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# **Analysis of Antecedents that Contribute to Try New Products in Retail Commerce**

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## **Abstract**

Offering innovative goods and/or brands to attract and retain customers is one of the challenges in the retail sector, which is characterized by high competitiveness and economic recession. This chapter analyzes the different variables that contribute to increasing customers' willingness to try retailers' innovations relative to the products and/or brands they offer. Specifically, we discuss the role that consumer satisfaction with price level, perceived quality of the assortment, and trust in the retailer plays in the dependent variable. The model is tested empirically on a sample of 498 individuals responsible for purchasing consumer products; causality is contrasted using a structural equation model (SEM). The results show that customers' trust in the retailer is the most important factor in explaining the decision to try new products and brands, followed by perceived quality of the assortment and satisfaction with price level. Furthermore, our finding that trust in the retailer is the most influential antecedent of customer willingness to try the retailer's innovations shows the importance of relationship marketing in the proposed model. Since this influence is significantly higher in the group of regular customers of the commercial chain, regular customers represent a sensitive segment for retailers in terms of product acceptance and testing.

**Keywords:** innovative products and brands, retailing, trust, regular and nonregular customers, assortment, price

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## **1. Introduction**

There is a widely held view that retailing is somehow less innovative than other service sectors [1]. The importance of innovation in entrepreneurial strategy is generally clear due to the high investment innovation requirements. According to Reinartz et al. [2], innovations in

retailing have several dimensions, such as retail formats, branding, assortment, process innovations, customer experience, information technology, new media, handling of payment and order fulfillment. Reinartz et al. [2] explain that (1) in the case of retail formats, supermarkets were considered as innovations when they were first introduced in markets that are currently viewed as mature retail markets. Thus, the development of new retail formats represents a promising source of retailing innovations; (2) in the case of branding, retailers' strategic decisions, such as single versus multiple private label brand names, or their positioning represent another dimension of innovations in retailing; (3) also, the assortments such as variety, stock ownership and speed of replenishment have also been identified as potential ways for a retailer to innovate and differentiate itself from competitors; (4) process innovations such as market research and supply chain management also constitute potential avenues for retailers to achieve a competitive advantage. For example, new forms of collaboration between manufacturers and retailers in supply chain management such as efficient consumer response (ECR) and category management represent major innovations in retailing pioneered by companies such as Walmart in the United States and Metro in Europe; (5) new forms of market research and marketing intelligence generation such as scanner data-based, customer loyalty program-based and customer experience management-based activities represent innovations in retailing; (6) other important dimensions of retailing innovation include the customer experience, such as innovations based on store atmosphere, expertise, and knowledge of front-end staff; and (7) information technology and new media-enabled retailing innovations. In this last case, according to Sorescu et al. [3], the wave of innovative technologies is spreading fast, by making available many interactive systems that able to support both consumers while shopping and retailers for achieving fast and update information on market trends and selling process. For instance, in recent years, groceries have introduced: (1) self-service technologies equipped with radio frequency identification (RFID) systems, such as the self-cash desks, (2) informative touch points; (3) interactive displays equipped with touch screens; and (4) digital signage and applications for mobile phones.

Another line of research about innovations in retailing considers new product development [4]. This study follows this line of research due to the high number of failures among new products launched on the market. According to Ref. [5], the possibility of success of a new consumer good in 2015 reached 29% compared to 45% in 2014. It is important to understand which factors influence consumers' process of trying and adopting new products [6, 7]. For example, perceived benefits and low level of perceived risks are important predictors for new products acceptance, which is today facilitated by the customers' greater ability to acquire and process the information needed to manage the risk associated to new products. This chapter focuses on the study of new product and brand trial, since it is the most used metric to measure the success of business innovation. It should be noted here that there are two types of innovations: incremental or sustained innovation and radical or disruptive innovation. Incremental innovation often exploits existing benefits or technologies. Also, it usually improves an existing product or adapts it for a new use. On the contrary, a radical innovation is one that produces a substantial improvement in the satisfaction of consumer needs [8].

The process of adoption of new products is especially important in the retail context, which is characterized by stagnant consumption and strong competition in the distribution channel,

and where relationships between manufacturers and distributors and between distributors and consumers are undergoing a process of change.

Specifically, this chapter analyzes the Spanish sector of consumer goods' distribution, where innovations are of considerable importance because of their added value. Given that Spain is behind most European countries in terms of innovations [5], it becomes very relevant to deepen on the aspects that can motivate to improve this situation. In the context of Spanish consumption, 73.1% of the new products launched in 2015 belonged to the food category. Beverages and cosmetics followed in the ranking of most innovative product categories, with a share of innovative products of 15.2 and 11.7%, respectively [5].

Considering aggregate data, the number of innovative products has grown in Spain in the last period analyzed (2014–2015). In 2015, 118 new products that did not exist before were launched, 9% more than in 2014. However, the number of innovations in 2015 is lower than in 2010, when 156 innovations were marketed [5].

In this situation, companies recognize the importance of understanding consumers' needs in depth and of identifying the issues consumers consider most relevant when shopping for mass consumption products. Based on this knowledge, the various commercial chains can differentiate themselves from the competition, achieve greater brand value through acceptance of the products they commercialize on the market, and increase the profitability they gain from their customers.

With regard to brand innovation, the conflict between manufacturer brands and store brands becomes very relevant. According to Ref. [5], manufacturer brands in Spain are the engine of product innovation. In 2015, 9 of 10 innovations were developed by manufacturer brands [5]. In 2012, 82.1% of all product innovations carried a national brand. That percentage grew to 89.5% in 2015, when just 10.5% of the innovative products were private-label goods.

With respect to the innovations of the manufacturer brands, Danone was the most successful manufacturer brand, thanks to the launch of Font Vella mineral water designed for children. Other brands such as Yatekomo (Gallina Blanca's instant noodles), the probiotic dairy product Actimel pro-Vital, Thomas Bagels, and Activia Fruit Fusion yogurts, also achieved remarkable success (see **Table 1**).

In the case of private labels, those belonging to Mercadona and Lidl are the most successful in terms of innovation [5]. The success of their store brand innovations coexists with the fact that Mercadona marketed just 10% of all manufacturer brand innovations while Lidl only introduced 2% of them, representing the two chains with fewer national brand innovative products in their shelves. An evidence to the fact that Mercadona opts to privilege the innovations of its own brands is the launch of a new line of vegan products and fitness products with at least 15 new references with its own brand such as "lentil and begur salad," "kale," "veggie mortadella," "Edamame green soybeans," "Agave syrup," "Maple gingerbread syrup," "cous cous," etc. On the opposite side, the chains that sold more manufacturers' innovations were Carrefour, Alcampo, and Eroski, who introduced 70, 40, and 43% of all manufacturers' innovations, respectively [5].

In this context, our study proposes two goals: (1) to develop a model to explain the customer's propensity to try retailers' innovations of the products and/or brands provided, using three

Innovative products	
Font Vella kids	Suchard oreo
Yatekomo Yakisoba chicken	San Miguel Melocotuva+ Naramango+Piñacuya
Actimel pro-vital	Frigo magnum mini-pink
Bagels	Shandy zero
Activia fruit fusion	Flora gold
Source: Kantar Worldpanel, 2015.	

Table 1. Top innovations in the Spanish market.

key variables of the retailers’ strategy: assortment and price of the products offered and consumers’ trust in the retailer and (2) to compare the influence of trust on the dependent variable for regular and nonregular customers of the retail chain, given the growing importance of this variable for relationship marketing. These goals advance research on new product acceptance in the retail area and contribute practical implications aimed at improving retail management.

This study is structured as follows. The second section presents a literature review, followed by a methodological section. We then explain the main results obtained from the analysis. The study concludes with the discussion of these results and the main limitations and future lines of research.

2. Literature review

2.1. Model of innovative product acceptance in the retail area

The literature defines innovation differently, depending on the field. According to Lusch and Nambisan [9], in the context of Service Dominant Logic, innovation can be considered the rebundling of diverse resources that create novel resources that are beneficial (i.e., value experiencing) to some actors in a given context; this almost always involves a network of actors, including the beneficiary (e.g., the customer). From the perspective of marketing, innovation can be defined as the process of launching new products or services on the market that satisfy the consumer’s needs [10] leading to the consumer’s acceptance of the new products or the generation, acceptance, and implementation of new ideas, processes, products, or services [11, 12].

Huang and Huddleston [13] insist on two innovation-related concepts: (1) innovativeness and (2) the capacity to innovate. They contend that firm innovativeness is the notion of openness to new ideas as an aspect of a retailer’s culture, whereas the capacity to innovate is the ability of the retailer to adopt or implement new ideas.

Among the factors that influence the process of trying and accepting new products, we can classify a series of variables into variables related to the market, such as concentration of brands and firms [14]; variables related to the firm itself, such as its reputation and market power [7];



variables related to the individual, such as his/her willingness to adopt innovations [15]; and variables related to the product and/or brand, such as its degree of innovation [16].

Trying to integrate some of the previous factors, Bass [17, 18] proposes a model that explains the acceptance of innovations. This model expresses the adoption of innovation as a dependent variable of (1) the individual's innovativeness, (2) the effectiveness of external influence on consumers, and (3) the accumulated product adoption (due to the effect of word-of-mouth). To do this, Bass [17, 18] uses three measures: the innovation ratio (or external innovation), the imitation ratio (or internal influence), and the market potential.

Based on factors related to the firm and the brand, this chapter focuses on characteristic aspects of retail strategy that contribute to the trying and acceptance of new products in this sector, such as the retailer's ability to develop an assortment of new products or brands with higher quality or unique features. A retailer, who focuses on building, developing, and nurturing its assortment's brands, benefits from using branding as a means of identification, differentiation, and guarantee of consistency for consumers. As a result, retailer assortment resulting from the retailer's brand orientation may provide consumers with added value as well as emotional attachments [19]. The literature has contrasted that a brand's reputation encourages acceptance and trying of new products [7]. A brand enjoys a good reputation when consumers perceive it as having consistent product quality over time. When characteristics of a new brand or product cannot be observed before they are consumed, as is the case with mass consumption products, the parent brand's reputation extends to the new products commercialized under this brand name [20]. Our study starts from this principle and proposes that the quality consumers attribute to the products and brands a retail chain commercializes—whether the retail brands or manufacturer brands—encourages acceptance of new products that the retailer begins to commercialize, since retailers will not take the risk of launching low-quality products that can jeopardize their current and future sales. Furthermore, the more the retailer allocates economic and shelf space to communicate the quality of its assortment, the more it will encourage customers' support for its new products [7]. Based on the foregoing, we propose:

H<sub>1</sub>: The quality of the retailer's assortment has a positive and significant effect on the consumer's acceptance of new products and brands.

There is considerable evidence showing that perceived costs and perceived benefits are the major determinants of consumers' acceptance of new consumer products [21]. For example, price level established by the retailer, the second antecedent considered in the research, could be associated to perceived costs.

The effect of the price level established by the retailer on acceptance of new products is not clear. The consumers most inclined to buy innovative products are less sensitive to price level and would be willing to assume a higher price level to obtain the differentiation that innovation targets [22]. There would thus be no negative effect on the relationship between price level and acceptance of new products. Not all consumers are willing to assume the price premium involved in entry of new products on the market [23]; however, in this case, consumers' price sensitivity could be a barrier to acceptance of innovations [24]. Since this study focuses on mass consumption products, a significant percentage of household expenses, in context of economic

recession in which consumers are rational in their shopping, we tend toward the second stream of research and propose that establishing a satisfactory price level encourages acceptance and trying of new products. That is

H<sub>2</sub>: Satisfaction with the retailer's price level has a positive and significant effect on the consumer's acceptance of new products and brands.

Finally, consumers have very limited knowledge of innovations. As a result, most consumers are unable to decide whether new products are associated with possible risks. One way people cope with a lack of knowledge is to rely on trust to reduce the complexity of decisions. Past research suggests that trust had an impact on perceived risk as well as on perceived benefit. Trust had an impact on the acceptance of, or willingness to buy, consumer goods products [21].

The trust that consumers place in the retailer is closely tied to the firm's reputation and market power and encourages acceptance of the new products the retailer commercializes [25]. It is expected that new products launched by a reputable retailer tend to have a greater acceptance than others launched by less reputable retailers. The reason being that firms with high reputation would have little interest in "cheating" their customers by launching a product of low-added value that could harm their business strategy, as this could affect their present and future sales. New products commercialized by a retailer which enjoys its consumers' trust are thus usually expected to have greater acceptance than those sold by retailers with worse positioning, since customers perceive lower risk in the acquisition and trying of products sold by retail chains with reputation in which they trust [26]. Based on the foregoing, we propose:

H<sub>3</sub>: Trust in the retailer has a positive and significant effect on the consumer's acceptance of new products and brands.

## **2.2. Differences between regular and nonregular customers of the retail chain**

Given the growing importance of relationship marketing, a proliferation of studies has advanced knowledge by incorporating moderating variables related to the characteristics of the relationship between companies and their customers [27]. These variables include, for example, length of the relationship [28, 29], frequency of contacts between company and customer [30], and consumer's involvement with the product, service, or firm itself [31]. Another important aspect that determines the success of an innovation is the influence of the number of people using the new product (direct effect) or its relation to the use of other products (indirect effect) [32]. These variables moderate the main effects of a series of antecedent variables on relational result variables like customer satisfaction and loyalty [33].

The literature review performed indicates, however, that it is necessary to incorporate new moderating variables whose effects have not been considered. To date, no studies have been found that develop models of innovative product acceptance that include as moderating variable a characteristic of the consumer's relationship with the retailer that is very important in studies of shopping habits in stores that sell mass consumption products: the regularity of that relationship.

Based on prior studies and on the importance of relational variables, this study proposes that the influence of trust in the retailer on consumers' acceptance of new products is more effective

in the group of regular customers. A regular customer has built an established relationship with the retailer, resulting in a stronger emotional link than that of the nonregular customer. This established relationship grants greater weight to relational issues (such as trust, commitment, satisfaction, etc.) in new shopping decisions [34, 35]. If we compare two customers with the intention to buy a new product/brand from a specific retailer—one customer regular and the other sporadic—the regular customer is more likely to make the decision to try, due to prior interactions with this retailer [36]. The sporadic customer, in contrast, is more familiar with the offering of competitor retailers and thus more rational when adopting the decision to try new products and brands, basing his/her decision more on functional criteria of the retailer's supply (such as perceived quality and price of assortment) than on emotional criteria [37]. We thus propose that the effect of trust in the retailer on trying new products is stronger among regular than among sporadic customers. The hypothesis is stated as follows:

H<sub>4</sub>: The regular character of the customer has a positive moderating effect on the relationship between trust in the retailer and acceptance of new products.

Figure 1 presents the theoretical research model.



Figure 1. Theoretical model of adoption of innovative products in the retail area.

### 3. Methodology

To contrast the model for new product acceptance, we perform an empirical study using a phone survey addressed to people responsible for buying the mass consumption products for their household. First, we asked the respondents to indicate at which of the following retail chains they shopped: (1) Carrefour, (2) Alcampo, (3) Eroski, (4) El Corte Inglés, and (5) Mercadona. These chains are chosen because, according to the economic information contained in Ref. [34], in



2015 they held the highest market shares in value terms in the analyzed product categories (Mercadona: 22.7%, Carrefour: 8.5%, Alcampo: 3.8%, Eroski: 6.2%, and El Corte Inglés: 1.8%).

The interviewer then told the respondent to which retail chain his/her answers should refer in the questionnaire. This enabled us to control responses to obtain a uniform percentage of surveys for each retail chain analyzed. That is, we applied random stratified sampling with simple allocation, such that the initial sample of shoppers was composed of similar subsamples related to each of the retail chains analyzed. We obtained 498 valid questionnaires.

Regarding the sociodemographic profile of the sample, it is observed that the respondents are mainly women, aged between 21 and 40 years old, who work outside the home and who have, at least, secondary studies. Regarding the family situation, the households of two to four members predominate, with a maximum of two children and a family income between 1000 euros and 2000 euros.

Perceived quality of assortment was measured through three items from the studies by Seiders et al. [27] and Vázquez et al. [38], and satisfaction with price level by three items adapted from the scales by Sirdeshmukh and Singh [39] and Anselmsson and Johansson [40]. For trust in the retailer, we adapted three items from the study by Crosby et al. [41] and Wong and Sohal [42]. Finally, the measurement most used to measure the success of product innovation in the consumer was the trying of new products [43]. All variables were measured on an 11-point Likert scale, from 0 (disagree completely) to 10 (agree completely). **Table 2** provides descriptions of the variables with their corresponding items.

The habit of shopping at the retail chain can affect the influence of the antecedents analyzed on acceptance of new products. This study thus classifies consumers into two segments, according to whether they indicate that they shop in the retail chain regularly or only sporadically. To measure regularity of shopping at the retail chain, we asked the following question: “Is this your regular shopping chain?” The consumers who answered yes (324) were considered regular customers; the others (174) were considered nonregular customers.

Perceived quality of assortment	CS1: The retailer provides very high-quality fresh products
	CS2: The retailer provides very high-quality packaged goods
	CS3: The retailer provides the products and brands that I need
Satisfaction with price level	SP1: The retailer generally provides a satisfactory price level
	SP2: The general price level does not undergo abusive increases over time
	SP3: At this retailer, I fill my shopping cart for a reasonable price
Trust in retailer	CF1: The retailer does not cheat me
	CF2: The retailer is honest
	CF3: I trust the retailer
Trying innovative products	PR1: When the retailer incorporates new products, I like to try them
	PR2: When the retailer incorporates new brands, I like to try them

**Table 2.** Study variables.

The empirical model was estimated using covariance structure modeling with the statistical package AMOS 19.

## 4. Results

### 4.1. Descriptive results

The results shown in **Table 3** offer high mean values of the three antecedents proposed (the perceived quality of the assortment, the price level, and trust in the retailer). All are above 7.

Customers show an intermediate level relative to the acceptance of new products and brands, with mean values around 6.20 for the acceptance of new products and mean values around 6.29 for the acceptance of new brands. In particular, Alcampo, Eroski, and Mercadona are the most successful chains in terms of new products' acceptance, although it should be noted that Alcampo and Eroski follow antagonistic strategies regarding the introduction of innovations compared to Mercadona. While Alcampo and Eroski support the innovations of manufacturers, Mercadona opts to privilege the innovations of its own brands.

The analysis by chains of the mean levels of the antecedents indicates that Carrefour's customers perceive the quality of the assortment and the price level of this retailer to be below the average value of the sample. Trust in the retailer does not exceed the average level either. Thus, despite the fact that Carrefour favors the introduction of brands' innovations, their customers seem not to be appreciating this strategy.

In the case of Alcampo and Eroski, their customers show adequate satisfaction levels in terms of assortment quality. Their customers are particularly pleased with the price level of these chains. Trust of their customers is an aspect that both retailers must improve. In both cases, it can be inferred that the high levels of innovation's acceptance are due, on the one hand, to the fact that these chains support the introduction of manufacturer brands' innovations, and on the other hand, to the brand equity of these brands that facilitates the introduction of innovations in the market.

The customers of El Corte Inglés appreciate the quality of its assortment but consider that the price level is high. Trust in this chain must also be improved, which explains why its customers are less inclined to test the innovations of products and brands that this retailer sells.

Finally, Mercadona enjoys high levels of perceived quality of assortment and high levels of customers' satisfaction with the store's price level. Also, Mercadona generates high levels of trust in its commercial policy. These three factors favor the trial of Mercadona's innovations (see **Table 3**).

### 4.2. Measurement model

For each subsample, we confirm the quality of the measurement scales, following the recommendation by Byrne [44]. We perform a confirmatory factor analysis, whose results show highly satisfactory fits of the proposed model in both samples. As may be seen in **Table 4**, the

Variables in the model	Retailers	Mean	Standard deviation
CS1: The retailer provides very high-quality fresh products	Carrefour	7.08	1.56
	Alcampo	7.00	1.58
	Eroski	7.15	1.49
	El Corte Inglés	7.29	1.55
	Mercadona	7.17	1.64
	Total	7.15	1.58
CS2: The retailer provides very high-quality packaged goods	Carrefour	7.45	1.25
	Alcampo	7.42	1.20
	Eroski	7.51	1.19
	El Corte Inglés	7.59	1.28
	Mercadona	7.50	1.34
	Total	7.53	1.24
CS3: The retailer provides the products and brands that I need	Carrefour	7.66	1.27
	Alcampo	7.61	1.24
	Eroski	7.54	1.33
	El Corte Inglés	7.71	1.35
	Mercadona	7.62	1.43
	Total	7.60	1.33
SP1: The retailer generally provides a satisfactory price level	Carrefour	7.08	1.36
	Alcampo	7.38	1.24
	Eroski	7.19	1.26
	El Corte Inglés	6.99	1.44
	Mercadona	7.21	1.47
	Total	7.15	1.33
SP2: The general price level does not undergo abusive increases over time	Carrefour	6.88	1.34
	Alcampo	6.99	1.30
	Eroski	6.88	1.31
	El Corte Inglés	6.87	1.34
	Mercadona	6.90	1.46
	Total	6.87	1.34
SP3: At this retailer, I fill my shopping cart for a reasonable price	Carrefour	6.87	1.39
	Alcampo	6.95	1.41
	Eroski	6.88	1.31
	El Corte Inglés	6.73	1.49
	Mercadona	6.93	1.52
	Total	6.92	1.37

Variables in the model	Retailers	Mean	Standard deviation
CF1: The retailer does not cheat me	Carrefour	7.03	1.34
	Alcampo	6.98	1.41
	Eroski	6.99	1.47
	El Corte Inglés	7.11	1.33
	Mercadona	7.17	1.42
	Total	7.13	1.35
CF2: The retailer is honest	Carrefour	7.13	1.39
	Alcampo	7.11	1.42
	Eroski	7.12	1.40
	El Corte Inglés	7.16	1.35
	Mercadona	7.26	1.40
	Total	7.21	1.33
CF3: I trust the retailer	Carrefour	7.26	1.46
	Alcampo	7.22	1.45
	Eroski	7.30	1.50
	El Corte Inglés	7.37	1.38
	Mercadona	7.44	1.39
	Total	7.39	1.36
PR1: When the retailer incorporate new products, I like to try them	Carrefour	6.08	1.99
	Alcampo	6.32	1.95
	Eroski	6.22	2.02
	El Corte Inglés	6.09	1.98
	Mercadona	6.28	2.00
	Total	6.20	2.00
PR2: When the retailer incorporate new brands, I like to try them	Carrefour	6.23	1.99
	Alcampo	6.38	1.91
	Eroski	6.30	2.04
	El Corte Inglés	6.16	1.96
	Mercadona	6.33	2.02
	Total	6.29	1.99

**Table 3.** Analysis of the variables of the model by retailer.

results respect the limits proposed in the scholarly literature for goodness of overall fit of the measurement model.

The results for reliability and validity of both subsamples are presented in **Tables 5** and **6**, respectively. In all cases, the statistics used for reliability—the Alpha Cronbach and composite

Regular retail chain customers ( $n = 324$ )	Nonregular retail chain customers ( $n = 174$ )
$\chi^2/\text{df} = 1.14$ ; CFI = 0.997; AGFI = 0.957; RMSEA = 0.02	$\chi^2/\text{df} = 2.08$ ; CFI = 0.963; AGFI = 0.868; RMSEA = 0.06

**Table 4.** Indicators of goodness of fit of the measurement model for both groups.

Variables	$L_i$	$E_i$	Reliability		Validity	
			Alpha Cronbach	Composite reliability (CR)	Average variance extracted (AVE)	Convergent validity
Perceived quality of assortment						
CS1	0.60	0.66	0.75	0.74	0.50	t = ...
CS2	0.76	0.42				t = 6.14***
CS3	0.74	0.46				t = 5.83***
Satisfaction with price levels						
SP1	0.82	0.33	0.81	0.83	0.62	t = ...
SP2	0.71	0.50				t = 7.49***
SP3	0.82	0.32				t = 10.39***
Trust in the retailer						
CF1	0.82	0.33	0.88	0.86	0.67	t = ...
CF2	0.78	0.39				t = 12.40***
CF3	0.86	0.26				t = 17.98***
Trying innovative products						
PR1	0.92	0.15	$r = 0.84^{***}$	0.92	0.85	t = ---
PR2	0.92	0.16				t = 14.43***

Significance: \*\*\*  $p < 0.001$ . $L_i$ : Standardized loading;  $E_i = (1 - R^2)$ : error variance.**Table 5.** Analysis of reliability and validity of the measurement scales in the sample of regular customers.

reliability—exceed the minimum value of 0.70 recommended by Ref. [45]. In all cases, the average variance extracted is greater than or equal to 0.5, and all items have good convergent validity, since the results show that all parameters are statistically significant.

We also confirm discriminant validity in both subsamples. **Table 7** shows that the square root of the average variance extracted from each construct in all cases is higher than the correlation between each pair of concepts.

### 4.3. Causal relationship model

First, the model in **Figure 1** was estimated using structural equations, without including moderating effects. The fit obtained is satisfactory ( $\chi^2 = 57.71$ ;  $\text{df} = 31$ ;  $\chi^2/\text{df} = 1.86$ ;



Variables	$L_i$	$E_i$	Reliability		Validity	
			Alpha Cronbach	Composite reliability (CR)	Average variance extracted (AVE)	Convergent validity
Perceived quality of assortment						
CS1	0.82	0.33	0.77	0.79	0.56	$t = \dots$
CS2	0.82	0.33				$t = 6.42^{***}$
CS3	0.60	0.67				$t = 4.39^{***}$
Satisfaction with price levels						
SP1	0.94	0.12	0.86	0.85	0.66	$t = \dots$
SP2	0.72	0.48				$t = 8.29^{***}$
SP3	0.76	0.42				$t = 9.08^{***}$
Trust in the retailer						
CF1	0.84	0.30	0.88	0.88	0.72	$t = \dots$
CF2	0.94	0.11				$t = 13.59^{***}$
CF3	0.75	0.44				$t = 5.79^{***}$
Trying innovative products						
PR1	0.60	0.69	$r = 0.83^{***}$	0.70	0.54	$t = \dots$
PR2	0.88	0.23				$t = 5.71^{***}$

Significance: \*\*\*  $p < 0.001$ .

$L_i$ : standardized weighting;  $E_i = (1 - R^2)$ : error variance.

**Table 6.** Analysis of reliability and validity of the measurement scales in the sample of nonregular customers.

		Perceived quality of assortment	Satisfaction with price levels	Trust in the retailer	Trying innovative products
Perceived quality of assortment	Regular	0.70	0.45	0.44	0.39
	Nonregular	0.75	0.36	0.45	0.45
Satisfaction with price level	Regular		0.79	0.53	0.32
	Nonregular		0.81	0.20	0.68
Trust in the retailer	Regular			0.82	0.48
	Nonregular			0.85	0.26
Trying innovative products	Regular				0.92
	Nonregular				0.73

Diagonal: square root of the variance.

**Table 7.** Analysis of discriminant validity for both subsamples, using the average variance extracted method.

CFI = 0.990; NFI = 0.980; IFI = 0.990; GFI = 0.979; AGFI = 0.956; RMSEA = 0.042), confirming that trust in the retailer, perceived quality of assortment and satisfaction with price level have a significant influence on consumers' acceptance of new products and brands. **Table 8** presents the parameters obtained.

Once we confirm the measurement invariance required to compare the groups of customers, we observe that two of the three antecedents analyzed—satisfaction with retailer's price level and trust in the retailer—affect the two samples with different intensity relative to the consumer's intention to try innovative products (see **Table 9**).

Specifically, for both regular and nonregular customers, perceived quality of the retail assortment has a positive and significant influence on acceptance of new products and brands. We see, however, that the effect of trust in the retailer is significantly higher in the case of regular customers, as was proposed in Hypothesis 4, but is not significant in nonregular customers. This difference indicates that, insofar as regular customers trust their shopping chain, they perceive less risk in the new products their retail chain commercializes and feel more inclined to try the products than do nonregular customers. In addition, although we did not propose it initially, we see that satisfaction with the retail chain's price level is an incentive for nonregular customers to try new products, whereas the effect of this antecedent is not significant for regular customers. One of the main variables influencing new product acceptance is consumers' price sensitivity [24]. The strong statistical correlation between regular shopping behavior and loyal shopping is widely recognized in the scholarly literature. Furthermore, loyal customers are less sensitive to high prices and to price increases. These phenomena, confirmed in the prior literature, would explain at least partially why regular customers' intentions to try new products do not increase significantly with increased satisfaction with the retailer's affordable prices [46], whereas sporadic customers are more price-sensitive [47],

Model relationships	Standardized coefficient	t-value
Perceived quality of assortment → Trying innovative products	0.23	3.42***
Satisfaction with price level → Trying innovative products	0.17	2.69***
Trust in the retailer → Trying innovative products	0.25	4.40***
*** $p < 0.001$		

**Table 8.** Modeling results for antecedents of trying innovative products.

Antecedents	Regular customers	Nonregular customers	Critical ratios of differences between parameters
Perceived quality of assortment	0.22***	0.28**	0.34 (n.s.)
Satisfaction with price level	0.04 (n.s.)	0.20**	1.65*
Trust in the retailer	0.35***	0.11 (n.s.)	2.72***

$t = 1.65$  for  $p < 0.1$ ,  $t = 1.96$  for  $p < 0.05$ , and  $t = 2.58$  for  $p < 0.01$ , \*\*\* $p < 0.001$ , \*\* $p < 0.05$ , \* $p < 0.01$ .

**Table 9.** Modeling results for antecedents of trying innovative products in regular and nonregular customers of the retailer.

compare the supply at multiple retailers, and use satisfaction with a specific retailer's price levels as a factor determining their intention to try that retailer's new products.

## 5. Conclusions, limitations, and future lines of research

While some authors have investigated consumer resistance to innovation (e.g., see Ref. [48]), explained through (1) rejection, (2) postponement, and (3) opposition, depending on the degree of change required and conflicts with the consumer's prior belief structure, this chapter focuses instead on positive adoption decisions.

The results obtained in this research enable us to confirm that the model proposed functions well to explain the consumer's intention to try innovative products in the retail context. First, trust in the retailer, perceived quality of assortment, and satisfaction with price level contribute to increasing the consumer's intention to try novel products and brands.

According to the descriptive results obtained, it can be indicated that the quality of the assortment and the satisfaction with the price level of the chains are two fundamental variables that the retailers must jointly manage to encourage the testing of new brands. In this study, Mercadona, Alcampo, and Eroski, which enjoy the most satisfactory levels in terms of the quality of their assortments and in terms of their price level, are those that have a greater success in relation to their new brands. El Corte Ingles is appreciated by the quality of its assortment but it is a chain with a high level of prices, which reduces the possibility of testing its brands' innovations. In the case of Carrefour, this chain should improve the positioning of its assortment in terms of quality and in terms of price levels to promote the trial of products' innovations.

It may be assumed that customers have some previous experience or knowledge about the parent brand that incorporates the innovation when he/she is going to try an innovation. This implies that a brand extension strategy is favored by the brand equity of the parent brand (e.g., consistency in quality level, brand image, brand reputation or loyalty). Also, customer trust in the parent brand favors the adoption of new products (e.g., new sizes or types of packaging, new flavors, etc.).

Customer trust in the retailer is particularly relevant. Generally, the trial of new products implies increased perceived risk due to the lack of knowledge customers have about the new product (e.g., the use of a new technology, new ingredients, etc.). So, in addition to the guarantee provided by the quality of the assortment and the incentive that supposes an adequate price level, customer's trust in the retailer will play a key role in diminishing the resistance toward product innovations. This suggests that retailers should make sure the necessary information about the new products is available to the consumer at the moment it is requested or needed. For example, attractively presenting the new products in the store, but outside store, social media or new technologies can be particularly helpful in illustrating how new products can be incorporated in daily habits or situations. Also, the collaboration of manufacturers and retailers in terms of communication campaigns to inform about the features of new products (e.g., ingredients, etc.) to reduce the perceived risk can be very useful.

Secondly, retailers must make significant investments in research, development, and innovation related to their assortments. The design and development processes in terms of new products play a critical role. To address the concern of building customer acceptance of innovations, retailers need to focus on the strategic role of the image and the awareness of the products and brands they market.

Also, retailers must practice a customer-oriented policy, encouraging customers' participation in terms of ideas and suggestions to develop goods and services that better meet their needs (value cocreation). For example, Mercadona, who enjoys high average levels of acceptance of its new products, has developed a system of coinnovation with 9000 customers, thanks to which it launches 400 references per year. In Mercadona's coinnovation centers, there are 180 monitors to interact with customers, as well as workers who receive consumer suggestions. These coinnovation centers identify the selection of products that are going to be developed according to users' needs. Thanks to this system, Mercadona has achieved a great success in terms of innovation. For example, it has recently launched a new line of vegan and fitness products such as tabule with fresh vegetables, lentil, salad, etc. [49].

Thirdly, retailers must design attractive price promotions to favor the testing of new products or brands because lower prices encourage customers to buy them—66.2% of Spanish consumers like to try new products, however 48.8% of them indicate that price is a determining factor in the choice of this new product [50].

Although the retailer's quality of assortment is an antecedent of intention to try the retail chain's innovative products regardless of the group of consumers analyzed, the effect of trust in the retailer and satisfaction with price level on new product acceptance varies according to the group of customers analyzed.

We can derive important strategic implications for retailers from the results obtained for the proposed modeling. First, we recommend that commercial chains not betray their regular customers' trust, because these customers' trust in the honesty, benevolence, and good deeds of the retailer will make them more inclined than nonregular customers to try the new products and brands the retailer commercializes. Regular customers that trust the retail chain give the chain greater profitability than do nonregular customers, since the former add innovative products to their shopping carts more easily, basing their decisions less on economic criteria and more on the trust they place in the retailer than do nonregular customers.

In contrast, to get nonregular customers to try the new products and brands commercialized by retailers, retailers should communicate positioning based on quality of assortment and consistent price level over time. This recommendation stems from the fact that nonregular customers, who are in an early phase of their relationship with the retailer, base their intentions to try new products more on the functional aspects of retail strategy than on emotional aspects. Nonregular customers' trust will be constructed over time as the fruit of repeated interactions with the commercial chain, becoming a future decisive factor in their intention to try new products. At this initial stage, however, assortment quality and price are the retailer characteristics that make noncustomers more inclined to try new products.

Given the different behavior of both segments (regular and nonregular customers), we can recommend retailers' different commercial strategies according to each group. For attracting

nonregular customers with their innovations, retailers could invest on advertising that communicates price promotions in order to increase the differentiation of their assortment in terms of price. Regular customers, who frequently visit stores and trust the retailer, will be more sensitive to merchandising actions that take place in the point-of-sale. Therefore, it is recommended that retailers generate many contact points in the store between the new product and/or new brand and the regular customer (e.g., attractive signage, placement of innovations in strategic and visible places of the stores).

This study is not exempt from limitations, which could be taken into account in future studies. The data were obtained for the Spanish mass consumption market. It is advisable for future studies to include other countries, product categories, and customers' buying habits. The percentage of customers that are prone to innovations varies according to the country analyzed: it is estimated that in the United Kingdom this percentage is 24% compared to 14% in France and 9% in Spain. These differences could be important in deciding a global innovation campaign, since customers would be more likely to try the new products in countries with a higher percentage of innovative shoppers. In terms of new product categories, future studies could focus on durable goods that require greater information search and purchase planning and thus exhibit lower innovation-acceptance ratios than consumer goods [8]. Also, customers susceptible of storing products in the home would have less opportunity to interact in the store, thus reducing their probability of innovations' trial [8]. The tendency to store products of a certain category could be considered as a negative factor in the acceptance of innovation. Finally, buying behaviors that include situations of greater risk or purchase complexity would also be more susceptible to failure or to delay the acceptance of new products over time [8].

Also, it is advisable for future studies to differentiate among other groups of customers than those analyzed. For example, it could be incorporated psychological traits of individuals, such as their innovation proneness.

Also, it would be interesting to incorporate the moderating effect of the retail strategy in relation to the importance given to the private labels and manufacturer brands in its assortment. Since consumers can only accept the innovations that retailers incorporate in their shelves, the trial of new products and brands will be conditioned by their incorporation in the retailers' assortments. For example, as we mentioned in the introduction, there are retailers that support the introduction of manufacturer brands' innovations, such as Alcampo, Eroski, and Carrefour, whereas other retailers, such as Mercadona, back the introduction of their own brands' innovations.

Finally, it would be interesting for future research to incorporate new antecedents into the model to improve the explanatory power of the dependent variable (consumer's acceptance of new products), as well as to incorporate new dimensions of this construct, beyond the consumer's intention to try, in order to enrich the research variable conceptually.

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