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## Análisis de la influencia de la percepción de la calidad de los productos en la distribución especializada

### RESUMEN

Este artículo aborda la siguiente cuestión: “*Influye la calidad percibida de los productos en la satisfacción y lealtad hacia la distribución especializada?*”. Con este objetivo proponemos un modelo conceptual sobre la creación de satisfacción y lealtad en el entorno de la distribución alimentaria especializada, para analizar la influencia de la calidad percibida de los productos. Los datos fueron analizados mediante un Modelo de Ecuaciones Estructurales (SEM), con una muestra de 592 consumidores. Nuestros resultados muestran que los atributos de la distribución alimentaria especializada ejercen una influencia diferente dependiendo de la calidad percibida de los productos, a la vez que sugieren su papel moderador. Nuestra mayor contribución consiste en el análisis de una variable subjetiva basada en el consumidor en el entorno de la distribución especializada.

**Palabras clave:** Distribución especializada, calidad percibida, satisfacción, lealtad, cliente.

## Examining the influence of products' quality perception in specialty retailing

### ABSTRACT

This paper addresses the following issue: “*Does the products' perceived quality influence on satisfaction and loyalty towards the specialty retailing?*” For this purpose we propose a conceptual model on the creation of satisfaction and loyalty in the specialty retailing setting, to examine the influence of products' quality perception. Data were analyzed through Structural Equation Modelling (SEM) on a sample of 592 consumers. Our findings show that the specialty food store-based attributes have different influence depending on the products' quality perception, while suggesting its moderating role. Our major contribution is the examination of one subjective consumer-based variable in the specialty retailing setting.

**Keywords:** Specialty retailing, perceived quality, satisfaction, loyalty, customer

**JEL classification:** L81, M31

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## **Análisis de la influencia de la percepción de la calidad de los productos en la distribución especializada**

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## 1. INTRODUCTION

In the highly competitive environment of retailing consumers are exposed to numerous retail format alternatives, such as hypermarkets, supermarkets, discounters or convenience stores; but many consumers perceive these retailing formats as adding insufficient value. In this context, retailers face the challenge to differentiate themselves serving customer needs better than competitors. One differentiation strategy is the offering of high quality products, focusing the offer in terms of great customer service, product assortment and an attractive environment to attract consumers (Gauri et al., 2008). The reason is that the demand for higher quality products has increased in developed countries, highlighting the importance of accessing to the best-quality products when customers are choosing where to shop (Oliver Wyman, 2014).

In this context, in the last decades the grocery retail industry has experienced a great change due to the emergence and development of a new store formats: the specialty store (Huddleston et al., 2009). This new food store format is designed to fit consumers' needs through customized assortments, great service and an appealing environment (Hsu et al., 2010). The specialty store carries products and brands that cannot be easily found in conventional retailers or may focus on one single product category targeting a market niche (Huddleston et al., 2009). The specialty store commercializes special types of products which may be unique and handcrafted, while offering outstanding customer services and carrying deep product lines (Gagliano and Hathcote, 1994). However, there is scarce research focusing on specialty food stores, despite this retailing format has experienced a great increase in popularity and demand over the last decade (Hansen, 2003; Zhao and Huddleston, 2012).

In addition, and despite the growth of new retail players, retailers often have little knowledge of the variables creating retailer satisfaction and retailer loyalty (Zentes et al., 2008). Customer satisfaction is a key variable in the retail industry; being crucial for retail managers to better understand customer needs. Accordingly, and since consumers interact with retailers at every step of the consumer decision-making process, some of the relevant issues that have received particular attention during the last years include the role of service and in-store environmental cues, as well as the role of employee–customer interactions (Grewal and Lévy, 2007).

In this context, the present study focuses in specialty food retailing to propose that a customer-based variable -the quality perception of products- may be a key variable to segment customers for specialty retailers. That is, we aim to examine the influence and role of the products' perceived quality in the specialty retailing setting, examining the differences between customers who perceive high product quality and customers who perceived a low or poor product quality.

## **2. LITERATURE REVIEW**

### **2.1. Specialty food retailing: a high involvement shopping environment**

Today consumers seem to put more and more effort into their grocery purchases (Anselmsson et al., 2007); and consequently, specialty food stores are characterized for being a high involvement shopping environment, differentiated from conventional food retailers in that they offer tailored products or unique products which are difficult to find in traditional food stores (Huddleston et al., 2009; Zhao and Huddleston, 2012), targeted at specific customer segments, and providing outstanding service (Gagliano and Hathcote, 1994). Likewise, specialty food stores usually focus on a single food category and carry a deep product line such as for example meat, bakery or meats. So, examples of specialty food stores would be the gourmet stores or the organic food stores. That is, specialty food stores often engage in selling special types of food products; thus carrying fewer product references than conventional grocery stores (Huddleston et al., 2009). So, the specialty food products carried at a specialty store may not be available in the range of assortment or at the same perceived quality levels as at conventional stores (Huddleston et al., 2009). Likewise, consumers who demand and seek specialty products spend extra time and money searching for these products.

Similarly, specialty food stores offer products at premium prices (Hoovers, 2008) and offer customers something different or unique, and may differentiate themselves through product assortment or via customer personalized services (Hansen, 2003). Finally, typical specialty food store features are product quality and the freshness of products offered (Skallerud et al., 2009). In fact, previous research shows that customers perceive products at specialty stores of higher quality than products offered at conventional grocery stores, positively influencing

customer satisfaction with the store (Huddleston et al., 2009). That is, product quality perception was found a stronger determinant of satisfaction with specialty food stores.

## **2.2. Specialty store attributes and their influence on customers' satisfaction and loyalty**

Research on the antecedents of consumer satisfaction and loyalty in the grocery retailing setting has been a research focus among scholars and marketers. The reason is that satisfaction and retailer loyalty have been identified as key outcomes of the shopping experience. Previous studies highlight that the main factors influencing customer satisfaction with the retailer include the products' quality (Hansen, 2003; Huddleston et al., 2009), the product assortment (Hoch et al., 1999; Semeijn et al., 2004; Pan and Zinkhan, 2006; Huddleston et al., 2009; Nettet et al., 2011) and the service quality (Semeijn et al., 2004; Carrillat et al., 2009; Jayawardhena and Farrell, 2011; Nettet et al., 2011). Similarly, prior research suggests as variables influencing retailer loyalty the store physical environment or the store atmosphere (Grewal et al., 2003; Pan and Zinkhan, 2006), the store merchandise (Semeijn et al., 2004; Pan and Zinkhan, 2006) and the service quality (Carrillat et al., 2009).

In the specialty retailing setting, Huddleston et al., (2009) developed a study comparing conventional and specialty stores on satisfaction with product quality, product assortment, services and price, showing that both conventional store customers and specialty store customers assess each variable differently. Later, Zhao and Huddleston (2012) carried out a study analyzing the antecedents of loyalty to specialty food stores. Their study reported that loyalty to specialty stores is influenced by consumer satisfaction through trust and commitment, and that the store service, the product quality offered and the product assortment influence customer satisfaction. Finally, Jayasankaraprasad and Kumar (2012) examined the antecedents and consequences of customer satisfaction in the grocery retail setting, suggesting that variables such as service quality, the store reputation or situational factors influence customer satisfaction. However, as stated above, only few studies have focused on the specialty stores, and to date, there is a lack of research providing a deep analysis on the influence of the products' quality perception.

Therefore, in the present study we propose that customers' satisfaction and loyalty towards the specialty food store could depend on the products' perceived quality, since specialty stores offer product quality (Skallerud et al., 2009). In addition, and considering the previous

research on the topic, we selected as antecedents of customer satisfaction and loyalty to the specialty retailer three store-based attributes: the store service, the overall store environment and the merchandise layout and product assortment offered by the retailer.

### *2.2.1. Specialty store environment*

According to Mehrabian-Russell (1974) many studies have adopted the role of environmental stimuli as leading to emotional responses. Regarding consumer behaviour in retailing, the store's environment offers a set of informational cues that consumers use to make evaluations about products and service (Baker et al., 2002). Prior research on retail environment identifies three main sets of store-based cues, namely design, ambient, and social (Baker and Cameron, 1996); and distinguishes between tangible and intangible attributes (Puccinelli et al., 2009). Previous literature also considers both external -such as window displays- and internal variables - equipment, furnishings, flooring, decoration, design or signaling- of store environment (Puccinelli et al., 2009). Finally, other researchers distinguish between visual and auditory atmospheric elements within the store environment (Jang and Namkung, 2009). In the past decades, research has shown the influence of store environment in consumer behaviour and affecting customer experience (Puccinelli et al., 2009), customer evaluations of service quality (Semeijn et al. 2004), expectations and store patronage intentions (Baker et al., 2002; Grewal et al., 2003). Consequently, in the present research we propose the following hypothesis:

*H<sub>0</sub>: The specialty store environment has a positive influence on customer satisfaction*

The retail store environment offers multitude of stimuli that serve as cues to consumers looking for information (Baker et al., 2002). These store-based attributes have a significant impact on customers' behaviour, since they tend to make evaluations about the stores on the basis of their subjective impressions (Pan and Zinkhan, 2006). In addition, the retail store environment has been shown to have a positive influence on consumers' loyalty (Semeijn et al., 2004). Thus, the following hypothesis is posed:

*H<sub>1</sub>: The specialty store environment has a positive influence on customer loyalty*

### 2.2.2. *Store service*

In order to differentiate their retail offerings and create customer loyalty retailers can provide excellent customer service (Grewal and Lévy, 2007). In this vein, previous literature shows that specialty store customers consider store service one of the most important determinants of store patronage. The reason is that these retailing stores offer a *one-to-one* service; offering higher levels of service than conventional stores (Grewal and Lévy, 2007). Consequently, store service has a stronger impact on customer satisfaction for specialty food stores (Huddleston et al., 2009).

Knowledgeable, kind and helpful staff is considered as the strongest determinant of store patronage and satisfaction for specialty store customers (Huddleston et al., 2009). In fact, the staff and the store employee service play a key role in customer satisfaction being the most relevant attributes staff attitude and treatment of customers (Gagliano and Hathcote, 1994). The reason may be that in retail settings where intensive service is a key component and require a high level of customer-employer interaction (Grewal et al., 2003), such as in specialty food stores, it is crucial how employees affect customers' image and associations of the store (Solomon, 1988). The wait time, the speed and accuracy of the staff is also related with customer satisfaction (Grewal et al., 2003). Moreover, customer satisfaction with service strongly influences store loyalty (Chen and Quester, 2006). Hence, the following research hypotheses are presented:

*H<sub>2</sub>: The specialty store service has a positive influence on customer satisfaction*

*H<sub>3</sub>: The specialty store service has a positive influence on customer loyalty*

### 2.2.3. *Merchandise layout and product assortment*

The product assortment could be described by breadth -number of brands/products- of an assortment offered by a retailer (Skallerud et al., 2009). According to Huddleston et al. (2009), specialty stores are able to focus specifically on the range of merchandise that satisfies a narrower and more specific market segment. The link between store product assortment and customer satisfaction is higher for specialty food stores, since these stores offer product categories similar to conventional retailers, but carry hard-to-find and unique products, and consumers expect to find a deeper assortment within every specific product category (Huddleston et al., 2009). Moreover, previous research highlights that product variety and

assortment influences customer satisfaction (Hoch et al., 1999), helping retailers to attract consumers (Pan and Zinkhan, 2006). Consequently, in order to meet consumer needs, grocery stores often provide a wider array of goods and services (Hsu et al., 2010). Thus, we assume that an appealing and attractive merchandise layout and presentation, with a wide product assortment will influence customer satisfaction and loyalty:

*H<sub>4</sub>: The specialty store merchandise layout and assortment has a positive influence on customer satisfaction*

*H<sub>5</sub>: The specialty store merchandise layout and assortment has a positive influence on customer loyalty*

### **2.3. Consequences of customer satisfaction with specialty food stores**

Consumer satisfaction could be conceptualized as the consumer's fulfillment response, to the degree to which the level of fulfilment is pleasant or unpleasant (Oliver, 1997), and has been shown to lead to customer loyalty in the long term (Oliver, 1997; Bloemer, 2002). On the other side, customer loyalty has been defined comprising attitudinal, behavioural and composite approaches (Dick and Basu, 1994). In the present study, following Dick and Basu (1994) we define customer loyalty as the relationship between relative attitude and repeat purchase patronage. Finally, prior research highlights the great relevance of customer loyalty in retailing, since even if customers prefer a particular retailer it remains relatively easy to switch (Grewal and Lévy, 2007). Thus, we present the following hypothesis:

*H<sub>6</sub>: Customer satisfaction with the specialty store has a positive influence on customer loyalty*

### **2.4. The moderating role of product quality perception**

There is a general agreement that product quality has both an objective and a subjective dimension. The subjective product quality is the quality as perceived by consumers (Grunert, 2005; Anselmsson et al., 2007), that could be defined as the consumers' global judgement of a product overall excellence or superiority; which stems from the evaluation of product-associated attributes (Zeithaml, 1988). Since consumers impossibly can make accurate judgements of the quality of products –such as the true objective quality of an ingredient contained in a food product-, they instead use attributes associated with quality (Zeithaml,

1988). Thus, we assume that customers' perceived product quality is a subjective notion that exists in consumers' minds.

This subjective notion of quality plays a major role in demand for food products (Grunert, 2005), since perceived quality is just as important as taste, health or price in determining consumers' food preference, satisfaction and purchase intention (Huddleston et al., 2009). Regarding food products, previous research notes that consumers associate attributes such as taste, quality of ingredients, naturalness, freshness, nutrition information (Grunert et al., 1993), texture and consistency, appearance and even odour with product quality (Grunert et al., 2005; Anselmsson et al., 2007). These attributes serve as tangible cues for consumers.

Likewise, specialty food products are characterized precisely by their superior quality – compared to standard foods- (Murphy et al., 2002; Huddleston et al., 2009); derived from a combination of exclusiveness –for example, food product produced on a small scale-, processing –produced outside the mainstream processing, using non-industrial techniques-, and distinctiveness –for example, extraordinary packaging, or unique design- (Murphy et al., 2002). Considering that specialty food stores' competitive advantage and source of differentiation is their superior products' quality, in the present study we assume that customers would develop different levels of satisfaction and loyalty with specialty food stores depending on their products' perceived quality. However, it appears that the influence of customer-based perceptual variables on products have been largely ignored as potential moderators. That is, if consumers differ considerably in their products' quality perception, a further analysis could be developed based on the perceived quality of products at specialty stores. So, in the present study we propose that the consumers' perceived quality of specialty food products would play a moderating role in the context of grocery food retailing.

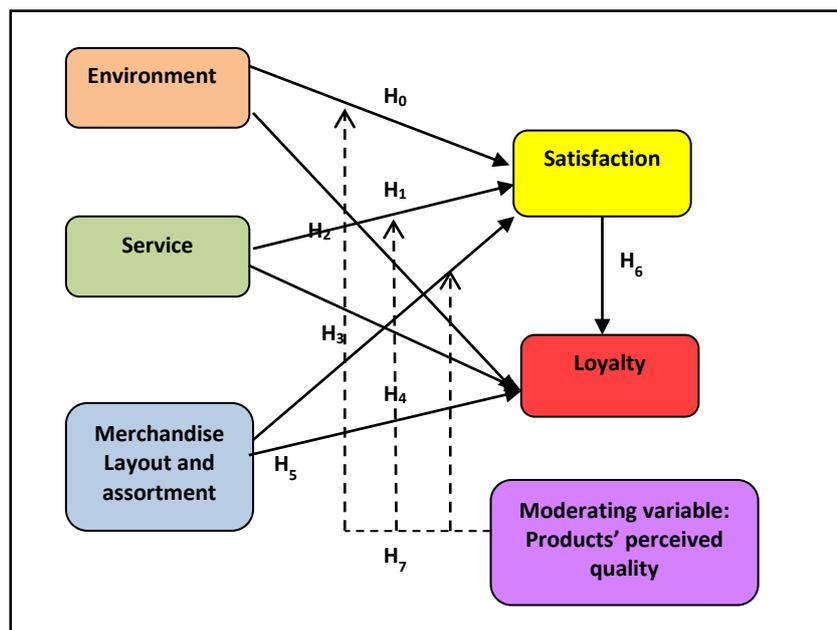
Product quality is essential for those consumers who are particularly interested in certain unique product characteristic (Huddleston et al., 2009). Thus, perceived quality of specialty products may be a driving force of customer satisfaction. This study hypothesizes that because individuals perceive different levels quality onto specialty products, their satisfaction with the specialty retailer will result in significant differences. Therefore, our goal is to determine whether the products' quality perception acts as a moderating influence. So, the following hypotheses are derived:

*H<sub>71</sub> Products' perceived quality moderates the influence of the store environment on satisfaction*

*H<sub>72</sub> Products' perceived quality moderates the influence of the store service on satisfaction*

*H<sub>73</sub> Products' perceived quality moderates the influence of the store merchandise layout and assortment on satisfaction*

**Figure 1. Conceptual proposed model and moderating influence**



### 3. METHODOLOGY

#### 3.1. Variables and scale development

In order to select variables and indicators, we considered previous research on the topic (Table 1). Participants were asked to indicate their level of agreement with several questions on specialty food stores on a 10-point Likert-type scale (1="strongly disagree"; 10="strongly agree"). In first place, the specialty *store environment* was measured adopting a four-item scale from Yoo et al. (2000); Burt and Carralero-Encinas (2000) and Baker et al. (2002). The specialty store *service* was also examined with four measures adopted from Burt and Carralero-Encinas (2000) and from Semeijn et al. (2004). The specialty store *merchandise layout and assortment* was gauged with a four-item scale adopted from Hoch et al. (1999) and Bauer et al. (2012). For measuring consumer *satisfaction* we adopted three items proposed by

Oliver (1997) and Yoo et al. (2000). Finally, specialty store *loyalty* was examined as a three-item scale adapted from Oliver (1997).

**Table 1. Measurement scale and indicators**

LATENT VARIABLES	INDICATORS
<b>Environment</b> Yoo et al. (2000); Burt and Carralero-Encinas (2000); Baker et al. (2002)	Env1: Layout and organization of the specialty store Env2: Decoration and atmosphere of the specialty store Env3: Cleanliness of the specialty store Env4: Aroma and smell of the specialty store
<b>Service</b> Burt and Carralero-Encinas (2000); Semeijn et al. (2002)	Serv1: Staffing levels Serv2: Lines and wait time Serv3: Speed and accuracy Serv4: Service policies and practices
<b>Merchandise layout and assortment</b> Hoch et al. (1999); Bauer et al. (2012)	Dist1: Cases and displays Dist2: Product arrangement and presentation Dist3: Materials and signs Dist4: Variety of types of products and brands
<b>Customer satisfaction</b> Oliver (1980); Yoo et al., (2000)	Sat1: Overall satisfaction with the specialty store Sat2: The specialty store provides me with good value for money Sat3: I am satisfied with the products offered in the specialty store
<b>Loyalty</b> Oliver (1980); Zeithaml et al. (1996)	Loy1: I will make next specialty food product purchase at this store Loy2: I would recommend this specialty store to relatives and friends Loy3: I will only purchase at this store exclusively

### 3.2. Sampling and fieldwork

A survey was developed based on an extensive literature review on food retailing and customer behaviour. Initially, the researchers conducted a pre-test with the purpose of examining that participants understood the questions adequately, and that consumers had consumer experience at the retailer Whole Foods. More precisely, participants were first asked whether they shop in specialty food stores, and if so, they were asked about a specific food specialty store –Whole Foods- which is a widely popular among customers residing in the US. The selection of Whole Foods as the specialty food store under evaluation was necessary to ensure an acceptable degree of familiarity of consumers with the food store. Then, participants were asked to rate the variables related to their satisfaction and loyalty to the specialty store, as well as regarding store-based variables. The last section of the questionnaire consisted of questions regarding purchasing habits and demographic

characteristics of participants. Finally, a total 592 valid questionnaires were gathered among consumers residing in the US on a random basis, through an on-line structured questionnaire.

Regarding the sample profile, the 58% of the participants are female, while the 42% are men. A percentage of 47% of the participants are between the ages of 31 to 40, while the 24 % were between 41 to 50; and a 15 % were between 20-30 years old. In terms of education level 18% of participants have primary education, while a 32% have secondary education and more than 35% of the participants have university studies. Regarding the household income, the greater percentage of participants (33%) has an income of 40.000-60.000\$. Finally, our data also indicated some characteristics of the participants' consumption behaviour, such as for example that the majority of the respondents (63%) spent on average 15-20\$ in specialty food products per purchase.

#### **4. RESULTS DICUSSION**

##### **4.1. Measurement model**

The data were analyzed following Anderson and Gerbing (1988) two-step approach: a measurement model and a subsequent structural model. This study first conducted a confirmatory factor analysis with maximum likelihood to estimate the measurement model. This first analysis revealed the need to remove one item from the proposed initial scale –Sat3-. Having removed this indicator, the results obtained showed an appropriate specification of the proposed factorial structure. The study also checked unidimensionality, reliabilities and validities of the measurement model (Table 2). The level of internal consistency in each construct was acceptable, with Cronbach Alpha estimates ranging from 0.822 to 0.948 (Nunally, 1978). In addition, all of the composite reliabilities of the constructs were over the cutoff value of 0.70 (Hair et al., 1998), ensuring adequate internal consistency of the multiple items. Then, convergent validity was tested, obtaining adequate values confirming that all factor loadings exceeded or were close to 0.70 (Anderson and Gerbing, 1988). Moreover, all factor loadings were significant at 0.01. Additionally, the average variance extracted (AVE) of all constructs exceeded the minimum criterion of 0.50 (Hair et al., 1998), indicating that a large portion of the variance was explained by the constructs.

**Table 2. Factor loadings and indicators of internal consistency and reliability)**

Construct	Items	Cronbach Alpha	HIGH PRODUCT PERCEIVED QUALITY			LOW PRODUCT PERCEIVED QUALITY		
			Lambda	CR	AVE	Lambda	CR	AVE
Environment	Env1	0.948	0.916	0.928	0.744	0.905	0.905	0.706
	Env2		0.915			0.882		
	Env3		0.870			0.730		
	Env4		0.789			0.832		
Service	Serv1	0.926	0.820	0.904	0.703	0.813	0.924	0.754
	Serv2		0.839			0.839		
	Serv3		0.854			0.920		
	Serv4		0.840			0.910		
Merchandise layout/ Assortment	Dist1	0.936	0.946	0.922	0.751	0.921	0.890	0.680
	Dist2		0.961			0.922		
	Dist3		0.881			0.872		
	Dist4		0.689			0.510		
Satisfaction	Sat1	0.822	0.848	0.765	0.622	0.828	0.774	0.632
	Sat2		0.724			0.760		
Loyalty	Loy1	0.834	0.791	0.824	0.612	0.700	0.794	0.564
	Loy2		0.865			0.852		
	Loy3		0.681			0.690		

Then, discriminant validity was tested by evaluating all possible paired combinations of the constructs. Our results show that the AVE values were greater than the squared correlations between any pair of constructs, suggesting discriminant validity (Table 3).

**Table 3. Discriminant validity and matrix of correlations**

	HIGH PRODUCT QUALITY PERCEPTION					LOW PRODUCT QUALITY PERCEPTION				
	ENV	SERV	MLA	SAT	LOY	ENV	SERV	MLA	SAT	LOY
Environment	<b>0.862</b>					<b>0.840</b>				
Service	0.722	<b>0.838</b>				0.686	<b>0.868</b>			
Layout/Assortment	0.753	0.600	<b>0.866</b>			0.566	0.554	<b>0.825</b>		
Satisfaction	0.818	0.738	0.748	<b>0.789</b>		0.673	0.658	0.600	<b>0.795</b>	
Loyalty	0.649	0.598	0.641	0.730	<b>0.782</b>	0.545	0.426	0.577	0.723	<b>0.751</b>

**4.2. Structural model**

The proposed structural model was estimated. The model fit indicated by these indexes was deemed satisfactory; thus, providing a good basis for testing the hypothesized relationships. Regarding the results obtained for the structural model Chi-Square shows a significant value ( $X^2=619.346$ ;  $p<0.000$ ), so it could be considered a reliable indicator of the model fit (Hair et

al., 1998). Other absolute measures of the modeling adjustment such as the Goodness of Fit Index (GFI=0.899) and the Root Mean Square Error of Approximation (RMSEA=0.050) show also adequate values. The measure of incremental fit and parsimony also indicates a good model fit, considering that the Incremental Fit Index (IFI=0.957), Tucker-Lewis Index (TLI=0.947) and the Comparative Fit Index (CFI=0.958) values are higher than the suggested threshold of 0.90 (Hair et al., 1998).

#### 4.3. Analysis of relationships among variables

Our results support the proposed conceptual model, since our findings provide support for most of the research proposed hypothesis (Table 4).

**Table 4. Structural model estimates and hypotheses test.**

Relationships	HIGH PRODUCT PERCEIVED PRODUCT		LOW PRODUCT PERCEIVED QUALITY	
	Standardized Coefficients	Hypotheses test	Standardized Coefficients	Hypotheses test
Environment → Satisfaction	$\beta_{14H} = 0.505^{**}$	H <sub>0</sub> : Supported	$\beta_{14L} = 0.334^{**}$	H <sub>0</sub> : Supported
Service → Satisfaction	$\beta_{24H} = 0.267^{**}$	H <sub>1</sub> : Supported	$\beta_{24L} = 0.877^{**}$	H <sub>1</sub> : Supported
Merchandise layout/assortment → Satisfaction	$\beta_{34H} = 0.156^{**}$	H <sub>2</sub> : Supported	$\beta_{34L} = 0.223^{**}$	H <sub>2</sub> : Supported
Environment → Loyalty	$\beta_{15H} = 0.102^{ns}$	H <sub>3</sub> : Not Supported	$\beta_{15L} = 0.505^{**}$	H <sub>3</sub> : Supported
Service → Loyalty	$\beta_{25H} = 0.096^{ns}$	H <sub>4</sub> : Not Supported	$\beta_{25L} = 0.728^{**}$	H <sub>4</sub> : Supported
Merchandise layout/assortment → Loyalty	$\beta_{35H} = 0.158^{**}$	H <sub>5</sub> : Supported	$\beta_{35L} = 0.068^{ns}$	H <sub>5</sub> : Not Supported
Satisfaction → Loyalty	$\beta_{35H} = 0.809^{**}$	H <sub>6</sub> Supported	$\beta_{35L} = 0.814^{**}$	H <sub>6</sub> Supported
<i>ns=non significant;</i> <i>** significant (p&lt;0.05)</i>	R <sup>2</sup> (Satisfaction)= 0.744 R <sup>2</sup> (Loyalty)= 0.724		R <sup>2</sup> (Satisfaction)= 0.665 R <sup>2</sup> (Loyalty)= 0.658	

The obtained results indicate that customers with high and low product perceived quality report interesting differences in the creation of satisfaction and loyalty towards the specialty retailer, as depicted in Figure 2 and Figure 3. Regarding customer satisfaction with the specialty food store, the store *service* was found to have a positive impact on satisfaction for both types of customers, however the influence is higher for customers with low products' perceived quality ( $\beta_{24H}=0.267^{**}$ ;  $\beta_{24L}=0.877^{**}$ ). So, in terms of the effect size, the store service seems to contribute the most to customer satisfaction for customers with low perceived

product quality. In addition, positive significant impact was found for store *environment* and store *merchandise layout* and assortment on customer satisfaction, regardless the type of customer. Nevertheless, the store *environment* shows a greater influence on satisfaction for customers with high perceived product quality ( $\beta_{14H}=0.505^{**}$ ;  $\beta_{14L}=0.334^{**}$ ). Consequently the store environment, followed by store service and the store *merchandise layout and assortment* is the stepwise order of impact on customer satisfaction for customers with high product quality perception; whereas, store service, followed by environment and merchandise layout and assortment was the stepwise order of influence on satisfaction for customers with low perceived product quality. Put it in other words, the store *environment* is the more relevant variable in customer satisfaction for customers who perceive high product quality; while the store service shows the greatest influence in customer satisfaction for customers who perceive low product quality.

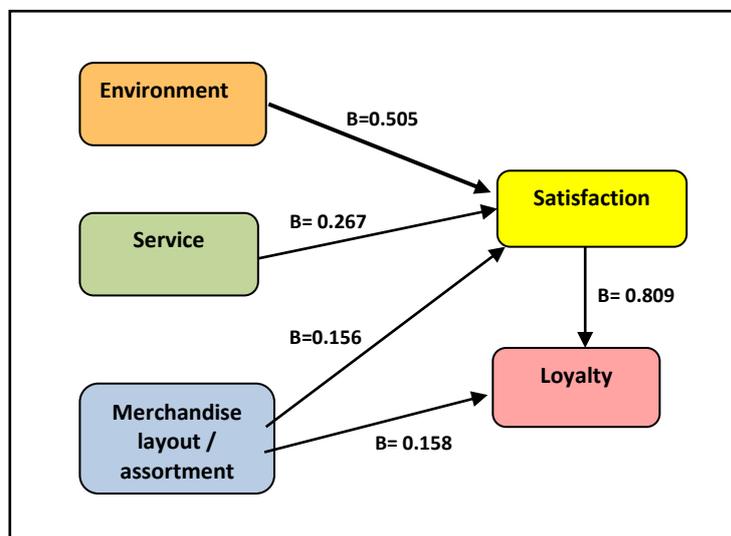
Regarding the creation of customer loyalty, some interesting differences were also found between customers with high and low product perceived quality. We found empirical evidence to propose a significant positive relationship between store *environment* ( $\beta_{15L}=0.505^{**}$ ) and store *service* ( $\beta_{25L}=0.728^{**}$ ) and loyalty for customers with low product quality perception. So, it can be stated that the better store service and more attractive and appealing store environment, the higher customer loyalty when customers have poor product quality perceptions. However, our findings do not support a significant influence of store *layout and assortment* on loyalty for customers with low perceived product quality ( $\beta_{35L}=0.069^{ns}$ ). One possible explanation is that customers with low perceived quality do not consider the store layout and the offering of a wide range of products and brands as long as products are perceived as having poor quality.

On the other hand, our findings highlight a slight positive relationship between the specialty store *merchandise layout and assortment* and loyalty for consumers with high product quality perception ( $\beta_{35H}=0.158^{**}$ ) as initially expected. However, the store *environment* ( $\beta_{15H}=0.102^{ns}$ ) and the *store service* ( $\beta_{25H}=0.096^{ns}$ ) did not show a statistical significance on loyalty for customers with high product perceived quality, since the relationships were in the expected direction, but failed to reach statistical significance for both variables. So, this result could suggest that as long as customers perceive high product quality, the store *environment* and the *services* provided by the specialty store are no relevant for consumers to remain loyal.

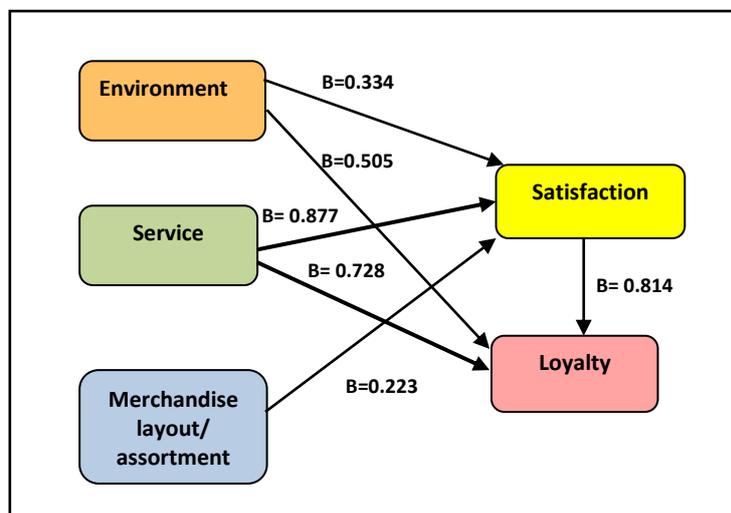
One potential explanation for this result might be a function of the real expectations of consumers who perceive specialty food products as having high quality, meaning that they truly expect a high quality service and a nice and appealing environment. Therefore, important differences were found between the two types of customers analyzed; thus showing the relevance of the products' perceived quality in the specialty retailing setting.

Finally, other relevant finding is the high influence of customer satisfaction with food specialty stores on customer loyalty for both types of customers ( $\beta_{35H}=0.809^{**}$ ;  $\beta_{14L}=0.814^{**}$ ), as shown in previous literature.

**Figure 2. Final relationships for high product quality perception**



**Figure 3. Final relationships for low product quality perception**



#### 4.4. The moderating role of customers' quality perception

In order to analyze moderating role of the customers' quality perception of specialty food products, we carried out a multi-group analysis comparing two sub-samples (Homburg and Giering, 2001). For this purpose, one specific question regarding the specialty products' perceived quality was included in the research questionnaire - "*Specialty food product appearance and texture in the specialty store*" - which allowed us to distinguish between high and low perceived product quality. So, according to their evaluation, consumers are classified either as having a high perceived product quality (n=461), or either as having a low perceived product quality (n=137).

In first place, a cross validation of the specified model was performed by examining the model fit for the total sample separately, indicating that multi-group analysis could be performed (Hair et al., 1998). Secondly, an overall  $X^2$  difference test was developed for the moderating variable under research. Then, model comparisons were conducted between the general model, whereby the structural paths specified were freed across both groups of customers and a model whereby the specified paths were systematically constrained to be equal across the two groups (Byrne, 2001). A significant  $X^2$  difference between the constrained and unconstrained model implies that the both compared models are dissimilar, indicating a moderation effect (Hair et al., 1998).

Consequently, the proposed model was estimated with all hypothesized parameters allowed to be estimated freely within each subsample ( $X^2=584.782$ ;  $p<0.001$ ; CFI=0.956). Then, each link was constrained separately in order to remain equal across the two sub-groups and  $X^2$  differences were calculated with respect to the general model. So, in a series of constrained models, the path coefficients corresponding to the relationships between environment and customer satisfaction ( $H_{71}$ ); service ( $H_{72}$ ) and merchandise layout and assortment ( $H_{73}$ ) were constrained to remain invariant across the two subsamples while the model was re-estimated. The significantly  $X^2$  higher values for the constrained models did not improve model fit in any of the cases, with the exception of distribution which according to the  $X^2$  distribution is not a significant influence. This supports the hypothesized moderating role of the products' perceived quality on the relationships between environment and customer satisfaction ( $\Delta X^2=16.743$ ;  $df=1$ ;  $p<0.001$ ); as well as between service and customer satisfaction ( $\Delta X^2=13.753$ ;  $df=1$ ;  $p<0.001$ ). Nevertheless, the no significant values for the  $\Delta X^2$  as indicated

in the  $X^2$  distribution suggests the lack of a moderating influence of merchandise layout and assortment ( $\Delta X^2=0.695$ ;  $df=1$ ;  $p<0.001$ ) on customer satisfaction (Table 5).

**Table 5. The moderating role of customers' perceived quality**

Moderating effect	Chi-square	df	CFI		
Unconstrained baseline model	584.782	218	0.956		
Constrained paths	Chi-square	$\Delta X^2$	df	p	Hypotheses
<b>Environment → Customer satisfaction</b>	601.525	16.743	219	0.001	H <sub>71</sub> : Supported
<b>Service → Customer satisfaction</b>	598.535	13.753	219	0.001	H <sub>72</sub> : Supported
<b>Merchandise layout/ Assortment → Customer satisfaction</b>	585.477	0.695	219	0.001	H <sub>73</sub> : Not Supported
All path constraint ** <i>significant</i> ( $p<0.05$ )	603.018	18.236	221	0.001	H <sub>74</sub> : Supported

## 5. CONCLUSIONS

Our research goal is to address the following research question: “*Does the products' perceived quality influence on satisfaction and loyalty towards the specialty retailing?*”. For this purpose we analyze the creation of customer satisfaction and loyalty towards specialty food retailers, considering three store-based attributes -store environment, store service and store merchandise layout and assortment-. For the hypotheses testing we distinguished between consumers who perceive products as having *high quality*, and customers who perceive them as having low or *poor quality*. In this vein, our major contribution consists on examining the influence and moderating role of a customer-based attribute under-researched in previous studies: the products' quality perception. The authors suggest that the level of products' perceived quality could influence and moderate the relationships between the specialty store-based attributes on the customers' satisfaction.

Our research aims to answer one question: “*May specialty food retailers differentiate their customers according to their perceived quality of products?*”. And the answer to this research question would be “*Yes, specialty store attributes have a different impact on satisfaction and loyalty according to the products' quality perception*”. First conclusion is that the creation of customer satisfaction and loyalty towards specialty food retailers shows a similar pattern on

customers, regardless their level of product quality perception. However, our findings also depict interesting differences between consumers, depending on the level of products' quality perception. On one side, customers with high perceived product quality show a greater influence of store environment on their store satisfaction, followed by store service and store merchandise layout and assortment; while our findings do not support a significant impact of these variables on customers' loyalty towards the specialty retailer. So, our results highlight that customers with high product quality perception are more difficult to pinpoint, since these customers do not exhibit significant influences of environment and service on customer loyalty. One potential explanation is that customers with high perceived product quality focus on different variables in order to remain loyal and these variables could be the products' quality or maybe a good *value for money*, which has not been considered in our study. For this reason, specialty retailers should focus their attention on providing customer satisfaction for these customers, by superior store service, since store service is a critical determinant of satisfaction for specialty products customers. In addition, specialty retailers should understand what products their customers are seeking for and ensure that the right merchandise is available at the store.

On the other side, satisfaction with specialty stores for customers with low product quality perception is mainly rooted in the store service, followed by the store environment and the store merchandise layout and assortment. The reason maybe the essential role of service for a specialty store, since specialty retailers are considered to be *experts* in certain product categories, such as for example sliced cheese or meat; and thus, customers seek for this expertise when purchasing in a specialty retailing. In addition, our findings highlight the key role of the specialty store service and environment on the creation of store loyalty.

Hence, it can be noted that the store service is a key factor influencing customers' satisfaction with specialty food retailers, in the case that customers have a low product quality perception. Compared with customers who have high perceived quality, -who put more emphasis on the store environment-, it seems that customers with low perceived quality require specialty food retailers to provide services with higher quality, and maybe these consumers are expecting extra benefits from specialty stores, including better service from the employees. This finding is coherent, since it seems that when customers perceive specialty products as having poor quality, they are demanding a great service and an attractive store environment in order to

come back to the store. Consequently, our findings demonstrate that the specialty store service, environment and merchandise layout and assortment influence customer satisfaction, regardless the product quality perception; despite the degree of influence varies according to the level or perceived quality of the products offered.

Finally, other major finding is that our results do support the moderating role of product quality perception of the specialty products on the environment-satisfaction and service-satisfaction links. That is, we hypothesized that the consumers' quality perception of specialty products would play a moderating role on the on the influence of service and store environment on customer satisfaction, and our results confirm these initial hypotheses.

### **5.1. Managerial implications**

Understanding the effect of products' perceived quality on satisfaction and loyalty towards the specialty stores is a valuable piece of information for retailers. Specialty food retailing companies should attempt to identify different customer groups to target emphasizing product quality, because this customer-based variable is determinant in the creation of store satisfaction and loyalty. Moreover, specialty retailers could use the level of products' perceived quality as a variable for segmenting their customers, in order to develop specific marketing strategies. In addition, our findings may help grocery retailers to better understand how store-based attributes can contribute to elicit customer satisfaction and loyalty: the store environment has an increasing appeal for consumers with high product perceived quality; but at the same time, the specialty retailer should provide high quality services to attract and capture consumers with low perceived quality. Likewise, retailers could use the store layout or the merchandise display to change customers' perception of the store environment, enhancing the store's environment through visual communications, such as appealing signs, attractive lighting and colors, scents or music.

### **5.2. Limitations and future research guidance**

This research nonetheless has limitations that represent avenues for future research. In first place, the data for the study come from one specific market; so, research replications across other countries will establish further generalizations. Secondly, this study could be generalizable to other products rather than food, since differences could be found across product categories. Finally, another limitation of our study was the selection of three store-

based attributes out of many possible specialty store attributes. Addressing these limitations in future research would provide a deeper view of consumer behaviour regarding specialty stores.

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