered sample; the second factor changes completely and finally, the third factor remains the same. We show the factor loadings for the three factor solutions in Table 4.

Table 4. FACTORS OF THE ESTABLISHMENT VALUED BY THE CONSUMER

Spanish sample				US sample			
Identified factor	Survey elements-Specific attributes	Factor loading	Cronbach alpha	Identified factor	Survey elements-Specific attributes	Factor loading	Cronbach Alpha
<i>Customer services and convenience (CSC)</i>	Assortment variety	.540	.713	<i>Customer services and quality (CSQ)</i>	Quality of the merchandise	.0592	
	Proximity to the home	.564			Own brand	0.485	
	Customer attention	.604			Customer attention	0.673	
	Additional services	.661			Additional services	0.723	
	Store atmospherics	.823			Store atmospherics	0.712	
	Opening times	.742					
<i>Quality image (QI)</i>	Quality of the merchandise	.650		<i>Convenience (C)</i>	Proximity to home	.733	
	Own brand	.772		Assortment variety	.591		
					.710		

					Opening times		
<i>Economic value of the purchase (EV)</i>	Price	.849		<i>Economic value of the purchase (EV)</i>	Price	.749	
	Promotion	.837			Promotion	.723	

In the Spanish customers' sample, the three factors account for 56.45% of the variation in the ten attributes. We define the three factors as follows: Customer services and convenience (CSC) that accounts for 24% of the variance and is related to the variables "assortment variety", "proximity to the home", "attention to customer", "additional services", "store atmospherics", and "opening times". The second factor, quality image (QI), accounts for 17.8% for the variance and is associated to the variables "perceived quality of the products offered", and "brand". Finally, the third factor, economic value of the purchase (EV), accounts for 14.7% of the variance and is associated to the variables "reduced priced variables" and "sales promotions".

In the US customer sample, the three factors account for 52.10% of the variation in the ten attributes. We define the three factors as follows: Customer services and quality (CSQ) which accounts for 26.84% of the variance and is related to the variables "quality of the merchandise", "own brand", "customer attention", "additional services" and "store atmospherics". The second factor, convenience (C) accounts for 13.96% for the variance and is associated to the variables "proximity to home", "assortment", and "opening times". Finally, the third factor, economic value of the purchase (EV) accounts for 11.19% of the variance and is associated to the variables "reduced priced variables" and "sales promotions".

These findings are coincident with those obtained by other previous works in the relevant literature (Berné and Martinez, 2007; Binninger, 2006; Gómez et al., 2004; Grace and O'Cass, 2005 b; Szymanski and Henard, 2001), that indicate the presence of certain customer satisfaction factors as elements of the differentiating capacity of the establishment. It also coincides with the impact of the client's perception on global satisfaction that is obtained from the purchase.

For example, the work of Grace and O'Cass (2005a) establishes the relationship between the economic dimension of the purchase and the satisfaction that the individual experiments. In addition, the works of Zeithaml (1988) and McDougall and Levesque (2002) observe how the monetary value of the purchase is an antecedent of satisfaction, given that customers who perceive receiving value for money are more satisfied than customers who do not perceive it. In fact, this claim is made on the basis that while customers may re-patronize

a retail store in order to replicate previous satisfying encounters, their decision to return may also be based on prior perceptions of perceived value for money.

With the aim to analyze the foreseeable influence that the identified factors are susceptible to exert on the maximum level of customer satisfaction with the purchase made, we propose the following hypotheses, relating to the Spanish sample:

H1: Customers' superior perceptions of the services and convenience offered by a food retailer enhances the customers' maximum satisfaction.

H2: Customers' superior perceptions of the quality image offered by a food retailer enhances the customers' maximum satisfaction.

H3: Customers' superior perceptions of the economic value offered by a food retailer enhances the customers' maximum satisfaction.

and the US sample:

H4: Customers' superior perceptions of the services and quality offered by a food retailer enhances the customers' maximum satisfaction.

H5: Customers' superior perceptions of the convenience offered by a food retailer enhances the customers' maximum satisfaction.

H6: Customers' superior perceptions of the economic value offered by a food retailer enhances the customers' maximum satisfaction.

MODEL AND RESULTS ANALYSIS

We carried out a binary logistic regression analysis from the customer data bases aiming at assessing how the previous factors affected the maximum level of customer satisfaction. In our model, the factors identified are the predictor variables considered in order to predict their influence on maximal customer satisfaction.

Cox-Snell's, Nagelkerke's and McFadden statistical pseudo- R^2 quantify the proportion of variation explained by the model of logistic regression, like the R^2 in a linear regression model. Table 5 below presents the values of the pseudo- R^2 . As seen on this Table, the values of Nagelkerke's and Cox and Snell's pseudo- R^2 are reasonable and show the model explains

between 9.9% and 14.7% of the variability of the endogenous variable in the Spanish sample, and between 8.7 % and a 12.5% of the in the US sample. These statistics must be interpreted with caution since they do not explain the variance in the way the R^2 coefficient does in the linear regression.

Table 5. MODEL SUMMARY –TOTAL SAMPLE OF CONSUMERS

Spanish sample		US sample	
Cox and Snell	Nagelkerke	Cox and Snell	Nagelkerke
.099	.147	.087	.125

Table 6 shows below the results of the analysis for the two samples. For the Spanish sample, the factor that contributes most to the maximum level of customer satisfaction is services and convenience, followed by image. However, the economic factor does not influence on maximal customer satisfaction. A similar trend appears for the US sample. Thus, the factor that contributes most to the maximum level of customer satisfaction is services and quality, followed by convenience. Again, the economic factor does not influence on the maximum level of customer satisfaction.

Table 6. RELATION OF EXPLICATIVE VARIABLES AND MAXIMAL CUSTOMER SATISFACTION

		Estimated Parameters
SPANISH SAMPLE	Constant	1.223***
	CSC	.711***
	QI	.288**
	EV	.24
* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$		
US SAMPLE	Constant	-1.030***
	CSQ	.648***
	C	.277**
	EV	.135
* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$		

Therefore, we find support for our first, second, fourth and fifth hypothesis, pertaining to the influence of the services and convenience, quality image, services and quality and convenience on maximal customer satisfaction. The perception of economic value hypothesis do not receive support. In Table 7, we summarize these results.

Table 7. SUMMARY OF HYPOTHESES RESULTS

Sample	Hypotheses
Spanish sample: 422 customers	<i>H1 supported</i> <i>H2 supported</i> <i>H3 rejected</i>
US sample: 400 customers	<i>H4 supported</i> <i>H5 supported</i> <i>H6 rejected</i>

FINAL DISCUSSION

Given the more dynamic and competitive environment that grocery retailers face today, the study of the store attributes and factors that enable retailers to differentiate themselves from other competitors and achieve in turn a strong competitive position in the industry becomes critical. Taking into account these ideas, this work recognizes the influence of customer satisfaction—especially satisfaction due to customer perception of certain store attributes—on food retailers’ ability to differentiate themselves from other competitors and thereby obtain a strong position in consumers’ minds that in turn supports firm survival and competitiveness. In this respect, we attempt to determine the influence of factors that underlie store attribute perceptions on the maximum level of customer satisfaction, because this goal should be the focus of any retail manager.

The findings have great relevance, especially in the important food retailing sector. To determine which factors customers value most as means to differentiate food retailers, as well as their relations to maximal satisfaction, we have conducted a descriptive investigation. In particular, we considered key attributes identified by prior literature as relevant and then obtain main factors that underlie these attributes according to a factorial analysis of the main components. Our overall objective has been to analyze which of the factors displays the greatest influence on the maximum level of customer satisfaction, which should be of great interest to retail managers.

Furthermore, we analyze two samples of 422 and 400 consumers who purchased from different types of self-service food establishments in two representative Spanish and US cities. The results confirm that for the Spanish sample, perceptions of service and convenience, along with a quality image, have positive and significant influences on the maximum level of customer satisfaction. In addition, the findings also shown similar results for the US sample: perceptions of service and quality, along with convenience, influence positive and significantly on maximal customer satisfaction. Finally, the economic value of the purchase does not have a significant influence on the maximum level of customer satisfaction.

This study therefore offers some interesting recommendations for managing establishments. First, we identify factors that customers value most. These particular factors facilitate managers’ ability to define their strong and weak points and determine the areas they may need to improve to maintain their competitive position in the market. Second, our study reveals a group of underlying

factors and determines the influence of each on the maximum level of customer satisfaction. Hence, managers can better design and implement marketing strategies that support the amplitude and range of products and brands, services and convenience offered, the quality image of the establishment, or the monetary value of the purchase, as appropriate.

Third, because this study considers different customer samples gathered in different countries, it offers additional value. Specifically, it notes elements that can help retailers construct a sustainable competitive advantage through differentiation and suggests the designs of marketing strategies that may increase clients' satisfaction, depending on customer profiles. Therefore, these results are especially relevant to those grocery retailers that intend to operate in different continents, as it determines the main factors to take into consideration in order to successfully launch a transnational grocery store.

Many open questions remain in relation to this topic. For example, further research should analyze the impact of the detected factors on the degree of customer loyalty toward certain commercial formats and specific establishments. We also consider the interesting possibility that the identified factors may influence the degree of selection of certain product categories.

References

- Arnold, S. (1997). Shopping habits at Kingston department stores: wave III: three years after Wal-Mart's entry into Canada. Report no. 3. July, University School of Business, Kingston.
- Arnold, S. and J. Fernie. 2000. "Wal-Mart in Europe: prospects for the U.K.," *International Marketing Review* 17 (4/5): 416-432.
- Baker, J.; Grewal, D. & Parasuraman, A. (1994). The influence of store environment on quality inferences and store image. *Journal of the Academy of Marketing Science*, 22, pp. 328-39.
- Baker, J.; Parasuraman, A.; Grewal, D. & Voss, G. (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66 no. 2, pp. 120-141.
- Bellenger, D. & Korgaonkar, P. (1980). Profiling the recreational shopper. *Journal of Retailing*, 56, pp. 77-92.
- Berné C. & Martínez, N. (2007). Determinantes del comportamiento variado del consumidor en el escenario de compra. Report, University of Zaragoza (Spain).
- Berné, C. (2006). Análisis de la demanda de servicios de distribución minorista. *Información Comercial Española*, 828, pp. 83-98.
- Betancourt, R. R.; Cortiñas, M.; M. Elorz & Mugica, J.M. (2004). The demand for and the supply of distribution services: A basis for the analysis of customer satisfaction in retailing. *Quantitative Markets and Economy*, 5, pp. 293-312.
- Bigné E. & Andreu, L. (2004). Emociones, satisfacción y lealtad del consumidor en entornos comerciales: Un análisis comparativo entre centro comercial y centro urbano. *Distribución y Consumo*, 77, pp. 77-87.
- Binninger, A.S. (2007). Exploring the relationship between retail brands and consumer store loyalty. *International Journal of Retail and Distribution Management*, 36, 2, pp. 94-110.
- Binninger, S. (2006). Les paradoxes des consommateurs au coeur des enjeux marketing: une analyse des sensibilités transactionnelle et societal. International Congress ESCP-EAP, Marketing Trends, VENICE.
- Blattberg, R. C., Richard, B. & Fox, E. J. (1995). How Promotions Work. *Marketing Science*, 14, , 3, Part 2 of 2, pp. G122-G132.

- Bridson, K.; Evans, J. & Hickman, M. (2008). Assessing the relationship between loyalty program attributes, store satisfaction and store loyalty. *Journal of Retailing and Consumer Services*, 15, pp. 364–374.
- Burt, S. K. Mellahi, TP Jackson, and L. Sparks. (2002). Retail internationalization and retail failure: Issues from the case of Marks and Spencer”. *International Review of Retail, Distribution, and Consumer Research* 12(2): 191-219.
- City-Data.com (2009): Orlando: Population profile. Available at <http://www.city-data.com/us-cities/The-South/Orlando-Population-Profile.html>
- Clarke, I.; Bennison, D. & Pal, J. (1997). Towards a contemporary perspective of retail location. *International Journal of Retail and Distribution Management*, 25, February, pp. 59-69.
- Clarkson, R. M.; Clarke-Hill, C. M. & Robinson, T. (1996). UK supermarket location assessment. *International Journal of Retail and Distribution Management*, 24, pp. 22-33.
- Corstjens, M. & Lal, R. (2000). Building stores royalty through store brands. *Journal of Marketing Research*, 37, 3, pp. 281-291.
- Darden, W. R. & Schinghammer, J. K. L. (1985). The influence of social characteristics on perceived quality in patronage choice behavior. Pp. 161-172 *In Perceived quality*, Jachoy, J. and Olson, J. (ed).Lexington, MA: Lexington Books.
- Darley, W. & Lim, J. S. (1993). Store-choice behavior for pre-owned merchandise. *Journal of Business Research*, 27, pp. 17–31.
- Davis, S., Mentzer, J. & Stank, T. (2008). Creating consumer durable retailer customer loyalty through order fulfillment service operations. *Journal of Operations Management*, 26, pp. 781-797.
- Deloitte, (2008). 2008 Global Powers of Retailing. Available on line http://www.deloitte.com/dtt/press_release/0,1014,cid%253D186530,00.html.
- Dellaert, B.; Arentze, T.; Bierlaire, M. Borgers, A. & Timmermans, H. (1998). Investigating consumers’ tendency to combine multiple shopping purposes and destination. *Journal of marketing research*, 35, no. 2, pp. 177-188.
- Dhar, S., Pain, D & Thomas, R. (2001). A small structural empirical model of the UK monetary transmission mechanism, Working paper, Bank of England.
- Dodds, W. (1995). Market cues affect on consumer evaluation. *Journal of Marketing Theory and Practice*, 3 no. 2, pp. 50-63.

- Dodds, W.; Monroe, K. B. & Grewal, D. (1991). Effects of Price, Brand and Store Information on Buyers: Product Evaluations. *Journal of Marketing Research*, 28, August, pp. 307-319.
- Donovan, R.; Rossister, J.; Marcoolyn & Nesdale, A. (1994). Store atmosphere and purchase behavior. *Journal of Retailing*, 70, no. 3, pp. 283-94.
- Douglas, M., Lambert & Armitage, H. M. (1979). Distribution cost: The challenge. *Management Accounting*, 11, May, pp. 33-37.
- Dunne, P. & Robert, K. (1997). Retailing in the USA: An Interpretation of Current Trends. *International Journal of Retail and Distribution Management*, 25, no. 8, pp. 275-281.
- Dupuis, M. and N. Prime. 1996. "Business Distance and Global Retailing: A Model for Analysis of Key Success/Failure Factors", *International Journal of Retail & Distribution Management* 24(11): 30-38.
- Erdem, O.; Oumlil, A. B. & Tuncalp, S. (1999). Consumer values and the importance of store attributes. *International Journal of Retail and Distribution Management*, 27, no. 4, pp. 137-144.
- Finn, A. & Louviere, J. (1990). Shopping center patronage models: Fashioning a consideration set segmentation solution. *Journal of Business research*, 41, no. 3.
- Finn, A. & Louviere, J. (1996). Shopping center image, consideration, and choice: anchor store contribution. *Journal of Business Research*, 35, March, pp. 241–251.
- Ganesh, J.; Reynolds & Lockett (2007). Retail patronage behavior and shopper typologies: A replication and extension using a multi-format, multi-method approach. *Journal of the Academy of Marketing Science*, 35, pp. 369-381.
- Gehrt, K. & Yan, R.-N. (2004). Situational, consumer, and retailer factors affecting Internet, catalogue, and store shopping. *International Journal of Retail and Distribution Management*, 32, no. 1, pp. 5-18.
- Gentry, J. W. & Burns, A. (1977). How important are evaluative criteria in shopping center patronage. *Journal of Retailing*, 53, pp. 73-86.
- George, D. & Mallery, P. (1995). *A Simple Guide and Reference*. Belmont: Wadsworth Publishing Company.
- Gómez, M. & McLaughling, E. (2004). Customer satisfaction and retail sales performance: An empirical investigation. *Journal of Retailing*, 80, pp. 265–278.
- Gómez, M. & Rubio, N. (2006). Gestión minorista de las marcas de distribuidor: Producto y merchandising. *Información Comercial Española*, 828, pp. 157-174.

- González-Benito, O. & González-Benito, J. (2005). The Role of Geodemographic Segmentation in Retail Location Strategy. *International Journal of Market Research*, 47, no. 3, pp. 295-316.
- González-Benito, O. (2002). Geodemographic and Socioeconomic Characterisation of Retail Attraction of LeaderHypermarket Chains in Spain, *The International Review of Retail, Distribution and Consumer Research*, 12 no. 1, pp. 81-103.
- Grace, D. & O’Cass, A. (2005). Service Branding: consumer verdicts on service brands. *Journal of Retailing and Consumer Services*, 12, no. 2, , pp. 125-139.
- Grace, D. & O’Cass, A. (2005). An examination of the antecedents of patronage intentions across different retail store formats. *Journal of Retailing and Consumer Services*, 12, no. 4, pp. 227-243.
- Greenberg, B. A.; Goldstucker, J. & Danny, B. (1977). What techniques are used by marketing. *Journal of marketing*, April, pp. 62-68.
- Hansen, R. & Deutscher, T. (1997/1978). An empirical investigation of attribute importance in retail store selection. *Journal of Retailing*, 53.
- Hickman, C. & Silva, M. (1984). *El directivo excelente*. Madrid: Grijalbo.
- Kotler, P. (1973). Atmospherics as a marketing tool. *Journal of retailing*, 49, Winter, pp. 48–64
- Levy, M. & Weitz, B. (1995). *Retailing management*, Chicago: Irwin.
- Linchtenstein, D.; Ridgway, N. M. & Netemeyer, R. (1993). Price perceptions and consumer shopping behavior: a field study. *Journal of Marketing Research*, 30, no. 2, pp. 234-245.
- Maholtra, N. (1983). A threshold model of store choice,” *Journal of Retailing*, 59, Summer, pp. 21-23.
- Martínez-Ruiz, M. P.; Mollá-Descals, A.; Gómez-Borja, M. A. and Rojo-Álvarez, J. L. (2006). Assessing the Impact of Temporary Retail Price Discounts Intervals Using SVM Semiparametric Regression. *International Review of Retail, Distribution and Consumer Research*, 16, no. 2, pp. 181 – 197.
- Martínez-Ruiz, M. P.; Mollá-Descals, A.; Gómez-Borja, M. A. and Rojo-Álvarez, J. L. (2008). Using Support Vector Semiparametric Regression to estimate the effects of pricing on brand substitution, *International Journal of Market Research*, 50, no. 4.
- McCollough, M.; Berry, L. & Yadav, M. (2000). An Empirical Investigation of Customer Satisfaction after Service Failure and Recovery. *Journal of Service Research*, November, pp. 121-137.

- McDougall, G. H. & Levesque, T. J. (1994). A revised view of service quality dimensions: An empirical investigation. *Journal of Professional Services Marketing*, 11, no. 1, pp. 189-209.
- Medina, O; Mendez, J.L. & Rubio N. (2004). Price-quality and market share of consumer goods in Spain: Retail brands and manufacturer brands. *The International Review of Retail, Distribution and Consumer Research*, 14, no. 2, pp. 199-222.
- Michael L.; Grewal, D.; Peterson, R. A. & Connolly (2005). The concept of Bid Middle. *Journal of Retailing*, 81, no. 2, pp. 83-88.
- Mittal, V.; Williams, T. R. & Baldasare (1998). The asymmetric impact of negative and positive attribute-level performance on overall satisfaction and repurchase intentions. *Journal of Marketing*, 62, no. 1, pp. 33-47.
- Moore, M. & Carpenter, J. (2006). The effect of price as marketplace cue on retail patronage. *Journal of Product and Brand Management*, 15, no. 4, pp. 265-271.
- Noticiascadadia.com (2007). Cuenca repite como la ciudad más barata de España. <http://www.noticiascadadia.com/noticias/articulo/cuenca-repite-como-la-ciudad-mas-barata-de-espana.html>.
- Nunnally, J. C (1978). *Psychometric Theory*, Vol. 10, September, 197-208.
- OCU (2007). Analizados más de 770 establecimientos en toda España, available at <http://www.ocu.org/cesta-de-la-compra/analizados-mas-de-770-establecimientos-en-toda-espana-s311734.htm>.
- Pan Y. & Zinkhan, G. (2006). Determinants of retail patronage: A meta-analytical perspective. *Journal of Retailing*, 82, pp. 229-243.
- Parasuraman, A.; Zeithaml, V. & Berry, L. (1988). Servqual: A multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*, 64, Spring, pp. 12-40.
- Piron, F. (2001). Effects of Service and Communication Initiatives on Retail Grocery Consumers' Loyalty. *Singapore Management Review*. 23, no. 2, pp. 45-60.
- Popkowski ,S. & Sahgal, A. (2004). The effect of multipurpose shopping on pricing location strategy for grocery stores. *Journal of Retailing*, 80, no. 2, pp. 85-99.
- Rao, A. R. & Monroe, K. B. (1989). The effects of price, Brand name, and store name on buyers. Perceptions of product quality: An integrative review. *Journal of Marketing Reseach*, August.
- Reichheld, F. (1996). *The Loyalty Effect: The Hidden Force Behind Growth, Profits, and Lasting Value*. Boston: Harvard Business School Press.

- Rubenstein, C. & Shaver, P. R. (1980). Loneliness in two northeastern cities. In *The Anatomy of Loneliness*, Hargoj, J., Audy, J. and Cohen, A. (ed). New York: New York: International Universities Press.
- Sivadas, E. & Baker-Prewitt, J. L. (2000). An examination of the relationship between service quality, Customer Satisfaction and Store Loyalty. *International Journal of retail and distribution management*, 28, no. 2, pp. 73-82.
- Sparks L. (1995). Customer service in retailing, in Akehrst G. and A. Nicholas A. (ed), London.
- Sprott, D. & Shimp, T. (2004). Using product sampling to augment the perceived quality of store brands. *Journal of Retailing*, 80, pp. 305-315.
- Szymanski, D. & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Academy of Marketing Science Journal*, 29, no. 1, pp. 16–35.
- Tauber, E. M. (1972). Discovering new product opportunities with problem inventory analysis. *Journal of Marketing*, 39, pp. 67-70.
- Tellis G. & Gaeth, J. (1990). Bets value price-seeking and price aversion: The impact of information and learning of consumer choice. *Journal of Marketing*, 54, pp. 34-45.
- Tigert, D. (1983). Determinants attributes in retail patronage: Seasonal, temporal, regional and international comparisons. *Journal of marketing research*, 20, May.
- Vallet, T. (2008). La estrategia de marketing de las empresas minoristas en los sectores de no alimentación. Unpublished doctoral thesis, Universidad Jaume I, Spain.
- Walters, R. G. & Rinne, H. J. (1986). An empirical investigation into the impact of price promotions on retail store performance. *Journal of Retailing*, 62, Fall, pp. 237–266.
- Wittink, D. R. & Bayer, L. R. (1994). The measurement imperative. *Marketing Research*, 6 no. 4, pp. 14–22.
- Woodside, A. & Trappey R.J (1992). Finding out why customers shop your store and buy your brand: automatic cognitive processing models of primary choice. *Journal of Advertising Research*, 32, no. 6, pp. 59–78.
- Yu, Y. T. & Dean, A. (2001). The contribution of emotional satisfaction to consumer loyalty. *International Journal of Service Industry Management*, 12, no. 3, pp. 234–250.