

Analyzing heterogeneity on the value, satisfaction, word-of-mouth relationship in retailing

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Abstract

Purpose – The literature recognizes the need to study differences in consumer behavior in highly competitive and dynamic markets. In this paper, the authors look at how the heterogeneous evaluation of retailing influences customer satisfaction and loyalty. The purpose of this paper is to analyze unobserved heterogeneity on customer value dimensions perceptions in retail establishments, and their potential effects on positive forms of behavioral outcomes considering customer satisfaction as a mediating variable.

Design/methodology/approach – On a sample of 820 retail customers, the authors apply a finite mixture structural equation modeling that analyzes unobserved heterogeneity simultaneously. In this model, the authors study the influence of heterogeneous perceptions of excellence, efficiency, entertainment and aesthetics on customer satisfaction and of satisfaction on word-of-mouth (WOM) referral and WOM activity.

Findings – The results show two latent segments where the intensity of causal relations varies, which means that the effect of value dimensions and satisfaction are over or underestimated when heterogeneity is ignored.

Originality/value – The main value of the paper has been to analyze the potential heterogeneity of value dimensions (invariable approach), and their links with satisfaction and some dimensions of loyalty (intervariable approach). Customer heterogeneity must be studied to understand the satisfaction process and WOM responses in order to design more efficient and effective relationship marketing strategies.

Keywords Value, Retailing, Customer satisfaction, Finite mixture SEM, Word-of-mouth (WOM)

Paper type Research paper

1. Introduction

In view of the growing heterogeneity and high competitiveness of consumer markets, marketing academics and service providers have recognized the need to study differences between consumers (De Keyser *et al.*, 2015; Larivière *et al.*, 2016). This heterogeneity demands appropriate segmentation strategy, which is currently still one of the basic pillars of marketing (Roberts *et al.*, 2014), especially in companies in the retail context (Fuentes-Blasco *et al.*, 2014; Chocarro *et al.*, 2015).

A large part of the literature studies heterogeneity or differences between consumers according to objective characteristics like personal variables and/or their valuations in the context of shopping (e.g. Chang and Fang, 2012; Sharma *et al.*, 2012). In this line, several authors use consumer perception of value as the basis for identifying segments of customers that enable different weights to be applied to value drivers (Bolton, 1998; Gil *et al.*, 2007; Gallarza *et al.*, 2011). There is still, however, a paucity of literature analyzing these differences in relation to behavioral criteria such as motivations, assessments, behaviors and attitudes, which lead to the identification of more realistic segments, especially perceived value (Floh *et al.*, 2014).

This situation may be due to the fact that the extensive and rich study of perceived value has led to a series of contradictory results so the debate on the multidimensional conceptualization of the construct continues (Varshneya and Das, 2017). As Gallarza, Ruiz-Molina and Gil-Saura (2016, p. 982) point out “very little is known about how these value dimensions in their varied



natures (cognitive, affective, social or others), specifically relate to both customer satisfaction and loyalty.” Floh *et al.* (2014) note that their study pioneers analysis of the heterogeneity of value based on a conceptualization with a solid theoretical basis.

In addition, ignoring the differences in perceptions of value and their influence on other behavioral outcomes such as satisfaction and loyalty could generate inappropriate combinations of individuals from different sub-populations (DeSarbo *et al.*, 2001). It seems, however, that these recommendations have been ignored in many of the studies focused on the value effects chain for post-consumption variables. The literature review has identified some studies that analyze the heterogeneous perception of value as the antecedent to explain satisfaction (e.g. Martín-Ruiz *et al.*, 2008) or loyalty intentions (e.g. Floh *et al.*, 2014). But to the best of our knowledge, there has been no in-depth analysis of the heterogeneous perception of value on loyalty behaviors taking into account the mediating effect of satisfaction.

Our proposal, therefore, is intended to contribute to furthering knowledge in two lines of research. First, following the research guidelines indicated by Gallarza *et al.* (2011, p. 186), our proposal follows the dual “intravariante-intervariante” approach conceptualizing value as a multidimensional construct based on Holbrook’s (1999) well-known typology, and on the effects of value dimensions on satisfaction and loyalty. And second, addressing the call for deeper study of heterogeneity in value perceptions (Floh *et al.*, 2014), we attempt to find out whether such differences generate groups of consumers with different levels of the studied consequences. To that end, we propose to further the recent applied research line using latent segmentation methodology (e.g. Fuentes-Blasco *et al.*, 2014; Chocarro *et al.*, 2015). One of the main advantages of these *post hoc* approaches is that the size and structure of the segment is estimated simultaneously (Wedel and Kamakura, 2000) and it enables predictions on dependent variables under a common modeling structure (Grewal *et al.*, 2013).

There is a particularly important field of study where recent works argue for the need to deepen both the study of value (e.g. Gallarza *et al.*, 2011; Boksberger and Melsen, 2011; Leroi-Werelds *et al.*, 2014; Gallarza, Ruiz-Molina and Gil-Saura, 2016) and the consequences of analyzing its heterogeneous perception (e.g. Shukla and Babin, 2013; Floh *et al.*, 2014; Fuentes-Blasco *et al.*, 2014; Chocarro *et al.*, 2015; Gallarza, Gil-Saura and Ruiz-Molina, 2016) in the retail context. The retail industry is a field of study that clearly connects with the calls for research from the academic world with needs detected by professionals in companies supplying this type of services (Piotrowicz and Cuthbertson, 2014). In the retail industry, the customer experience is actually a crucial aspect, and is recognized as having broad scope for understanding contemporary purchase behavior. This study, therefore, answers the call for research in the retail trade in the geographical environment of Spain. Spain is currently in a post-recession economic context and consumers have been forced to change their patterns of behavior (Gallarza, Gil-Saura and Ruiz-Molina, 2016). The retail sector has significant economic importance in Spain and is one of the activities with the greatest impact on society. It is a highly competitive sector where identifying different consumer profiles is the key to improving the efficiency and effectiveness of marketing strategies (Theodoridis and Chatzipanagiotou, 2009; Kumar *et al.*, 2013), hence the interest in further study and analysis.

According to the above arguments, our general objective focuses on analyzing unobserved heterogeneity in customers’ value perceptions in retail establishments, and its potential effect on positive forms of behavioral outcomes. In particular, we intend to:

- study the influence of the dimensions of value in Holbrook’s (1999) typology on customer satisfaction and on the word-of-mouth (hereinafter WOM) dimension of loyalty as behavioral outcomes;
- analyze unobserved heterogeneity on value perceptions using a latent methodology that enables estimation of the parameters of influence in the value-satisfaction-WOM dimensions and simultaneously identify the segments; and

- describe the resulting segments with covariables for proposing relationship marketing strategies at segment level.

This study is organized in three parts. First, we define the theoretical framework for approaching value dimensionality, customer satisfaction and WOM dimensions of loyalty. There is also in-depth explanation of how value perception heterogeneity is treated in its links with post-consumption variables. This theoretical framework provides the basis for a series of research hypotheses. Second, we establish the methodology used in the empirical research and evaluate the findings. Finally, we report the most significant conclusions which can be drawn from this study and possible managerial implications.

2. Conceptual framework and model proposition

2.1 Value

The importance of value in both the study of consumer behavior and from the strategic marketing perspective has meant that the construct has been widely studied and it has continued to receive special attention in retail in recent years (Leroi-Werelds *et al.*, 2014; Pecoraro and Uusitalo, 2014; Gallarza, Ruiz-Molina and Gil-Saura, 2016).

This situation has led to rich, ongoing debate over its conceptualization, measurement and effect on post-consumption outcomes like satisfaction and loyalty (Boksberger and Melsen, 2011). As Gallarza *et al.* (2011) point out, there is some consensus that value is a multidimensional concept, but there is no clear agreement over the number and nature of its dimensions (Gallarza, Ruiz-Molina and Gil-Saura, 2016; Gallarza, Gil-Saura and Ruiz-Molina, 2016; Varshneya and Das, 2017); as is clear from the number and variety of typologies of value proposed by academic research which have given rise to different dimensions (Sheth *et al.*, 1991; Babin *et al.*, 1994; Holbrook, 1999; Sweeney and Soutar, 2001). From this perspective, retail studies have traditionally focused on more utilitarian aspects of the shopping process, but more recent literature indicates that consumers have other behaviors related to consumption experience and hedonic aspects which go beyond the purchase of the product (Mathwick *et al.*, 2001; Chi and Kilduff, 2011; Pecoraro and Uusitalo, 2014). As Gallarza, Gil-Saura and Ruiz-Molina (2016) point out progress in the classical utilitarian vs hedonic dichotomy of the value concept is still open to debate incorporating the affective and cognitive dimensions of consumption in different retail formats.

Based on this duality, Holbrook (1999) developed one of the most comprehensive conceptualizations of consumer value that have been applied to many consumption experiences (Gallarza and Gil-Saura, 2006; Seo and Lee, 2008; Leroi-Werelds *et al.*, 2014). The author proposes three dimensions of value that occur in a consumption experience (Holbrook, 1999, p. 12) – extrinsic vs intrinsic, active vs reactive and self-oriented vs other oriented – when combined they give rise to eight types of values: excellence or quality, efficiency or convenience, play or entertainment, aesthetics, esteem, status, ethics and spirituality. As regards the first differentiation, intrinsic value is relative to appreciation of an experience as an end in itself regardless of results, like aesthetics and entertainment, reflecting the hedonic component of value; whereas extrinsic value refers to the utility or functionality of the use or experience, like efficiency and quality, similar to the utilitarian value. The second dimension represents the importance in the subject-object interaction so that active value occurs when the individual experiences value through an object or experience; whereas reactive value occurs when the individual perceives, admires or appreciates an object. In the third dichotomy referring to the orientation of value, self-oriented value is understood to occur when the individual is analyzing personal utility, in contrast to other-oriented value, which refers to the utility the object provides for third parties.

The literature review enables us to claim that Holbrook's framework seems to be an appropriate typology for research into retailing experiences. However, this typology is not without its critics. First, various authors point to operational deficiencies at both theoretical (Oliver, 1999) and empirical level (Gallarza and Gil-Saura, 2006; Leroi-Werelds *et al.*, 2014).

In this line, Oliver (1999) points out that self-oriented values are more representative of a consumer behavior approach. Thus, our work focuses on self-oriented values because we approach value from the individual perspective in relation to the service provider without taking into account the social dimension. It is fundamental to consider personal interactions in the retail context because, as Leroi-Werelds *et al.* (2014) point out, they are a key element in the current line of research into value co-creation as Professor Grönroos and colleagues have argued (Grönroos, 2011; Grönroos and Voima, 2013). Furthermore, considering our objective of analyzing the potential unobserved heterogeneity of consumer perceptions of value, we justify the dimensionality of self-oriented values based on consumption value theory (Sheth *et al.*, 1991; Sweeney and Soutar, 2001), following Floh *et al.* (2014).

This approach enables us to gather the hedonic and utilitarian evaluations of customers' experiences in retailing. These self-oriented values are as follows (Nsairi, 2012): excellence (extrinsic and reactive value): assessment of the reactive potential capacity of an object or experience to serve as means to achieve a personal goal; efficiency (extrinsic and active value): active use of a product or consumption experience as a means to achieve self-oriented purpose; entertainment or play (intrinsic and active value): resulting from an active manipulation of the offer being considered as a source of pleasure for the individual; and aesthetics (intrinsic and reactive value): passive and personal appreciation of the beauty of the object or place of consumption.

With this proposal of value dimensionality, we intend to contribute to the research proposed by Gallarza *et al.* (2011) on the dual perspective in value research (intra and intervariable approach) furthering knowledge in the retail context of the extent to which self-oriented values (intravariation focus) affect post-consumption outcomes (intervariable focus).

2.2 Customer satisfaction

The first outcome of value we consider is satisfaction. Customer satisfaction is an undeniable objective for managers of retail establishments because high levels of satisfaction lead to the establishment of profitable relationships over time (Martins and Sampaio, 2012; Eisingerich *et al.*, 2014). It has been studied mainly from two approaches: specific/accumulative satisfaction (Boulding *et al.*, 1993) and cognitive/affective satisfaction (Oliver, 1997).

In the first approach, satisfaction in retailing is considered to refer to a set of accumulated experiences (Fuentes-Blasco *et al.*, 2014).

In the second approach, the classic definition from Oliver (1997) points out that satisfaction is a judgment on a pleasurable level of consumption-related fulfillment, based on the expectancy disconfirmation theory (Oliver, 1980). This approach, which has been widely applied in the retail sector, understands satisfaction to be an evaluation based on comparison of prior expectations with the store's performance (Neset *et al.*, 2011). From a more affective perspective, one of the most representative definitions is from Giese and Cote (2000) who consider that satisfaction is a summary affective response of varying intensity.

Many authors defend the convergence of both cognitive and affective responses (Lovelock and Wirtz, 1997; Oliver, 1997; Fuentes-Blasco *et al.*, 2014; Gallarza, Ruiz-Molina and Gil-Saura, 2016). For example, one of the most accepted cognitive-affective conceptualizations defines satisfaction as "a person's feelings of pleasure or disappointment resulting from a consumption experience when comparing a product's perceived performance or outcome in relation to his or her expectations" (Lovelock and Wirtz, 1997, p. 631). In this line, one research stream is focused on studying the relationship between cognitive and affective satisfaction. For example, Oliver (2010) points out that cognitive satisfaction is preceded by an affective process. There is empirical evidence in services to confirm the contribution of affective responses to satisfaction. In the context of retail distribution, Gelbrich (2011) shows that whereas happiness increases customer satisfaction with the store, feelings of sorrow reduce it. Fuentes-Blasco *et al.* (2014) also confirm that cognitive satisfaction is largely determined by affective satisfaction, in line with the

works by Nettet *et al.* (2011) and Shukla and Babin (2013). Considering the above arguments, in the context of this study customer satisfaction refers to the cumulative satisfaction with the store and a post-consumption (or post-purchase) affective and cognitive evaluation.

2.3 WOM

Finally, one of the most important consequences of satisfaction is loyalty (Dick and Basu, 1994). It is a multidimensional construct that has been mainly defined and measured from the behavioral and attitudinal perspective (Oliver, 1997). WOM behavior or recommendations has received a lot of attention as a recognized dimension of loyalty (Kumar *et al.*, 2013), since the true value of customers who are loyal to a company lies more in their influence on other customers than their purchase behavior (Aaker, 1991).

Although WOM was originally studied in the 1960s, there has been a significant increase in academic investigation in retail in recent years (e.g. Kumar *et al.*, 2013; Riquelme *et al.*, 2016; Hess and Ring, 2016; Vesma *et al.*, 2016). There are different definitions of the WOM concept. According to the classic definition of Westbrook (1987, p. 261), WOM is “all informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services or their sellers.” In this line, Harrison-Walker (2001, p. 63) define WOM as “an informal person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, an organization, or a service.” Various authors agree with these definitions, emphasizing the personal and informal nature of the concept (Goyette *et al.*, 2010; Moliner-Velázquez *et al.*, 2015), that contains an independent message from the company more real and credible than other marketer-controlled sources (King *et al.*, 2014; Riquelme *et al.*, 2016). That is, because WOM is a communication between consumers, it excludes formal communication from customers to companies (complaints or suggestions) and from companies to customers (promotional activities) (Mazzarol *et al.*, 2007). It is also both an antecedent and a consequence of consumers’ evaluations. In the pre-purchase stage individuals seek information as a risk reduction strategy (King *et al.*, 2014). In the post-purchase stage, consumers engage in WOM with a variety of motivations, mainly to help other consumers, prevent possible errors, vent their anger or reduce cognitive dissonance (Kim and Gupta, 2012; Eisingerich *et al.*, 2014; Hess and Ring, 2016).

The literature review reveals a variety of issues related to the nature of WOM and consequently the dimensions that must be evaluated to measure the construct. Traditionally the two-dimensional nature of WOM is accepted: its evaluative dimension or valence (related to the degree of information goodness) and conative dimension (related to the volume of information dissemination to others (Duan *et al.*, 2008). Gelbrich (2011) considers the referral and the activity as WOM dimensions. WOM referral is the degree to which customers praise and recommend an organization and its products or services (Swan and Oliver, 1989) and WOM activity is the intensity of talking to others about the advantages and benefits (Harrison-Walker, 2001). Gelbrich (2011, p. 212) argues that “both dimensions may become salient when customers experience particular emotions.” Given that consumer experiences in commercial establishments have a certain hedonic and emotional content, we follow this approach and adopt these two dimensions to study WOM behavior in our retailing context.

2.4 “Value, satisfaction, WOM” relationship

Over the last 20 years, the literature has recognized that value contributes to explain satisfaction and subsequent loyalty behaviors (e.g. Cronin *et al.*, 2000; Martín-Ruiz *et al.*, 2008; Boksberger and Melsen, 2011; Gallarza *et al.*, 2011; Leroi-Werelds *et al.*, 2014). This rich and extensive research into the effects of value on these outcomes has led to somewhat contradictory results and the debate continues. Authors like Boksberger and Melsen (2011) advocate continuing with the study of the operationalization of value and its effect on other marketing constructs; Kumar *et al.* (2013) ask whether satisfaction is really a good predictor of

loyalty and specifically WOM; and Floh *et al.* (2014) are in favor of studying the source of heterogeneity in value perceptions to understand its predictive power for loyalty intentions. Furthermore, despite the extensive literature on value as a predictor of loyalty behaviors, the dimensions of value have been operationalized as the antecedents of perceived value, customer satisfaction and/or customer loyalty (e.g. Gallarza and Gil-Saura, 2006; Martín-Ruiz *et al.*, 2008).

At this point, returning to the proposed dimensionality of value through self-oriented values (intravariabile perspective), our proposal is intended to continue the line argued for by Gallarza *et al.* (2011) from the intervariable perspective as well, going deeper into the direct effect of value dimensions on customer satisfaction.

Note also that several studies in the retail context do not consider satisfaction to be a mediating element between value dimensions and loyalty behaviors (e.g. Martín-Ruiz *et al.*, 2008; Sullivan *et al.*, 2012; Floh *et al.*, 2014). Therefore, to further this line, our proposal considers the value dimensions affects chain on satisfaction and satisfaction on loyalty.

On that basis, our first hypothesis supporting the initial effects of the chain, considering that in the context of retail establishments, values related to excellence, efficiency, entertainment and aesthetics (self-oriented value dimensions) have a positive impact on customers' satisfaction judgements (Figure 1):

H1. (a) Excellence, (b) efficiency, (c) entertainment and (d) aesthetics perception of consumer in retail experience has a positive impact on customer satisfaction.

As regards the “satisfaction-WOM” relationship, despite some contradictory results for the satisfaction-loyalty link (Seiders *et al.*, 2005), most recent studies applied to the retail trade confirm the direct effect of judgments of satisfaction on WOM behavior (Neset *et al.*, 2011; Riquelme *et al.*, 2016). These studies, however, do not take into account the potential previous influence of value dimensions. Our proposal views satisfaction as a fundamental mediating element in relation to the impact of value dimensions on WOM, as a prior stage in studying their possible heterogeneity. We also consider the dual perspective of WOM proposed by Gelbrich (2011), assuming that there is a relationship between customer satisfaction and WOM referral and WOM activity (Figure 1). Therefore, we posit the second hypothesis:

H2. Customer satisfaction in retail experience has a positive impact on (a) WOM referral and (b) WOM activity.

2.5 Heterogeneity in the “value, satisfaction, WOM” relationship

As already pointed out, one of the reasons for the contradictory results for the effects of the value-satisfaction-loyalty chain may be due to the fact that a large part of the research into perceived

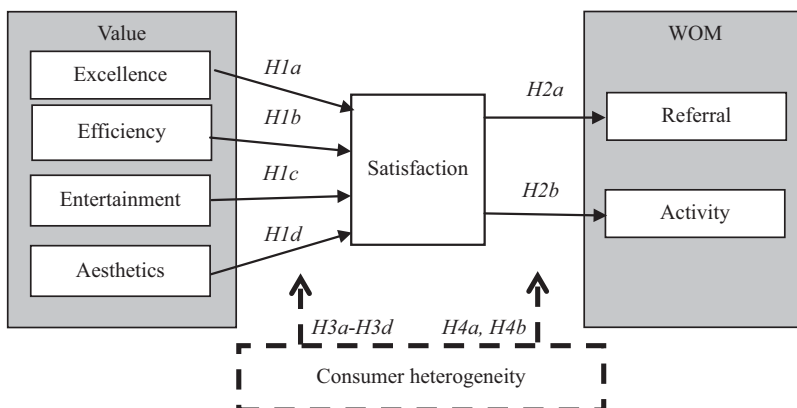


Figure 1.
Proposed model

value in retail assumes that value perceptions affect all consumers equally (e.g. Sheth *et al.*, 1991; Gallarza and Gil-Saura, 2006; Turel *et al.*, 2007; Yuan and Wu, 2008) and any differences that may exist in their evaluations and responses are therefore ignored (Fuentes-Blasco *et al.*, 2014).

Considering consumer perceptions from an aggregated perspective may be a fairly unrealistic vision (Becker *et al.*, 2013) as bias can occur in parameters estimation that leads to inconsistent results in relation to the effect of marketing variables (DeSarbo *et al.*, 2001; Kamakura and Wedel, 2004), instability of the resulting segments and solutions that are difficult to implement (Kim *et al.*, 2013).

In this line, empirical evidence in retailing suggests that differences between consumers, due to personal characteristics or because of their valuations in the context of shopping, cause variations in the effects of value on satisfaction (e.g. Jones *et al.*, 2006; Martin-Ruiz *et al.*, 2008; Chang and Fang, 2012; Sharma *et al.*, 2012) and satisfaction on WOM (e.g. Teller and Gittenberger, 2011; Kumar *et al.*, 2013), and value on loyalty intentions (Floh *et al.*, 2014). However, to the best of our knowledge, there are to date no studies focusing on the analysis of unobserved heterogeneity along the entire value dimensions-satisfaction-WOM chain in our proposal.

Furthermore, a large part of the literature reviewed shows that heterogeneity at individual level has been analyzed with a priori segmentation techniques. That is, in structural equations models heterogeneity is treated using multi-group methodology, assuming that consumers can be assigned to different segments in relation to certain segmentation criteria based on socio-demographic variables or variables specific to the purchase situation (e.g. Chang and Fang, 2012; Sharma *et al.*, 2012). This methodology presents various inherent limitations as it is based on a two-stage procedure which can be statistically inefficient for large models (Fuentes-Blasco *et al.*, 2014). In particular, Jedidi *et al.* (1997) find it unsuitable for attempting to explain unobserved heterogeneity in customer responses to marketing efforts because both the nature and number of segments are forced. Therefore, in line with Chocarro *et al.* (2015), we consider that the empirical evidence remains inconclusive.

In response to this gap in the research and following the lines proposed by recent studies in the retail sector (e.g. Teller and Gittenberger, 2011; Floh *et al.*, 2014; Fuentes-Blasco *et al.*, 2014; Chocarro *et al.*, 2015), we intend to analyze unobserved heterogeneity in the relationship chain using latent *post hoc* methodology. The main advantage of this approach lies in the fact that it is based on a probability distribution model that enables joint identification of segments and estimation of population parameters (Wedel and Kamakura, 2000). Therefore it enables predictions on dependent variables under a common modeling structure (Cohen and Ramaswamy, 1998).

In view of the above arguments, we consider the existence of groups of consumers based on differences in the relationship both between the four dimensions of value and satisfaction and between satisfaction and the two WOM dimensions (Figure 1). We therefore posit the following hypotheses:

- H3. The strength of the relationship between (a) excellence, (b) efficiency, (c) entertainment and (d) aesthetic perception and customer satisfaction differs between consumer segments.
- H4. The strength of the relationship between customer satisfaction and (a) WOM referral and (b) WOM activity differs between consumer segments.

3. Method

3.1 Questionnaire design and fieldwork

A quantitative investigation has been carried out in the context of shopping experiences at retail outlets selling food, textile, household and electronic products. The questionnaire was developed with a set of scales carefully selected and tested from the literature, adapted to our context and translated from English to Spanish. Value was measured from self-oriented

values in Holbrook's (1999) typology. The two-item efficiency (or convenience) and aesthetic (or beauty) scales come from the work by Mathwick *et al.* (2001), while the three-item excellence (or quality) scale and the three-item entertainment (or play) scale are based on the work by Sweeney and Soutar (2001). The five-item satisfaction scale was adapted from the studies of Nesset *et al.* (2011) (first two-item) and Gelbrich (2011) (last two-item) to reflect cognitive and affective components, respectively. WOM behavior was measured with the two dimensions proposed by Gelbrich (2011): WOM referral scale was adapted from the works of Swan and Oliver (1989) and Maxham III and Netemeyer (2002) and WOM activity scale was adapted from the work of Harrison-Walker (2001).

A pilot test of the questionnaire was conducted in two stages. First, the questionnaire was given to five scholars of marketing, experts in retailing, and then a pretest was done with 20 individuals from the four sectors to verify that it functioned correctly. Based on the feedback, question order was modified, the items were better adapted to the context, and scale sensitivity was verified. A seven-point Likert-type scale was used to measure value dimensions, satisfaction and WOM dimensions. The wording for the adapted items is shown in Table I.

The method for collecting information was stratified random sampling by the four sectors. The interviews were distributed on the basis of a series of representative retail shop formats in the Valencia region, taking into account the type of products offered and their positioning on the European (Interbrand, 2015a) and Spanish markets (Interbrand, 2015b). In the grocery sector, the interviews were conducted in Mercadona, Carrefour, Alcampo, Lidl and Dia; in the clothing sector they were conducted in Zara, Mango and H&M; in home furnishings in Ikea and El Corte Inglés-Hogar; and finally, in electronics, in Fnac, MediaMarkt and Apple Store. Uniform allocation was used to stratify the stores in the first three sectors ($n = 60$), and the number of questionnaires for the home furnishing sector was increased because there were fewer shop formats ($n = 80$). This type of sampling was used because of the need to obtain more closely circumscribed information on retail sectors that can be considered homogenous in themselves; but heterogeneous in comparison to each other.

Shoppers were randomly selected and interviewed as they left the establishments from Monday to Saturday mornings and evenings. Interviewees had to be over 18 and the responses were process anonymously.

The fieldwork was conducted from February to March 2013. In total, 820 valid surveys were achieved which implies a sampling error of 3.14 percent for intermediate proportions ($p = q = 0.5$) and infinite population.

Regarding sample distribution according to the retail sector, 36.6 percent of individuals have evaluated shopping experiences in food stores, 22 percent in textile stores, 22 percent in electronic good stores and 19.4 percent in household goods stores. In relation to location at the moment of the interview, 48.5 percent of interviews were conducted in the city of Valencia, 38.8 percent assessed their shopping experience in stores in the metropolitan area, and 12.7 percent were collected in the other two provinces in the Valencia region.

The sample has an average age of 41.4 years and in general most subjects are women (64.3 percent) and are working (55.1 percent). The 46.3 percent of the sample is employee, and it also highlights that the 15 percent is student and 12.4 percent of the sample is unemployed. With regard to the education level, we note the high percentage of respondents with five-year bachelor degree.

3.2 Dimensionality and reliability of the measurement scales

The scale's dimensionality was evaluated using confirmatory factor analysis with robust maximum-likelihood estimation (Table I). This estimation algorithm was chosen because of

Construct and scales items	SL (<i>t</i> -value)
<i>Value dimensions</i>	
Excellence (Mean = 5.56; ST = 1.15; α = 0.918; CR = 0.922; AVE = 0.769)	
EX1: Products in this shop are of consistent quality and well made	0.868
EX2: Products in this shop have an acceptable standard of quality	0.961** (39.55)
EX3: Products in this shop perform consistently	0.848** (27.91)
Efficiency (Mean = 4.28; ST = 1.66; α = 0.891; CR = 0.893; AVE = 0.807)	
EF1: Shopping in this shop is an efficient way to manage my time	0.838
EF2: Shopping in this shop makes my life easier	0.955** (29.45)
Entertainment (Mean = 4.35; ST = 1.54; α = 0.888; CR = 0.891; AVE = 0.803)	
EN1: I enjoy shopping in this shop	0.898
EN2: Shopping in this shop makes me feel good	0.895** (34.19)
Aesthetics (Mean = 5.07; ST = 1.43; α = 0.837; CR = 0.844; AVE = 0.732)	
AE1: The way this shop displays its products is attractive	0.927
AE2: I like the way this shop looks	0.777** (19.33)
Satisfaction (Mean = 5.00; ST = 1.29; α = 0.915; CR = 0.911; AVE = 0.675)	
S1: In general, what is your level of satisfaction with this shop?	0.695
S2: Considering what is expected from this type of shop, assess your satisfaction with this one	0.742** (33.32)
S3: I am delighted to visit this shop	0.917** (20.22)
S4: I am grateful this shop exists	0.849** (18.57)
S5: Shopping in this shop is pleasant	0.881** (19.91)
<i>WOM dimensions</i>	
WOM referral (Mean = 4.72; ST = 1.52; α = 0.916; CR = 0.922; AVE = 0.799)	
WR1: I recommend this shop to my family/friends	0.878
WR2: If my family/friends ask my advice, I tell them to go to this shop	0.927** (42.93)
WR3: I encourage my family/friends to buy products in this shop	0.877** (33.88)
WOM activity (Mean = 3.63; ST = 1.71; α = 0.956; CR = 0.959; AVE = 0.885)	
WA1: I tell other people about the advantages of this shop	0.937
WA2: I tell other people that this shop is better than others	0.967** (75.27)
WA3: I tell them that this shop treats me better than the others	0.918** (48.27)
Scale correlations	1 2 3 4 5 6 7
(1) Excellence	0.888
(2) Efficiency	0.490 0.898
(3) Entertainment	0.523 0.627 0.896
(4) Aesthetics	0.496 0.585 0.609 0.856
(5) Satisfaction	0.653 0.672 0.773 0.679 0.822
(6) WOM referral	0.526 0.571 0.637 0.535 0.772 0.894
(7) WOM activity	0.400 0.507 0.605 0.443 0.658 0.854 0.941
Notes: Fit statistics: $\chi^2_{\text{Sat-Bit}}$ (df = 149) = 589.87 (<i>p</i> -value < 0.001); RMSEA = 0.062; CFI = 0.961; GFI = 0.909; AGFI = 0.871. ST = standard deviation; SL = completely standardized loadings; α = Cronbach's α (< 0.7); CR = Composite reliability (> 0.7); AVE = Average variance extracted (> 0.5). The elements on the main diagonal represent the square root of the AVE. ** <i>t</i> -values are significant at 99 percent (<i>p</i> -value < 0.01)	

Table I. Measurement model (scale dimensionality, reliability and validity)

the lack of multivariate normal distribution of the data (Mardia coefficient = 155.94, normalized score = 73.45 > 2.57). It was necessary to purge the scales eliminating one item from the entertainment scale (EN3: "Shopping in this store is pleasant") because the Cronbach's α index increased when it was removed.

Viewing with caution the significance of the global contrast, the statistics indicate that the model presents adequate fit (Table I). All the dimensions reached adequate levels of reliability and internal consistency. These indicators, together with the correlations between them, are shown in Table I.

The measurement scales have: convergent validity because all the factor loadings are significant at 99 percent (t -statistic > 2.58) (Steenkamp and Van Trijp, 1991); and discriminant validity, because the linear correlation between each pair of scales is less than the square root of the AVE in the scales (see Table II). This validity was analyzed in depth with the χ^2 difference test between estimation of the model restricting the correlations between each pair of constructs to the unit and the unrestricted model following the indications in the work of Anderson and Gerbing (1988). The statistical value $\chi^2 = 393.77$ (df = 21) is significant at 99 percent (p -value = 0.000) and so we can state that each scale measures a different dimension.

To check for possible common method variance problems, we applied Harman's single-factor test (Podsakoff *et al.*, 2003), loading all scale items on one latent factor. Fit indexes were $\chi^2_{\text{Sat-Bt}}$ (df = 176) = 4,611.59; RMSEA = 0.180; CFI = 0.612; GFI = 0.514; AGFI = 0.421. Comparing this estimation with the results in Table I for the measurement model with the seven latent variables ($\Delta\chi^2_{\text{Sat-Bt}} = 3,600.80$; $\Delta\text{df} = 27$; p -value < 0.001), we can conclude that the single-factor estimation had a significantly poorer fit.

4. Results

We estimated the causal relations taking into account the unobserved heterogeneity using the methodology developed by Jedidi *et al.* (1997). This method simultaneously estimates the causal relations proposed in Figure 1 and detects unobserved heterogeneity from the general random coefficient model.

First of all, the aggregated causal model is estimated using robust maximum-likelihood given the lack of multivariate normality in the observable variables. Then, a simplified model is estimated incorporating unobserved heterogeneity with the aim of identifying and quantifying latent segments and estimating the structural relations. Assuming there are $s = 1, \dots, S$ segments or classes of unknown proportion in the population, s denotes the index of belonging of the individual i ($i = 1, \dots, 820$) to the unknown segment s . Conditioning belonging to segment s , the measurement model comprises vector $x|s$ which meets the valuations of the three variables observed in excellence scale, two variables in efficiency scale, two variables in entertainment scale and two variables in esthetics scale which act as antecedents (see the following equation):

$$\begin{cases} y|s = v_y^s + \Lambda_y^s \eta^s + \varepsilon^s \\ x|s = v_x^s + \Lambda_x^s \xi^s + \delta^s \end{cases} \quad (1)$$

vector ξ^s reflects the exogenous latent constructs (excellence, efficiency, entertainment and aesthetics) which the previous observable variables load. Vector $y|s$ includes the observations of observable variables that act as dependent variables: five satisfaction items,

No. classes	LL	AIC	BIC	Adjusted BIC	Entropy	Distribution	Free parameters
1	-23,562.07	47,272.15	47,620.64	47,385.64	-	820	74
2 (Stage 1)	-23,471.26	47,108.52	47,499.39	47,235.81	0.872	85/735	83
2 (Stage 2)	-23,403.17	46,978.34	47,383.34	47,110.24	0.880	162/658	86
2 (Stage 3)	-23,079.62	46,355.24	46,816.75	46,505.54	0.702	348/472	98
2 (Stage 4)	-22,929.26	46,074.52	46,583.13	46,240.16	0.738	379/441	108
3 (Stage 1)	-23,386.00	46,956.00	47,389.26	47,097.10	0.914	83/700/37	92
3 (Stage 2)	-23,033.94	46,275.89	46,765.65	46,435.39	0.651	190/177/453	104
3 (Stage 3)	-23,059.30	46,332.60	46,836.49	46,496.70	0.723	242/160/418	107
3 (Stage 4)	-23,007.32	46,232.65	46,745.96	46,399.82	0.732	276/152/392	109

Table II.
Evaluation indexes for
determining the
number of
latent classes

three WOM referral variables and three WOM activity variables. Vector η^s gathers the three latent variables that act as dependent ones.

In order to ensure the identification of the model, it must be assumed that the measurement error vectors are uncorrelated with the latent variable vectors ξ^s and η^s ; and that the vectors of average errors are null ($E(\epsilon^s) = E(\delta^s) = 0$).

Based on the measurement model conditioned to belonging to segment s , the structural equations model is defined as follows:

$$B_s \eta^s = \alpha^s + \Gamma^s \xi^s + \zeta^s \tag{2}$$

where matrix Γ^s reflects the effect of the four value dimensions on satisfaction. And matrix B_s shows the effect of satisfaction on the other two endogenous latent variables (WOM referral and WOM activity).

The structural model represented in Equation (2) was estimated using an iteration process with the expectation-maximization algorithm. This iterative methodology consists in a four stage estimation of all the population parameters conditioned to belonging to the segment s ($\Lambda_y^s, \Lambda_x^s, B_s, \Gamma^s, v_y^s, v_x^s, \alpha^s, \Phi^s, \psi^s, \Theta_e^s, \Theta_\delta^s, \tau_\xi^s$), and the likelihoods of belonging $\pi_s, \forall_s = 1, \dots, S$. According to Fuentes-Blasco *et al.* (2014), the process begins by contemplating two latent segments, in a first stage the parameters relative to constants $v_y^s, v_x^s, \alpha^s, \tau_\xi^s$ (Stage 1). The parameters are gradually released one by one according to the modification indexes. Second, the parameters associated to the variances are released $\Phi^s, \Theta_e^s, \Theta_\delta^s$ (Stage 2). Followed by those associated to the matrices that reflect the factor loadings and causal relations between the latent variables $\Lambda_y^s, \Lambda_x^s, B_s, \Gamma^s$ (Stage 3) and, finally, the likelihood of belonging or the size of the latent segment π_s (Stage 4).

The process is repeated until it is verified that the evaluation criteria increase with model parsimony, especially the Bayesian information criterion (BIC). Table II shows the results of the different iterative processes, the number of latent segments used in the estimation, the indexes to evaluate parsimony (AIC, BIC and adjusted BIC) and discriminatory capacity (entropy), the size of each class/latent segment in absolute value and the number of free parameters at each stage of the estimation.

The estimated model and the number of latent classes for retention are chosen according to criterion values, which suggest the first two conclusions. First, estimation of the causal model without taking into account data heterogeneity (aggregated vision: number of classes = 1) presents clearly inferior evaluation criteria to the other proposals where that heterogeneity is taken into account (disaggregated vision: number of classes = 2 or 3). This fact indicates that there is unobserved heterogeneity in the effect of value dimensions over satisfaction and in the effects on WOM referral and WOM activity in the estimation of their causal relations. Second, the evaluative indexes indicate that the best estimation is the proposal that contemplates two latent segments in the fourth stage of the iterative process. Choosing this modeling as the optimum one, two segments are obtained with sizes $\pi_1 = 46.2$ percent (379 customers) and $\pi_2 = 53.8$ percent (441 customers).

Table III shows the estimations of the standardized loadings in the measurement and structural relationship models the aggregated model and the model with two latent classes. The results of the aggregated model ($s = 1$) indicates that all of the proposed causal relations are significant. In particular, there is a positive and significant effect of excellence ($\gamma_{15} = 0.252$), efficiency ($\gamma_{25} = 0.204$), entertainment ($\gamma_{35} = 0.402$) and esthetics ($\gamma_{45} = 0.195$) on satisfaction so the first group of hypothesis ($H1a-H1d$) is accepted. Satisfaction has a positive and significant influence on the two proposed consequences of WOM: WOM referral ($\beta_{56} = 0.792$) and WOM activity ($\beta_{57} = 0.682$). These results lead to global acceptance of the group of hypotheses: $H2a$ and $H2b$.

	Aggregated	Segment 1	Segment 2	Value, satisfaction, WOM relationship
EX1/Excellence (λ_{11})	0.863	0.896	0.797	1569
EX2/Excellence (λ_{21})	0.963	0.971	0.937	
EX3/Excellence (λ_{31})	0.844	0.879	0.771	
EF1/Efficiency (λ_{12})	0.833	0.819	0.819	
EF2/Efficiency (λ_{22})	0.950	0.890	0.917	
EN1/Entertainment (λ_{13})	0.904	0.944	0.900	
EN2/Entertainment (λ_{23})	0.870	0.839	0.839	
AE1/aesthetics (λ_{14})	0.914	0.943	0.862	
AE2/aesthetics (λ_{24})	0.753	0.811	0.638	
S1/Satisfaction (λ_{15})	0.699	0.609	0.708	
S2/Satisfaction (λ_{25})	0.743	0.745	0.730	
S3/Satisfaction (λ_{35})	0.900	0.921	0.915	
S4/Satisfaction (λ_{45})	0.837	0.769	0.962	
S5/Satisfaction (λ_{55})	0.795	0.803	0.790	
WR1/WOM referral (λ_{16})	0.869	0.885	0.881	
WR2/WOM referral (λ_{26})	0.920	0.945	0.943	
WR3/WOM referral (λ_{36})	0.872	0.960	0.959	
WA1/WOM activity (λ_{17})	0.922	0.788	0.986	
WA2/WOM activity (λ_{27})	0.957	0.959	0.989	
WA3/WOM activity (λ_{37})	0.851	0.818	0.813	
Intercept satisfaction (α_5)	<i>0.000</i>	0.041	<i>0.000</i>	
Intercept WOM referral (α_6)	<i>0.000</i>	-0.112	<i>0.000</i>	
Intercept WOM activity (α_7)	<i>0.000</i>	-0.708	<i>0.000</i>	
Error var. Satisfaction (ψ_5)	0.282	0.254	0.308	
Error var. WOM referral (ψ_6)	0.500	0.373	0.522	
Error var. WOM activity (ψ_7)	0.590	0.535	0.611	
Excellence \rightarrow Satisfaction (γ_{15})	0.252	0.308	0.211	
Efficiency \rightarrow Satisfaction (γ_{25})	0.204	0.209	0.218	
Entertainment \rightarrow Satisfaction (γ_{35})	0.402	0.366	0.383	
Aesthetics \rightarrow Satisfaction (γ_{45})	0.195	0.217	0.136	
Satisfaction \rightarrow WOM referral (β_{56})	0.792	0.707	0.692	
Satisfaction \rightarrow WOM activity (β_{57})	0.682	0.641	0.624	
R^2 Satisfaction	0.718	0.746	0.692	
R^2 WOM referral	0.500	0.627	0.478	
R^2 WOM activity	0.41	0.465	0.389	
Size	820	379	441	

Notes: Estimations in bold are significant at least at 95 percent (p -value < 0.05). Parameters that appear in italics were set before the estimation

Table III.
Standardized loadings
for the measurement
models and
estimations of
causal relations

The results for the model disaggregated into two latent classes show interesting differences in the relations between the variables. The first segment is the smallest group ($n = 379$ consumers).

It presents lower constant values for WOM referral ($\alpha_{6_class1} = -0.112$) and WOM activity ($\alpha_{7_class1} = -0.708$) than the other segment. Furthermore, these constant values are significant. This group has the lowest values for the error variances associated to the three dependent variables. In the causal relations analyzed, these customers are characterized by having the highest significant effect of excellence and aesthetics on satisfaction ($\gamma_{15_class1} = 0.308$ and $\gamma_{45_class1} = 0.217$) of the two segments and aggregated model. The relationship between value dimensions and satisfaction ($R^2_{Sat_class1} = 0.746$), and between satisfaction and WOM referral ($R^2_{WOMref_class1} = 0.627$) and WOM activity ($R^2_{WOMact_class1} = 0.465$) achieves the best explanation. The second class ($n = 441$) represents 54 percent of the sample. This group shows the strongest influence of efficiency on satisfaction ($\gamma_{25_class2} = 0.218$). For the other causal relations, in this latent class all the

estimations are significant, but they are lower than the estimation of the other segment and aggregated model. Globally, this segment shows R^2 indexes below those achieved in the other group.

Thus the results show that the effect of excellence, efficiency, entertainment and aesthetics on satisfaction ($H3a-H3d$) and the effects of satisfaction on WOM referral and WOM activity ($H4a, H4b$) differ over the two segments identified. In addition, all the causal relations are significant in the segments, providing affirmative confirmation the group of hypothesis: $H1$ and $H2$. In particular, in one group of individuals (class 1) most of the relations are more intense than the relations in the other group. Consequently, we can confirm the existence of heterogeneity in the process of creating loyalty in customers of retail establishments.

The final composition of the two segments has been studied by analyzing the information from socio-demographic variables and a specific criterion concerning the type of establishment where the customer made the purchase using non-parametric bivariate tests (Table IV). Although the results only show significant differences between the two segments in relation to the retailer where purchase was made, we consider the distribution of all the variables important for detailing the profile of the groups obtained.

As regards the socio-demographic characteristics of the first segment, this group is made up mainly of women, over 60 percent. They are an older average age (42 ± 14.5 years), with the highest percentage of customers with university studies (29.2 percent). The group consists mainly of consumers who have been shopping in food shops (43.3 percent), and were mainly interviewed in the city of Valencia (50.7 percent). The second latent segment shows a higher percentage of women (65.7 percent) than the other group, has the youngest customers and a substantial percentage of students in vocational training (17.9 percent). In comparison with the other group, a high percentage of consumers have been shopping in a household goods shop (23.6 percent), in the rest of the Valencia region (Castellon and Alicante) (15.2 percent).

5. Discussion and managerial implications

This research provides evidence of unobserved consumer heterogeneity in the value-satisfaction-loyalty link in retailing. First, we examine market segmentation because it is still a key tool for designing effective strategies (Roberts *et al.*, 2014). Taking into account the research objectives of recent studies (e.g. Floh *et al.*, 2014; Chocarro *et al.*, 2015; De Keyser *et al.*, 2015; Li *et al.*, 2016), we attempt to contribute to the identification of unobserved heterogeneity stemming from value perceptions using latent methodology that permits the identification of segments together with estimation of the value-satisfaction-loyalty relationship chain.

The novelty of our research lies in its two main objectives. First, we consider the dimensionality of value from the perspective of self-oriented values based on consumption value theory which contains utilitarian and hedonic dimensions so common in retail studies (e.g. Babin *et al.*, 1994; Mathwick *et al.*, 2001; Sweeney and Soutar, 2001). We also develop current proposals by assessing the effect of these dimensions (and not an overall value perception) on WOM dimensions as one of the main loyalty intentions, taking into account the mediating role of customer satisfaction. In this regard, and following the call for research from the works of Gallarza, Ruiz-Molina and Gil-Saura (2016) and Boksberger and Melsen (2011) in the retail context, we intend to contribute to the existing gap regarding the effects of the dimensionality of value on its consequences. Our results indicate that consumer evaluations of aspects of the store related to excellence, efficiency, entertainment and aesthetics are important antecedents of satisfaction, with entertainment value making the largest contribution. Therefore we support the empirical evidence in the more recent literature which confirms the influence of customer perceived value on satisfaction

Socio-demographic criterion	Categories	Aggregated (%)	Class 1 (%)	Class 2 (%)
Retail sector were the purchase was made	Food	36.6	43.3	30.8
	Textile	22.0	22.2	21.8
	Electronic goods	22.0	19.8	23.8
	Household goods	19.4	14.8	23.6
Gender		$\chi^2_{(3)} = 18.2^{**}$ (p -value < 0.001)		
	Male	35.7	38.3	33.6
	Female	34.3	61.7	66.4
Age		$\chi^2_{(1)} = 1.95$ (p -value = 0.162)		
	Mean (\pm SD) (years)	41.4 (14.7)	41.9 (14.5)	40.9 (14.7)
Education level		$Z_{U-MW} = -0.924$ (p -value = 0.355)		
	No formal education	1.7	1.9	1.6
	Primary education	15.4	14.3	16.3
	Secondary education	18.1	19.6	16.7
	First cycle vocational training	5.0	3.7	6.2
	Second cycle vocational training	12.1	12.5	11.7
	Diploma, 3-year degree courses, advanced training cycles	13.8	14.6	13.1
	5-year degree courses	31.5	14.6	13.1
PhD	2.4	2.9	1.6	
Employment situation		$\chi^2_{(8)} = 7.93$ (p -value = 0.440)		
	Farm owner or similar	0.5	0.5	0.5
	Farm laborer	1.5	1.3	1.6
	Non agricultural business owner	3.4	4.2	2.7
	Employee (non civil servant)	28.4	30.6	26.5
	White collar	3.5	3.4	3.6
	Civil servant, public authority employee	10.9	12.7	9.3
	Self-employed and liberal professional	6.8	6.1	7.5
	Police and armed forces	0.1	0.3	0.0
	Housewife	8.2	6.1	10.0
	Student	15.0	14.0	15.9
	Retired	9.3	9.5	9.1
Unemployed	12.4	11.3	13.4	
Shopping location		$\chi^2_{(11)} = 11.59$ (p -value = 0.396)		
	Valencia capital	48.5	50.7	46.7
	Rest of the province of Valencia	38.8	39.6	38.1
	Rest of the region of Valencia	12.7	9.8	15.2
		$\chi^2_{(2)} = 5.51^*$ (p -value = 0.064)		

Table IV. Characterization of the latent segments

Notes: *Significant at 90 percent (p -value < 0.10); **Significant at 99 percent (p -value < 0.01)

(e.g. Nettet *et al.*, 2011; Kim *et al.*, 2015). However, we consider that our results enable more efficient management of retail establishment resources where it is fundamental to identify the value dimensions or value drivers of their offerings. Therefore, at aggregate level, retailers must invest in both cognitive factors (such as excellence and efficiency) and emotional aspects (such as entertainment and aesthetics) if they seek to create long-term relationships with their customers.

Second, estimation of the finite mixture SEM model shows two latent classes where the strength of the relationships of the four values on satisfaction and this satisfaction on the two WOM dimensions is different between the segments and in relation to the aggregated model.

We consider, therefore, that we are presenting a more comprehensive proposal than the one currently in the literature (e.g. Teller and Gittenberger, 2011; Kumar *et al.*, 2013; Floh *et al.*, 2014; Fuentes-Blasco *et al.*, 2014; Chocarro *et al.*, 2015) because our model takes heterogeneity into account throughout the consequences chain, proposing two consequences. Our results enable us to respond to our second objective by confirming the need to analyze heterogeneity because estimators of the aggregate model show that the effect of excellence on satisfaction is underestimated in one segment (class 1) and the effect of entertainment is underestimated in the other group (class 2), whereas the effects of satisfaction on WOM are overestimated in both groups.

Our third objective focuses on the description of segments in order to establish more specific retail marketing strategies for each segment. From a practical perspective, two clear segments have been identified that enable us to establish implications for retail distribution management. The first group (46.2 percent of the sample) comprises mainly women with a high education level who shop in the capital city of the Valencia region. This group stands out because of the greater effect of the dimensions of excellence and aesthetics on customer satisfaction, with similar values to the global model for the effect of satisfaction on WOM behaviors. The lowest estimation value in the link entertainment-customer satisfaction may be due to the fact that most of these consumers' shopping experience was evaluated in food stores. In this type of shopping, which is usually routine, expectations and ideal perception of the store tend to coincide. Therefore, entertainment as a hedonic component of hedonic value does not particularly contribute to boost satisfaction or WOM activity. In this case, loyalty behavior is represented more by other elements like WOM referral or repeat purchase when the consumer considers the store is more convenient. As regards the practical implications for this type of consumers, to increase customer satisfaction and WOM behaviors, retailers should invest efforts and money into enhancing excellence (functional value) and the aesthetic aspects of the store (hedonic value). To that end, stores should promote perception of quality in their assortments, location and prices through service differentiation strategies (product quality, personalized service and/or complementary services). Furthermore, to enhance the aesthetic aspects, they should invest in visual and atmospheric experiential aspects.

The second segment (53.8 percent of the sample) comprises younger consumers with a more varied distribution by sectors, and an emphasis on customers of household goods shops. This group is characterized by showing a much stronger relationship between shopping efficiency and satisfaction. In this case, strategies that promote the relationship between customer satisfaction and WOM dimensions should be directed at increasing convenience of the shopping experience as a key factor in efficiency. To that end, retailers can make use of technologies, promoting the functional design of a virtual store that enables potential customers to find out about their offering before traveling to the store. For that purpose, website design should be tailored to different screen formats to match the different technologies used to surf the internet. Finally, to advance in this line of research we propose some conceptual and methodological issues that will enable in-depth study of customer heterogeneity in the satisfaction process. For example, given that communications between consumers through internet-based technology are becoming increasingly important for consumer decisions (King *et al.*, 2014), we consider it interesting to add the online dimension of WOM in the consequences of satisfaction. The study of different commercial formats could also help to improve segment profiles and detect more differences in the relationships and their characteristics (Chocarro *et al.*, 2015). Finally, we propose extending the research to other geographical areas of Spain in order to generalize the results to the national market and replicating this study in other service contexts with greater differences in levels of perceived value, satisfaction and loyalty, such as restaurants or hotels.

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