The impact of retail store format on the satisfaction-loyalty link: An empirical investigation

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ABSTRACT

Maintaining and improving customer loyalty is an important strategic goal for businesses as competition has intensified in almost all sectors of the economy. Retailers, in particular, feel the need to invest in customer loyalty more than ever before as channels and store format alternatives available for consumers to shop at have proliferated. However, current research in marketing provides little guidance to retail managers about developing and sustaining shopper loyalty across different store formats. Toward filling this gap, the present research examines the shopper satisfaction-loyalty link in two different store formats (supermarkets and hypermarkets). Using data from surveys of 505 Spanish shoppers at both types of retail formats, we examined how shoppers' attitudinal and behavioral loyalty develop differently. Our results reveal important differences and offer directions for the pursuit of different strategies by supermarkets and hypermarkets. The specific strategies, and the implications of this research for theory and practice are discussed.

1. Introduction

The construct of customer loyalty has always attracted interest from both academics and practitioners. This is because customer loyalty is an important asset in today's intensely competitive environment (Srivastava, Shervani, & Fahey, 1998). As companies find themselves under more pressure in the marketplace, they seek to improve customer loyalty in the hope of securing future sales and revenue. This is especially true for retailers who are facing competition from multiple channels (online and offline) and multiple retail store formats (hypermarkets, supercenters, supermarkets, etc.). According to a recent (2013) survey by Retail Systems Research (www.rsrresearch.com), 61% of retailers believe that customer retention is the most important challenge they face in managing their businesses. At the same time, Northwestern University's Center for Retail Management reported that only 12 to 15% of retail customers are loyal to a single retailer! These figures underscore the unprecedented challenge faced by all retailers and the specific importance of planning and implementing successful loyalty building strategies to protect and increase their share of the market. However, in spite of numerous articles in marketing and retailing literatures that have examined the antecedents and processes leading to and/or enhancing customer loyalty, there is still uncertainty among retail managers on how to best allocate resources to various loyalty-building efforts. Moreover, it is not clear whether the mechanism for building loyalty varies by contingencies such as retail store format type considering that today there are multiple store formats selling the same product categories (e.g., hypermarkets, supercenters, and supermarkets).

Some of the uncertainty about how to build loyalty stems from continuing debate about the antecedents of loyalty less than 25%. For example, while many assume that customer satisfaction is a strong predictor of loyalty in the marketing literature, several studies have found evidence to the contrary (e.g. Homburg & Fürst, 2005; Verhoef, 2003). In this vein, a meta-analysis by Szymanski and Henard (2001) concluded that < 25% of repeat purchase behavior is attributable to customer satisfaction. Thus, the need for better understanding of the customer satisfaction–loyalty link persists.

In a recent comprehensive review in the *Journal of Retailing*, Kumar,

Pozza, and Ganesh (2013) stress that extant research on the link between satisfaction and loyalty does not yet offer clear guidance to marketers. They argue that part of this ambiguity is because this relationship is more complex than current theoretical models suggest. That is, the satisfaction-loyalty link could depend on various moderators and mediators that need more investigation. Therefore, they encouraged researchers to consider more holistic models that include relevant variables. Furthermore, they note the differences in how loyalty is defined and measured across different articles. Most empirical research studies have either not distinguished between two types of loyalty - attitudinal and behavioral - or focused only on one or the other of these loyalty types. Consequently, it is not still clear whether strategies suggested to build, say, behavioral loyalty, will also enhance attitudinal loyalty and under what conditions. Thus, there is a need for more studies that clearly distinguish between the two constructs of attitudinal and behavioral loyalty as well as conceptualize and empirically investigate how satisfaction affects them in different contexts and contingencies.

Against this backdrop, the goal of the present research is to contribute to loyalty research literature in marketing and store format strategy literature in retailing. We do so by proposing and empirically testing a conceptual model that distinguishes between attitudinal and behavioral loyalty and relates two important antecedents, satisfaction and trust, to each type of loyalty in two different store formats (supermarkets and hypermarkets). That is, we develop hypotheses of how customer satisfaction, trust, attitudinal loyalty, and behavioral loyalty are related, and how store format moderates these relationships. We test our conceptual model in the context of grocery retailing using data obtained from a survey of 505 grocery shoppers in Spain. Fig. 1 presents the conceptual model for our investigation. We present our related hypotheses and their rationales in the next section. We test this model on our Spanish survey data using structural equation modeling. To summarize, our study aims to answer the following research questions:

(1) How does the distinction between the two types of loyalty in our model alter extant theory and findings about the satisfaction-attitudinal loyalty and satisfaction-behavioral loyalty links?
(2) Does store format (supermarket vs. hypermarket) moderate the links between satisfaction and two types of loyalty? If so, what are the implications for retail managers and scholars interested in strategies for building store loyalties?

Showing a moderation effect of store format, as we propose in our conceptual model, would not only confirm Kumar et al. (2013)'s position on the need for testing context-specific contingencies in the relationship between satisfaction and loyalty, it would also provide retail managers with much more clear and specific guidance in their loyalty building strategies. While our findings are based on data from grocery retailing, we discuss how our research can benefit all retail establishments (grocery and non-grocery) determining how to build shopper loyalty.

Our results suggest that satisfaction and trust positively influence behavioral loyalty but only through attitudinal loyalty, i.e., their direct influences on behavioral loyalty are not significant. This implies that attitudinal loyalty is a precursor of behavioral loyalty and focusing directly on the latter is unlikely to be a fruitful strategy. We also find that there are some important differences between supermarkets and hypermarkets, i.e., the satisfaction-loyalty link varies with the retail store format. In particular, trust mediates the satisfaction-loyalty link in the supermarket but not in the hypermarket context. This difference is due to the moderating effect of store format on two specific relationships: satisfaction to attitudinal loyalty and trust to attitudinal loyalty. This important finding indicates different strategies and resource allocations to build loyalty in these two major types of grocery retailing formats. By extension, it also suggests that the overall link between satisfaction and loyalty is in fact context-specific. Thus, claims of generalizability must be made with caution.

The remainder of this paper is organized as follows. First, we review the literature in order to provide the rationale for our overall conceptual model. We then define the concepts of satisfaction, trust, attitudinal and behavioral loyalty and hypothesize how they are linked, and how store format would moderate these relationships. Then, we test our model using structural equation modeling on data obtained from consumer surveys conducted at the end of customers' shopping trips to supermarket and hypermarkets in Spain. We conclude with a discussion of the importance of our findings to both marketing and retailing research and their implications for managers of supermarkets and hypermarkets.

2. Background and model development

Oliver (1999, p. 34) defined consumer loyalty as "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future." As such, building and improving customer loyalty can secure long-term profitability for firms. Loyalty's importance grows in the face of competition. Retailers in general and grocery retailers in particular, are among the firms that face intense competition. Proliferation of channels and store formats and the expansion of consumers' choice as it relates to which retailer to shop from have made retaining current customers more important than ever. Not only grocery customers now have the option to purchase groceries online from their
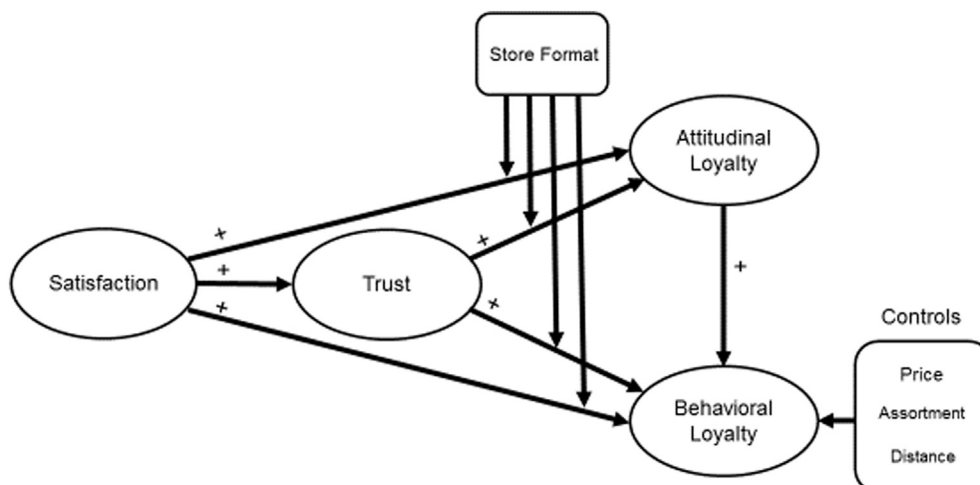

Fig. 1. Hypothesized model.

homes, but also there are various store formats (supermarkets, hypermarkets, convenience stores, etc.) that can fulfill their needs when they go shopping. Thus, successful planning and implementation of loyalty building strategies should be, and in fact is, a major goal for grocery retailers.

Much of the literature to date suggests that improving customer satisfaction is the key to improving loyalty. However, several recent studies have found that the relationship between satisfaction and loyalty is not as strong as widely assumed. Moreover, the relationship is more complex than previously thought and customers who say they are satisfied may still defect (Reichheld, 1996). These observations all point to the need for better models and empirical work to improve our understanding of the relationship between satisfaction and the two types of loyalty: attitudinal and behavioral.

Fig. 1 presents our proposed model and hypothesized relationships. In the following sections, we discuss each link and hypothesis.

2.1. Satisfaction-loyalty link

In the context of retailing, Bloemer and De Ruyter (1998) defined satisfaction as "the outcome of the subjective evaluation that the chosen alternative (in our case, the store) meets or exceeds expectations" (p. 501). Satisfied customers are positively impressed by products and services offered by a retailer. This positive attitude plays an important role in the future purchases of a customer as same levels of product quality and service are expected. Subsequently, unless other competitors offer significantly better value for the customers' money, it is very likely that customers return for future purchases to the same store. In the context of grocery retailing, customers usually have a 'focal store' where they spend the majority of their grocery budget. (East, Hammond, Harris, & Lomax, 2000; Meyer-Waarden & Benavent, 2009). Since shopping for groceries is associated with lower risk and lower involvement, satisfied customers usually patronize the same grocery store unless there is an episode of dissatisfaction or an attractive promotional deal is introduced by other stores. Thus, in general, a positive relationship between customer satisfaction and loyalty is expected even though this relationship may be subject to moderators and contextual factors. Furthermore, several studies in marketing suggest that satisfaction of customers' needs constitutes one of the antecedents of loyalty whether the context is a brand or a particular store (Bloemer & De Ruyter, 1998; Deng, Lu, Wei, & Zhang, 2010; Fornell, 1992; Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Gustafsson, Johnson, & Roos, 2005; Mittal & Kamakura, 2001).

The marketing literature distinguishes between two types of loyalty: attitudinal loyalty and behavioral loyalty. In the context of retailing, attitudinal loyalty refers to positive attitudes held by customers about a particular store or retail outlet, whereas behavioral loyalty refers to repeat purchases by a customer at a specific retailer (Dick & Basu, 1994). This distinction is important as attitudes might not necessarily lead to customer behavior desired by a retailer (repeat patronage). In fact, previous literature suggests that attitudinal loyalty in the absence of re-patronage behavior ("Latent Loyalty"), and re-patronage in the absence of attitudinal loyalty ("Spurious Loyalty") can occur (Day, 1969; Dick & Basu, 1994). Thus, it is very important to distinguish between attitudinal loyalty and behavioral loyalty as two separate, although inter-related, constructs. While it is common to encourage retailers to design strategies to boost both types of loyalty, several papers have argued that behavioral loyalty is more important as it impacts directly the retailer's bottom line (Bemmaor, 1995; Chandon, Morwitz, & Reinartz, 2005; Liu, 2007). Therefore, we consider behavioral loyalty or re-patronage behavior to be the ultimate goal that retailers strive for, and treat it as the ultimate dependent variable of interest in our model.

Based on the above discussion and previous research, we expect customer satisfaction to increase both positive attitude toward the retailer (attitudinal loyalty) and the probability of repeat purchases (behavioral loyalty), i.e.

H1. An increase in customer satisfaction increases attitudinal loyalty.

H2. An increase in customer satisfaction increases behavioral loyalty.

2.2. Mediating role of trust

As already noted, the relationship between satisfaction and loyalty appears not as strong in some studies as marketers and academic researchers often assume (Homburg & Fürst, 2005; Szymanski & Henard, 2001; Verhoef, 2003). In fact, these studies have shown that satisfaction accounts for a relatively small portion of the variance in loyalty when the model includes only the two constructs. These observations suggest some other variable may mediate the satisfaction to loyalty relationship. We propose that this mediator is 'trust' following Morgan and Hunt (1994) argument that trust is a "key mediating variable" in marketing relationships, and failing to include trust in the studies of relationship marketing processes would lead to "flawed" conclusions about the relationship between antecedents and outcomes. Kumar et al. (2013) also suggest that trust is a "desirable" mediator for the satisfaction-loyalty link.

Trust in a particular brand or retailer refers to expectation of honesty and dependability in quality of associated products and services (Garbarino & Johnson, 1999). When a customer is satisfied with her/his purchases from a specific retailer over time, s/he is more likely to believe that the same level of quality would be offered by the retailer in the future i.e., s/he is more likely to trust the retailer. This is consistent with Social Exchange Theory (Emerson, 1976), which is a powerful theoretical framework that provides support for the relationships hypothesized in this study.

The essence of SET is that "social exchange comprises actions contingent on the rewarding reactions of others, which over time provides for mutually and rewarding transactions and relationships" (Cropanzano & Mitchell, 2005, p. 890). In a social exchange, two or more actors who value something that the other actor(s) possess, engage in a joint activity/exchange (Lawler, 2001). It is well established in sociology and social psychology literatures that repeated successful exchange generates positive emotions and promotes cohesion (Lawler, 2001). Moreover, it has also been shown that along with affective and emotional processes, an uncertainty reduction process is also involved in the context of repeated exchanges (Lawler, Thye, & Yoon, 2000). Thus, repeated successful exchanges lead to positive emotions and reduced perceived uncertainty both of which lead to increased level of trust. Finally, the causal relationship between satisfaction and trust is established in several marketing studies (e.g. Geyskens, Steenkamp, Scheer, & Kumar, 1996; Siguaw, Simpson, & Baker, 1998). Therefore, we formally hypothesize that,

H3. Increase in satisfaction increases trust.

Trust, in turn, affects attitudinal and behavioral outcomes. When a customer trusts a retailer, s/he already holds positive attitudes toward that store. Such a positive attitude increases the chance that s/he recommends and revisits the store. Therefore, grater trust has the potential to increase attitudinal and behavioral loyalty. As Cropanzano and Mitchell (2005) put it, "one of the basic tenets of SET is that relationships evolve over time into trusting, loyal, and mutual commitments." (p. 875) Moreover, SET's principle of generalized reciprocity, which has been applied widely in business research (Cropanzano & Mitchell, 2005; Morgan & Hunt, 1994), suggests that reciprocal exchanges lead to interdependence and reduces perceived risk and uncertainty which are necessary conditions for future cooperation (Molm, 1994). Each successful reciprocal interaction creates a "self-reinforcing cycle" that increases the likelihood of future exchange (Cropanzano & Mitchell, 2005). Therefore, trust in a retailer that is achieved over time can induce strong positive recommendation, word-of-mouth, and re-patronage behavior. In other words, trust should have

a positive and direct effect on both attitudinal loyalty and behavioral loyalty. Finally, previous empirical work in marketing has shown that trust mediates the satisfaction-loyalty link and significantly increase the R^2 for models designed to explain the relationship between the two constructs (Agustin & Singh, 2005; Garbarino & Johnson, 1999; Morgan & Hunt, 1994). Therefore, we hypothesize:

H4. Increase in trust increases attitudinal loyalty.

H5. Increase in trust increases behavioral loyalty.

2.3. Relationship between attitudinal and behavioral loyalty

Attitudinal and behavioral loyalty are two distinct constructs. Whereas attitudinal loyalty refers to the customer's propensity to recommend a store or brand and hold generally positive attitudes, behavioral loyalty refers to actions that would result from those attitudes. Marketing literature suggest that attitudinal loyalty precedes behavioral loyalty (Dick & Basu, 1994). The two constructs are closely related and it is suggested that attitude would lead to behavior. However, there are instances when positive attitude (purchase intention) does not lead to purchase, probably because the shopper has a more favorable attitudes toward competing brands or stores. The expression of a favorable attitude toward some product that does not actually result in its purchase has been termed "Latent Loyalty" (Dick & Basu, 1994). There are also instances when repeat purchase does not result from positive attitude. In those cases, the loyalty is "Spurious" (Day, 1969). In general, however, latent and spurious loyalty are more exceptions than the general rule as there is enough evidence in the literature of a positive causal relationship between attitudinal and behavioral loyalty (Dick & Basu, 1994; Jacoby & Chestnut, 1978; Jacoby & Kyner, 1973). Therefore, we hypothesize that:

H6. Increase in attitudinal loyalty increases behavioral loyalty.

While hypotheses H1 through H6 have been supported in disparate studies in the past, to the best of our knowledge, we are the first to empirically test relationships between the four constructs of satisfaction, trust, attitudinal loyalty, and behavioral loyalty simultaneously within a single model.

2.4. The moderating role of store format

In this section, we posit that the significant differences between supermarket and hypermarket store formats can affect the relationships between satisfaction and loyalty (attitudinal and behavioral) as well as the relationships between trust and loyalty. We draw on customer retail store choice literature and service output theory from the marketing channels literature to develop our hypothesis with respect to the moderating role of store format.

A supermarket is a retail food store with particular focus on groceries. The assortments it sometimes supplemented with health and beauty items and general merchandise (Levy & Weitz, 2012). On the other hand, hypermarkets offer a wide range of consumer products including food and groceries, appliances, furniture, electronics etc. While hypermarkets are not common in the U.S., they are widespread in Europe and South America (Levy & Weitz, 2012). The French-based retail giant Carrefour, for example, has hypermarkets in various regions. In the U.S., supercenters like those of Walmart are the closest counterparts to hypermarkets and are similar in terms of size, assortment etc. Since our data came from a European country where hypermarkets can be found in most cities with sizeable populations, we focus on supermarkets versus hypermarkets. In the U.S., we expect our findings to hold when we move between supermarkets and supercenters.

The defining differences between hypermarkets and supermarkets are that the former typically have a broader product assortment, lower prices (because of operating efficiencies and bargaining power when they deal with manufacturers and wholesalers), and can provide one-stop shopping convenience for their customers (González-Benito, Munoz-Gallego, & Kopalle, 2005; Koistinen & Järvinen, 2009). On the other hand, supermarkets charge higher prices and carry a more limited product assortment that makes one-stop shopping difficult. However, they usually provide more *personalized service* and *customized experience* to compete with larger establishments (Levy & Weitz, 2012). Cooking classes, food tasting, and entertaining children while their parents shop are some examples of supermarkets' efforts to appeal to some customers.

According to retail store choice literature, the mix of benefits (both tangible and intangible) offered by each store affects customers' perceived utility differently as their utility functions vary (Cleeren, Verboven, Dekimpe, & Gielens, 2010; Solgaard & Hansen, 2003). For example, Messinger and Narasimhan (1997) show that larger assortments become more attractive to consumers with high disutility for shopping effort. In their qualitative study of Finnish grocery shoppers, Koistinen and Järvinen (2009) found that grocery shoppers who visit supermarkets are less price sensitive and more concerned about personal service compared to hypermarkets. Also, Bhatnagar and Ratchford (2004) found that the interplay between prices, consumer travel cost, and consumer's inventory capacity can explain the variation in choice of retail store format. Based on their research they argued that in most cases, the store format chosen by consumer is the one that minimizes the perceived costs (price of product, travel cost, and consumer's storage cost). Finally, using a hierarchical Bayes model to investigate customer choice between different formats (supermarkets, hypermarkets and discount stores), Solgaard and Hansen (2003) found price, assortment, and distance to be the main predictors of store format choice. In sum, previous literature on store format choice suggests that the choice of store format depends on the differences in their offerings (both products and services) that affect customers' expected value and utility in different ways. In other words, *customers' overall experience*, rather than just satisfaction with certain products or services, is affected by mix of benefits that are valued differently by customers based on their utility functions, which in turn affects their choice of store format. Customers are expected to choose a store with the potential to enhance their overall experience. Store format as a categorical variable that represents a particular set or bundle of benefits associated with a format has the potential to influence the relationships hypothesized earlier through affecting customers' perceived utility. In other words, it can strengthen or weaken the relationships between satisfaction and loyalty as well as trust and loyalty as a result of different overall experiences customers have when shopping at different store formats.

Consistent with the store choice literature, service output theory (Coughlan, Anderson, Stern, & El-Ansary, 2006) in the marketing channels literature suggests that end-users' decision regarding where to shop is not solely based on product attributes or even price. Rather, end-users make trade-offs between those factors and service outputs (i.e. how the product is purchased) when choosing a retail format. The format that offers higher level of service outputs such as customer service, information provision, reduced waiting time, and spatial convenience is more appealing to customers. In a nutshell, supermarkets and hypermarkets, represent different mixes of service outputs from a shopper's viewpoint, that affect the overall shopping experience. As mentioned earlier, we expect these differences in store format to moderate the hypothesized effects. The magnitude of the moderating effect is an empirical question. Thus,

H7. Store format (in this case supermarket vs. hypermarket) has a moderating effect on the relationships between (a) satisfaction and attitudinal loyalty; (b) satisfaction and behavioral loyalty; (c) trust and attitudinal loyalty; (d) trust and behavioral loyalty.

3. Empirical study

3.1. Sample and data collection procedure

From December 2009 to January 2010, we conducted surveys of shoppers at all supermarkets and hypermarkets in Burgos, Spain. Burgos has a population of 179,251, of which 136,987 are over 18 years of age (Spanish National Statistics Institute, 2010), which makes it an average size city in the country. Trained interviewers approached customers at the end of their shopping trips at 24 supermarkets (from six different chains/brands) and 3 hypermarkets (from three different chains/brands). Shoppers were asked questions aimed at measuring constructs of our proposed model as well as obtaining their perceptions of store characteristics. Ultimately, we had 505 completed questionnaires to use for our analysis (295 from supermarket customers and 210 from hypermarket customers). Approximately, 65% of our respondents were female. Majority of respondents were between the ages of 24 and 54, and had a monthly income between 600 and 2800 Euros.

3.2. Measures

We have adapted our measures from previous studies. All our constructs were measured using multiple items (5-point Likert Scales). Satisfaction was measured using three items (5 point dissatisfied-satisfied Likert Scale) to reflect overall satisfaction with the establishment. The items were adapted from Fornell (1992) and Chang, Chen, Hsu, and Kuo (2010). Trust in the establishment was measured using 5 items (5 point agree-disagree Likert Scale) adapted from Doney and Cannon (1997) and Ganesan and Hess (1997). Attitudinal loyalty was measured using two items (5 point agree-disagree Likert Scale) adapted from Wu (2011) and Yang and Peterson (2004). Finally, we measured behavioral loyalty using two items (5 point agree-disagree Likert Scale adapted from Reutterer and Teller (2009) and Wu (2011). All constructs and items are presented in Table 1. Finally, our store format variable is a categorical binary variable with two possible values: 0 for hypermarket and 1 for supermarket.

We used three control variables (customer perceptions of price, assortment variety, and distance to their place of residence), which have been used in previous research as antecedents of grocery store choice (e.g. Solgaard & Hansen, 2003) to show that our hypothesized links to behavioral loyalty (our main dependent variable) have explanatory power beyond those control variables. All three control variables were measured by asking respondents to rate how they perceived them on a 5 point very poor-excellent Likert Scale.

3.3. Common method variance

To reduce the usual concern with respect to common method variance in data collected from same respondents (Podsakoff & Organ, 1986), we employed techniques to reduce potential bias: we used well-established scales, assured respondents of anonymity of responses, and separated the measurement over a large survey as recommended for study of attitudes and their relationships (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Furthermore, after collecting the data, we conducted a Harman single-factor test and confirmatory factor analysis (CFA) to assess whether common method variance remained a significant problem in our research. First, we conducted an explanatory factor analysis with all variables (excluding controls and store format variable). The assumption of Harman single-factor test is that common method variance is a problem if the exploratory factor analysis results in either a single factor or multiple factors where one can account for the majority of covariance between variables (Podsakoff et al., 2003). Our exploratory factor analysis indicated that our variables cannot load on a single factor and no major factor can account for the majority of covariance between variables. Thus, common method variance was not a major problem in our study. Moreover, the results of the CFA indicated that a single factor model was not a good fit for our data (Chi-square (54) = 658.85, p < 0.01, RMSEA = 0.15, IFI = 0.87, CFI = 0.87) further indicating that the likelihood of common method variance bias in our research is very low.

3.4. Analysis and results

We employed a two-step modeling approach, as recommended by Anderson and Gerbing (1988), to test our hypothesized model using structural equation modeling software EQS 6.2 (Bentler, 1995). In the first step, we conducted a CFA to assess the measurement model. In the second step, we performed path analysis to test our main effect hypothesized model (H1 through H6). We conducted path analysis on our pooled sample (N = 505) as well as supermarket (N = 295) and hypermarket (N = 210) subsamples separately to see whether there are significant differences in the hypothesized effects. Finally, we tested the moderation hypothesis (H7).

In order to assess the measurement model, we allowed our latent constructs (satisfaction, trust, attitudinal loyalty and behavioral loyalty) to correlate and obtained the fit indices, which indicated that our measurement model fits the data very well. (Chi-square (48) = 100.944, p < 0.01, RMSEA = 0.05, IFI = 0.99, CFI = 0.99). Standardized factor loadings, R^2 and t-statistic for all items, and coefficient alphas for factors are presented in Table 1. All standardized factor loadings were positive, high in magnitude, and statistically significant, indicating convergent validity.
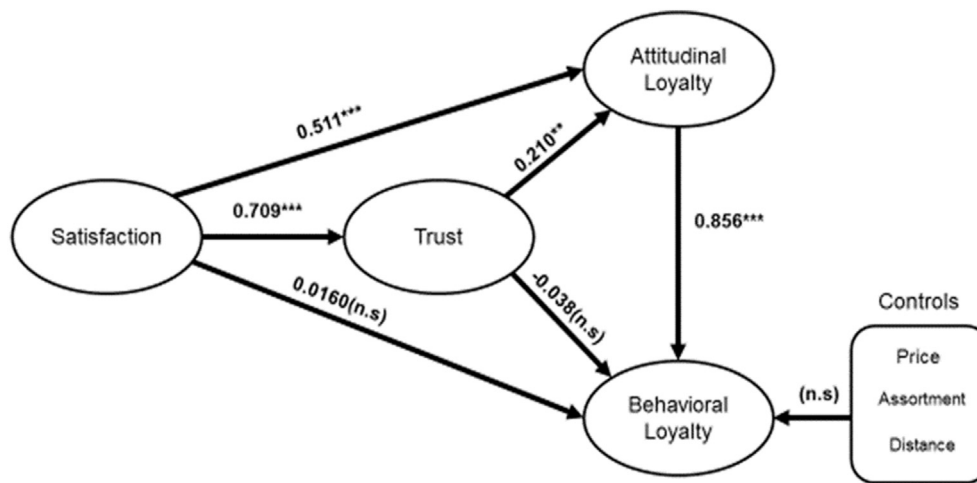
Table 1
Measurement model.

Construct	Item	Standardized loading	R^2	t-Value	Reliability
Satisfaction	How satisfied are you with the purchases made in this establishment?	0.761	0.579		0.794
	How satisfied are you with your purchases at this establishment compared to other establishments?	0.709	0.503	13.475***	
	What is your level of satisfaction with this establishment?	0.806	0.649	15.027***	
Trust	This establishment is responsible and fulfills its promises	0.708	0.501		0.840
	I believe the information provided in this establishment is true	0.762	0.581	14.052***	
	I believe that this establishment behaves honestly.	0.826	0.682	15.047***	
	I trust the good intentions of this establishment	0.754	0.568	13.912***	
	In this establishment they provide me with all necessary information	0.573	0.328	10.718***	
Attitudinal loyalty	Whenever I can, I recommend this establishment.	0.582	0.338		0.667
	I always think of this establishment as the best option	0.866	0.750	11.174***	
Behavioral loyalty	I carry out the majority of my purchases in this establishment	0.739	0.547		0.723
	I intend to continue making my purchases in this establishment	0.773	0.598	14.230***	

Model fit indices: Chi-square = 100.944(48)***, RMSEA = 0.05, CFI = 0.99, IFI = 0.99.
*** p < 0.01.

Fig. 2. Path analysis results for the hypothesized model (main effects).Model fit indices: Chi-square = 281.969 (84)***, RMSEA = 0.06, CFI = 0.96, IFI = 0.96.Standardized path coefficients are presented **p < 0.05, ***p < 0.01.

3.4.1. Test of the main effects

We conducted our path analysis with data from both types of grocery stores (overall sample), using SEM software EQS 6.2 (Bentler, 1995). The model had a good fit for our data. (Chi-square (84) = 281.969 (p < 0.01), RMSEA = 0.06, IFI = 0.96, CFI = 0.96). The path model and the standardized coefficients are presented in Fig. 2. The parameter estimates indicate that H1, H3, H4, and H5 were supported. Satisfaction has a positive and significant influence on trust (β = 0.709, p < 0.01) and attitudinal loyalty (β = 0.511, p < 0.01). Furthermore, trust has a significant and positive effect on attitudinal loyalty (β = 0.210, p < 0.05), and attitudinal loyalty significantly affects behavioral loyalty (β = 0.856, p < 0.01). Nevertheless, in this model, behavioral loyalty is not directly influenced by either trust or satisfaction. Thus, H2 and H5 are not supported. Both satisfaction and trust affect behavioral loyalty through attitudinal loyalty and have no significant direct effect. Also, we found both the direct path from satisfaction to attitudinal loyalty and the indirect path through trust are significant indicating that trust partially mediates the relationship between satisfaction and attitudinal loyalty. This is consistent with previous research that shows trust to be a significant mediator of the relationship between satisfaction and loyalty. It is important to note that trust directly affects attitudinal loyalty and the effect of trust on behavioral loyalty is through attitudinal loyalty.

3.4.2. Test of the main effects in subsamples

As mentioned earlier we conducted our path analysis in both supermarket and hypermarket subsamples to explore any differences between the two on the hypothesized main effects. We split our sample based on store format (supermarket vs. hypermarket) and ran the path analysis separately. The models fit the data well and were significant for both subsamples. The standardized path coefficients shown in Table 2 indicate some similar patterns across the pooled, supermarket, and hypermarket samples. In particular, the results indicate that satisfaction and trust have no direct effect on behavioral loyalty and only influence it through attitudinal loyalty for the pooled sample and each subsample. The important difference that we observed pertained to the role of trust. Whereas trust partially mediated the relationship between satisfaction and attitudinal loyalty for the supermarket sample, it did not do so for the hypermarket sample. This was particularly interesting since previous research has argued that trust is a significant mediator of the satisfaction loyalty link in general. In contrast, we find here that the mediating role of trust is contingent on the context, specifically, store format.

Table 2
Path model analysis.

Relationships	Pooled sample	Supermarket	Hypermarket
H1: Satisfaction ⇨ Attitudinal loyalty	0.511***	0.365***	0.748***
H2: Satisfaction ⇨ Behavioral loyalty	0.160 (n.s)	0.146 (n.s)	0.139 (n.s)
H3: Satisfaction ⇨ Trust	0.709***	0.672***	0.757***
H4: Trust ⇨ Attitudinal loyalty	0.210**	0.307***	0.035 (n.s)
H5: Trust ⇨ Behavioral loyalty	− 0.038 (n.s)	0.047 (n.s)	− 0.151 (n.s)
H6: Attitudinal loyalty ⇨ Behavioral loyalty	0.856***	0.792***	0.969***
Model fit indices			
Chi-square	281.969 (84)***	192.120 (84)***	188.140 (84)***
RMSEA	0.06	0.06	0.07
CFI	0.96	0.96	0.96
IFI	0.96	0.96	0.96

** p < 0.05
*** p < 0.01

3.4.3. Test of the moderation effect

The finding about the difference in statistical significance of the path from trust to attitudinal loyalty between our subsamples and the difference in magnitude of standardized coefficients of the satisfaction-attitudinal loyalty relationship (0.365 vs. 0.748) suggested that store format could be a significant moderator of the two paths as hypothesized before (H7a and c). However, in order to formally test H7, we conducted a chi-square difference test to see whether the difference in path coefficients between subsamples is statistically significant and, therefore, H7 is supported. To perform the test, we compared an unconstrained model with a constrained model and set the path coefficients to be equal (one path at a time). The difference in chi-square obtained was 4.24 for satisfaction-attitudinal loyalty link, 0.067 for satisfaction-behavioral loyalty link, 3.185 for trust-attitudinal loyalty link, and 1.828 for trust behavioral loyalty link. Given the one degree of freedom difference between the constrained and unconstrained models, we have found support for H7a (p < 0.05), and H7c (p < 0.1). H7b and d were not supported. A visual summary of results is provided in Fig. 3

4. Discussion

The link between satisfaction and loyalty has always been of interest
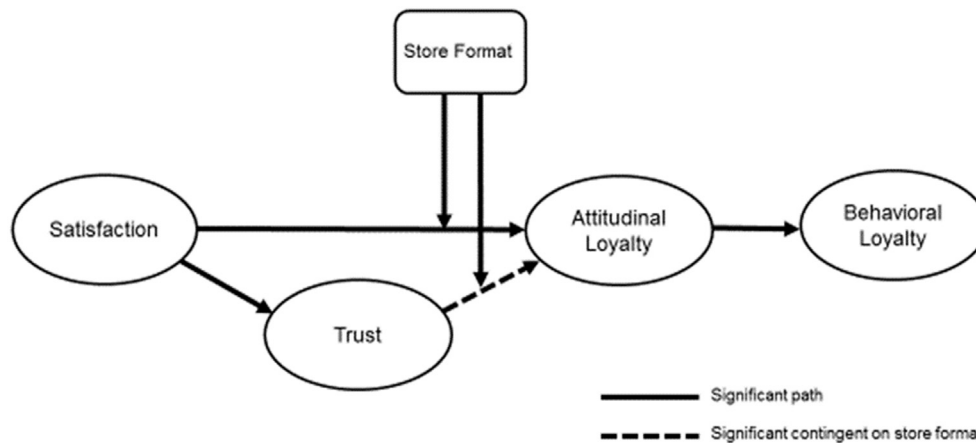
Fig. 3. Visual summary of results.

to both academics and marketers. However, the research into the mechanism through which satisfaction impacts loyalty has not yielded consistent findings. Although, in general, satisfaction is shown to positively affect loyalty, the strength of the relationship varies across different empirical studies. These inconsistencies have left managers and retailers without a solid understanding of how suggested antecedents impact desired outcomes of attitudinal and behavioral loyalty that would in turn affect profitability. Following Kumar et al. (2013), we believe that this is due to incomplete frameworks and ambiguity in defining loyalty. In particular, attitudinal and behavioral loyalty should be separated. In the current research, we distinguished between the two types of loyalty and propose a model which allows for both direct and indirect paths from satisfaction to the two types of loyalty. We include trust as a mediator, since previous research and theory overwhelmingly agrees that it is an important construct in the satisfaction-loyalty frameworks. We derived hypotheses from the previous literature where we found a reasonable consensus on the relationships between the constructs of our study. We also hypothesized that store format moderates the relationships between the main constructs. Our model appears to be unprecedented in the literature and, we believe that itself is a contribution of our paper to the marketing literature. Our main contribution, however, is that we have interesting and somewhat counterintuitive results from our empirical examination. We tested our model using structural equation modeling on a dataset from a large survey of Spanish supermarket and hypermarket shoppers. Our results suggest that attitudinal loyalty is a necessary antecedent of behavioral loyalty. Therefore, we suggest that spurious loyalty, behavioral loyalty without attitudinal loyalty, is very hard to achieve particularly in the context of grocery retailing. Upon further investigation, we find that while trust partially mediates the path between satisfaction and attitudinal loyalty in our pooled sample and supermarket subsample, it does not have a mediating effect in the hypermarket subsample. This was particularly interesting as it suggests that the mediating role of trust is contingent on the context. The follow-up test of the moderating role of store format provided additional support for the difference we observed after comparing the results of subsamples. Store format was found to have significant moderating role on two links: satisfaction to attitudinal loyalty and trust to attitudinal loyalty. The moderating effect is such that it significantly increases the magnitude of the effect of satisfaction on attitudinal loyalty in hypermarket (compared to supermarket) while significantly reduces the impact of trust on attitudinal loyalty such that the link becomes insignificant. This finding suggests important differences in loyalty building mechanism between supermarkets and hypermarkets. Whereas satisfaction is found to be solely responsible for increasing attitudinal loyalty and subsequently behavioral loyalty in hypermarkets, trust is shown to play key mediating role in supermarkets. As a result, different strategies are suggested for

supermarkets and hypermarkets that strive for building and maintaining customer loyalty.

As we expected, the differences that exist between the two store formats, and how those differences in turn affect utility, play an important role in determining the suitable strategy for retailers in each case.

4.1. Managerial implications

What does our empirical investigation mean for supermarket and hypermarket managers and to some extent other retailers? This study suggests specific and distinct strategies for building loyalty for supermarket and hypermarket managers. As our results indicate, supermarkets should invest in strategies and actions that improve customer's satisfaction and trust. Trust, along with satisfaction, plays an important role in boosting loyalty which in turn results in store profitability. Therefore, supermarket managers should invest in actions with the potential to increase customer trust. Transparency is a key factor in increasing customer trust (Adams, 2014). With their disadvantage in terms of price and assortment, compared to hypermarkets, supermarkets should be as transparent as they can with their potential customers and communities they serve. There are different aspects of transparency that can help supermarkets: transparency about their prices and fees, transparency about their products and the sources where they are purchased, transparency about the ingredients used in products that are processed within the supermarket, and transparency about their treatment of their employees and the environment. Furthermore, supermarkets should continue their focus on service and creating a more personalized experience for their customers. Great service has the potential to substantially increase perceived utility for all customers in general and for less price sensitive customers in particular.

On the other hand, the main focus of hypermarkets should be on increasing satisfaction. Our results suggest that satisfaction directly affects loyalty toward hypermarkets. Hypermarket customers appreciate benefits such as the convenience of one-stop shopping, lower prices and larger assortment. As long as these expectations are met, it appears that trust will not play a significant role in affecting loyalty levels.

Lastly, our results can to some extent be generalized to other retailers. Retailers with larger stores and assortment and competitive prices would probably be better off investing in strategies that improve satisfaction, whereas smaller retailers would benefit from investing in improving trust toward their establishment. We use caution in generalizing these findings to other retail establishments. However, it makes sense that trust can provide smaller retailers with a competitive advantage compared to larger retailers that can attract customers with their merchandising and pricing flexibility.

5. Limitations and future research

This paper has few limitations which suggest directions for future research in both loyalty and store format strategy streams. First, our constructs and variables are based on a survey questionnaire at the end of customers' visits to the establishment. We did not have access to objective data from the retailers on their sales and profitability. It was not feasible to get the cooperation of three hypermarket chains and six different supermarket chains. Therefore, we had to use customers' responses to our questionnaires that reflect their perception. Future research can complement ours with objective data on customer purchases and retail store sales.

Second, although our interviewers approached respondents randomly, customers had the choice whether to participate or not in our survey. We also did not offer incentives to respondents. This approach has the potential to affect external validity of our results since there might be issues with the representativeness of our sample.

Finally, we translated our survey items from English to Spanish in order to implement the survey. Although this translation was conducted by people who were fluent in both languages, we do not rule out the possibility that some respondents might have not understood some items as we intended. That is why we ended up using two items to measure attitudinal and behavioral loyalty. In our original questionnaire, we had more items and the scales we used were adapted from previous high quality research. However, in our analysis we had to drop some items based on descriptive statistics and factor loadings.

Overall, we believe that our findings are interesting for academics and practitioners, and provide interesting avenues for future research. For example, our inter-format investigation of the satisfaction loyalty link can be expanded by examining the link in inter- channel context. It would be very interesting to see how the process of obtaining or improving loyalty would be different in online versus off-line channels. Furthermore, it would be very important for retail managers who offer their products through multiple channels to know whether they should manage customer satisfaction and loyalty the same way across channels or implement a channel specific strategy to boost loyalty and profitability. Finally, we believe more research is needed on the trade-offs between different resource allocation strategies among formats (or channels) and the costs involved in adopting those strategies.

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