The Satisfaction-Loyalty Relationship in Marketing: A Critical Review and Future Research

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Abstract

The purpose of this study is to critically review and to recommend future research for the satisfaction-loyalty relationship (SLR) in marketing. The paper is based on over 75 papers published by top peer reviewed journals in marketing throughout the world over the past three decades. The results show that the SLR is suggested to be positive. However, this relationship could be linear or nonlinear depending on the nature, the different approaches of measure and definition of satisfaction and loyalty. Moreover, the relationship is affected by many moderators, mediators and other variables. Future research should extend to test other antecedents besides satisfaction and to use different definitional approaches of satisfaction and loyalty to explain loyalty. Different functional forms of the SLR, moderators and mediators are also recommended to test in a separate or combined approach to shed light on the complex nature of this relationship.

Keywords: The satisfaction–loyalty relationship; nonlinear; moderators; mediators.
1. Introduction

The relationship between customer satisfaction and loyalty has been discussed or investigated from different theoretical perspectives over the last decades (Bloemer and Kasper, 1995; Fornell, 1992; Johnson et al., 2001; Oliver, 2009). Traditionally, the satisfaction-loyalty relationship (SLR) is considered to be positively linear (Bove and Johnson, 2006; Brown et al., 2005; Garbarino and Johnson, 1999; Gustafsson et al., 2005; Lam et al., 2004; Yang and Peterson, 2004; Zeithaml et al., 1996). However, it is observed that the SLR ranges from low to moderate (Bolton, 1998; Gustafsson et al., 2005; Mittal and Kamakura, 2001). This leads to a failure to explain fully the prevalence of satisfied customers who defect and dissatisfied customers who do not (Seiders et al., 2005).

Thus, several researchers have challenged the view that there is a simple SLR, and argue that we need to employ more complex models (Dick and Basu, 1994; Fournier and Mick, 1999; Oliver, 1999; Seiders et al., 2005). Generally, the SLR is complicated since it deals with different functional forms of the relationship, different conceptual and empirical definitions of satisfaction and loyalty, different moderators and mediators, and other factors that may outperform satisfaction as the key predictor of loyalty (Homburg and Giering, 2001; Bloemer and Kasper, 1995).

The main purpose of this study is to make a critical review of the SLR and to suggest some directions for future studies. This study wants to provide a general picture about the research phenomenon by reviewing three main points. The first point involves different approaches to conceptualize and to measure both satisfaction and loyalty, which generate different conceptual relationships between satisfaction and loyalty. On this point, this study discusses some suggestions for conceptualizing and measuring the SLR. The second point focuses on different research lines explaining the strength of the SLR. Specifically, the literature on SLR could be divided into three main approaches. First, the satisfaction–new drivers approach focuses on adding other antecedents besides satisfaction to explain loyalty (e.g., Cronin et al., 2000; Fornell, 1992; Taylor and Baker, 1994). Second, the mediator–moderator approach tries to find mediators and moderators impacting on the SLR (Johnson et al., 2001; Johnson et al., 2006; Olsen, 2007). Finally, the linear-nonlinear approach suggests that the SLR is both a linear and nonlinear complex (e.g., Agustin and Singh, 2005; Homburg et al., 2005; Oliva et al., 1992). In each research line, this study discusses some research gaps and gives directions for future research. It is worthy to note that these research lines are not independent, but interrelated with each other. Specifically, a moderator may be as a mediator or as a variable, explaining the nonlinear effect of satisfaction on loyalty. Thus, the last point ends up with some discussion for integrated approaches, such as nonlinear–moderator, mediated moderation, moderated mediation or moderated nonlinear models.

2. Methods

The paper is based on over 75 papers published by top peer reviewed journals in marketing throughout the world over the past three decades. These papers were searched by several strategies. The author searched databases (PsycInfo, 1987–2013; Social Science
This study used the search terms satisfaction, loyalty, mediator, moderator, non-linear and interaction effect. The author also conducted manual searches of journals that publish research on consumer/customer loyalty including: Journal of Marketing, Journal of the Academy of Marketing Science, Psychology & Marketing, Journal of Marketing Research, Journal of Business Research, Journal of Consumer Research, Journal of Consumer Psychology, and others. Another source from Researchgate was used as well. The process first provided over 120 papers. However, this number was then reduced by rejecting papers which mainly duplicated previous studies, or were published by a low ranked journal.

Based on the abstracts and keywords, these papers were then categorized into four groups. The first group includes the papers which focus on antecedents of loyalty. The second group is on the nonlinear effect of satisfaction on loyalty and different functional forms of SLR. The third one is grouped on a basis of moderators, mediators or mixture of them in the SLR. The final group includes book chapters, review papers and the rest. Each group was then analyzed by using a cross strategy, which means that if a paper contains relevant information from other groups, this information will be used again for analyzing the others. This paper will start with critical reviews and discussions about the conceptual-measurement approaches for satisfaction and loyalty. Then, it focuses on three main lines in the literature explaining the SLR. For each line, it will discuss some directions for future studies.

3. Results, discussions and future research

3.1. The conceptual-measurement approaches of satisfaction and loyalty

3.1.1. Conceptual-measurement approaches of satisfaction

Satisfaction has been defined and operationalized in various ways over the last 50 years (Oliver, 2009; Yi, 1990). Satisfaction can be measured with regard to any object or idea, such as a transaction, a product or service attribute, a brand or product, a company or store, a person, etc. (Anderson and Fornell, 1994; Bloemer and Kasper, 1995; Fornell, 1992; Johnson et al., 2001; Oliver, 2009). Satisfaction is still targeted to different objects and activities (e.g., Lam et al., 2004).

During the very first years of consumer psychology, satisfaction was viewed as an attitude construct and measured as a global attitude. For example, Hunt (1977, p.49) defines “satisfaction with a product refers to the favourableness of the individual’s subjective evaluation of the various outcomes and experiences associated with buying it or using it”. Thus, satisfaction is seen as a post consumption attitude and can include the dimensions of cognition and affection or emotion (Hunt, 1977; Westbrook and Reilly, 1983) with items such as “Favourable”, “Positive”, “Excellent”, “Wise”, “Right”, “Good” “Satisfied”, “Pleased”, “Delighted”, “Joyful”, “Surprised”, “Angry”, “Shy” or “Happy” (e.g., Hunt, 1977; Nijssen et al., 2003; Oliver, 1980; Spreng and Olshavsky, 1993; Voss et al., 1998).

Yi (1990) proposed two different approaches to definitions of satisfaction. One approach has defined satisfaction as an expressed outcome of the consumption experience as “an emotional response to the experience provided by, and associated with particular products or services”
(Westbrook and Reilly, 1983, p.256). Thus, an overall global measure of satisfaction is often used with items “Dissatisfied/Satisfied”, “Displeased/Plased, “Unfavourable/Favourable”, or Negative/Positive” (Yi, 1990). The other approach defines satisfaction as a comparative evaluation (“or process”) between “prior expectation and the actual performance of the product” (Tse and Wilton, 1988, p. 204). The approach includes two different evaluations (i.e., expectations and experience) combined into one consequence. For example, satisfaction is measured as “the objective discrepancy between expectations and performance outcomes to arrive at a difference score”, or as “a better than expected–worse than expected scale” (Oliver, 1980). Satisfaction as a customer’s overall evaluation is still measured as a combination of satisfaction (dissatisfied/satisfied), expectancy disconfirmation (falls short of expectations/exceeds expectations) and some ideal standard (i.e., not very close/close to ideal provider) (Gustafsson et al., 2005).

Johnson et al. (1995) describe two basic conceptualizations of satisfaction, transaction–specific and cumulative. Transaction-specific satisfaction is a customer’s transient evaluation of a particular product or service experience (e.g., in the last experience with the service A of provider B, I feel …), while cumulative satisfaction describes the total consumption experience of a product to date (Cronin and Taylor, 1992) (e.g., overall, using the services from the provider B, I feel…). These definitions of satisfaction are based on degree of experiences as well as involving the time and place of evaluations. To a certain extent, they are just more like weak versus strong attitudes. Cumulative satisfaction may be based on many transactions or just a few, depending on the number of times the consumer/customer has used a particular product/service/brand provider (Jones and Suh, 2000). Cumulative satisfaction is an aggregation of all previous transaction–specific evaluations, and is updated after each specific transaction much like expectations are updated after each transaction (Jones and Suh, 2000).

One of the latest formal definitions of satisfaction as a composite construct has been developed by Oliver (2009, p. 28), who proposed it to be “the consumer’s fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant”. In this definition, satisfaction can include both cognitive (e.g., quality, value) and affect evaluations (e.g., positive emotions).

3.1.2. Conceptual-measurement approaches of loyalty

Loyalty is a concept that is easy to grasp in everyday discussions, but hard to analyze for meaning (Oliver, 2009). In most cases, loyalty has been associated with “brand” loyalty (Oliver, 1999). In recent years, however, loyalty has been found and measured in relation to several other marketing objects, such as product loyalty (Homburg and Giering, 2001), product category loyalty (Olsen, 2007), service loyalty (Pritchard et al., 1999), chain/store loyalty (Macintosh and Lockshin, 1997; Nijssen et al., 2003), personal loyalty (Bove and Johnston, 2006), loyalty to a company (Román, 2003), activity, area or geographic loyalty (see Pitchard et al., 1999 for a review).

Although many different definitions of customer loyalty exist, the consensus today seems to be that loyalty has been defined and mea-
sured in many different ways, but most conceptualizations and operationalizations may be divided into three different approaches: a behavioural, an attitudinal and an integrated composite approach (Dick and Basu, 1994; Jacoby and Chestnut, 1978).

The first approach focuses on behaviour and ignores the cognitive processes underlying that behaviour. Lots of items exist in the literature to measure this (e.g., proportion of purchase, purchase sequence, total buying behaviour, probability of purchase, average stay time with a brand; Jacoby and Chestnut, 1978 for a review), but the most important measures are the aspects of rebuying/repurchase (Chaudhuri and Holbrook, 2001), retention (Gustafsson et al., 2005), patronage (Lam et al., 2004) or consumption, or use frequency over time (Olsen, 2002; Shankar et al., 2003).

The second approach focuses on attitudes, where brand loyalty is considered to depend on the psychological commitment or attachment (Butcher and O’Callaghan, 2001). Commitment or attachment is closely related to attitudes or an attitude’s strength (Zins, 2001). There are four dimensions of attitudinal loyalty: (1) advocacy of product/service to others (e.g., recommending to others or speaking favourably about the product or service, encouraging others to use or defending the service provider’s virtues, willingness to pay a price premium, price tolerance; Butcher and O’Callaghan, 2001, Brown et al., 2005; Chaudhuri and Holbrook, 2001; Macintosh and Locksin, 1997; Yi and Jeon, 2003; Zeithaml et al., 1996); (2) tendency to resist switching (e.g., intention or resistance to switch; Beerli et al., 2004); (3) identification with the provider (e.g., my bank, my service provides, commitment; Butcher and O’Callaghan, 2001); and (4) having a relative preference for the product/service ahead of other competitors (e.g., I prefer A to B; Olsen, 2002). Several studies use a multi-dimension scale to access loyalty including recommendation and intention to repurchase, willingness to pay a higher price for the offering and external response (Bolton et al., 2000; Bove and Johnson, 2006; Johnson et al., 2006; Zeithaml et al., 1996).

The third approach focuses on both the behavioural and attitudinal dimensions, thereby addressing the complexity of the construct (Jacoby and Chesnut, 1978). In this approach, Jacoby and Kyner (1973) discussed the role of loyalty in the consumer extensive decision-making process and defined loyalty by six necessary and collectively sufficient conditions. According to them, brand loyalty is: (1) a biased (i.e., non-random); (2) behavioural response (i.e., purchase); (3) expressed over time; (4) by some decision-making unit; (5) with respect to one or more alternative brands out of such brands, and (6) is a function of a psychological (decision making, evaluative) process. The authors stated that the evaluation process (the six conditions) is what makes an individual develop a commitment towards a brand. They argued that it is this notion of commitment that provides an essential basis of differentiation brand loyalty from other forms of repeat purchasing behaviour. Thus, they used six different dependent measures (two assessing attitudinal brand loyalty and four assessing behavioural brand loyalty) to access the formation of loyalty.

Based on Jacoby and Kyner’s (1973) work on brand loyalty, Dick and Basu (1994) defined
brand loyalty as a function of relative attitude and patronage behaviour. He classified loyalty into four different categories based on repeated patronage and relative attitude. The categories are true loyalty, spurious loyalty, latent loyalty and no loyalty. Thus, loyalty is considered as a multi-dimensional construct to include an attitudinal (cognitive and/or affective components), normative, motivational or conative (intention or commitment to consume) component (e.g., Dick and Basu, 1994; Macintosh and Lockshin, 1997; Oliver, 1999) to a behavioural loyalty concept.

Oliver (2009, p.392) defined loyalty as “a deeply held commitment to rebuy or repatronise a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour”. This definition includes attitudinal constructs such as commitment, predispositions to switch and a time perspective. Further, Oliver (1999) developed the loyalty hierarchy - a broad attitudinal approach with reference to attitude–behavioural theory. He proposes that consumers go through different phases from cognitive (cost, benefits and quality) and affective loyalty (satisfaction, involvement, liking or preferences) through conative loyalty (e.g., commitment) before being committed to action loyalty. This perspective is in accordance with the traditional attitude–motivation/intention–behaviour approach in social psychology (Ajzen and Fishbein, 2005). The attitudinal approach uses evaluative, emotional and/or motivational expressions to assess loyalty (Oliver, 1999).

3.1.3. Suggestions for future studies

The above review process reveals some issues which need future research.

Satisfaction is not a well-defined construct. The measures of satisfaction contain information from other constructs, such as quality and expectations. Thus, one can suspect the discriminant validity between satisfaction and these evaluative constructs. However, it seems that more and more studies where some kind of behaviour is involved prefer to assess satisfaction more like a facet of a global attitude (Oliver, 2009). Another issue is that most measures of satisfaction are explicit but not implicit, while attitude theories have made a clear distinction between these two measures (Ajzen and Fishbein, 2005). This is a challenge for future research in the satisfaction area.

The distinction among the three approaches to define and measure loyalty is not clear because some studies use intention as a proxy for actual behaviour, while other studies define intention as attitudinal. Another note is that most conceptual discussions of loyalty include an integration of several constructs, including attitudes, intentional and behavioural aspects. Generally, the loyalty concept has centred on complex definitions and may include both antecedents and consequences of loyalty. Including causal explanations in conceptual definitions of loyalty may cause circularity because they focus on a single concept (loyalty), but define it by several related constructs (East et al., 2005, for a discussion). In addition, some measures of loyalty, such as past behaviour and consumption frequencies (e.g., Olsen, 2002), are also used to measure other behavioural constructs, such as inertia and habit (Ouellette and Wood, 1998).

Thus, the present study suggests some direc-
Firstly, the different dimensions should be treated differently because each aspect of loyalty may have different antecedents and/or consequences (e.g., Lam et al., 2004). The decomposition of loyalty has been an important way to fully understand the consequences of consumer satisfaction and its complicated relationship with ultimate loyalty, such as repeated action over time.

Secondly, because different conceptual and measurement approaches of satisfaction and loyalty exist, and the SLR may vary depending on the kinds of these approaches, it is recommended that future research studying the SLR should be aware of the principle of compatibility (Olsen, 2007). According to this principle, measures of attitude and behaviour are compatible to the extent that the target, action, context and time element are assessed at identical levels of generality or specificity. Thus, this study suggests that specific measures of satisfaction must match specific measures of loyalty and general measures of satisfaction should correspond to general measures of loyalty. The object or target should be framed on the same level and with correspondence for both satisfaction and loyalty, in which they may be framed towards an action (e.g., buying or consuming) of a given defined object (e.g., product, brand or category) in a given setting (e.g., in a supermarket, or in a restaurant) within a given time-frame (during a week, month or a year).

Thirdly, this study suggests that research on satisfaction and loyalty should learn from the theories on attitude–behaviour relationships in social psychology (Ajzen and Fishbein, 2005). This comes from the fact that both attitude and satisfaction are not well-defined constructs. The review process reveals that it is possible to view satisfaction as a facet of “object–evaluation–association”. For this reason, researchers should be aware of the fact that different objects (attributes, product, service, price, decision, person, issue, buying, consuming, etc.) produce different associations and so do the different evaluations (satisfied, pleased, happy, liked, good, etc). For example, it is possible that satisfaction with a product produces different associations from satisfaction with the price, quality, decision or company because the evaluation is associated with different objects or targets.

Next, most studies use self–reported measures to measure loyalty. However there are discrepancies between self–reported measures of behavior and actual behavior (Seiders et al., 2005) due to common method variance between attitudinal and behavioral data. Thus, future research should use objective measures to assess loyalty.

Finally, there is need for future research focusing on the conceptual distinctions amongst evaluative constructs related to satisfaction and loyalty, such as quality, value, trust, price, commitment, recommendations, switching, etc. It also is necessary to make a clearer distinction between attitudinal, intentional and/or behavioural assessments of loyalty. For example, the results may differ if one asks for actual recommendations versus intended recommendations or actual paying behaviour versus intention to pay a higher price. Another distinction should also be made between loyalty and habit. This is because most behavioural measures of action loyalty (e.g., past behaviour...
frequencies) are equivalent to some definitions of spurious loyalty (Dick and Basu, 1994) or inertia (Beerli et al., 2004) and not “true” loyalty based on elaboration or conscious evaluation and decision-making. In that respect, habit and loyalty have equivalent measures even though their theoretical definitions include that habits are behaviours without self-instruction that have become automatic responses (Verplanken and Aarts, 1999) and can be performed quickly without intention and with a minimum of focal attention (Ouellette and Wood, 1998). Thus, it should be possible to include a cognitive or mental dimension of loyalty in addition to behavioural, intentional or attitudinal loyalty. This “new” dimension should include aspects of lack of awareness, unintentional behaviour, efficiency and/or difficulty to control.

3.2. Different research lines about the satisfaction–loyalty relationship

The literature pertaining to the relationship between satisfaction and loyalty can be organized in three categories. The first category provides empirical evidence of a positive relationship between satisfaction and loyalty without further elaboration. This group also focuses on additional antecedents besides satisfaction as well as mediators in the SLR. Other studies investigate the functional forms of the relationship between customer satisfaction and loyalty. Finally, the last category examines the effects of moderator variables on this relationship.

3.2.1. The satisfaction – new drivers approach

3.2.1.1. Critical review

Within the first research stream, typically, satisfaction is thought of as an immediate antecedent to loyalty (Anderson and Sullivan, 1993, p.125). The strong focus on satisfaction is based on the implicit assumption that there is a strong positive relationship between satisfaction and loyalty (Fornell, 1992; Homburg and Giering, 2001; Taylor and Baker, 1994).

A wide range of empirical evidence for a positive relationship between satisfaction and intentional loyalty is provided (Anderson et al., 1994; Taylor and Baker, 1994; Rust et al., 1995; Woodside et al., 1989). The few empirical studies that have tested the relationship between satisfaction and perceived or actual behaviour/loyalty have found a moderate to low relationship (Bloemer and Ruyter, 1998; Bolton, 1998; Gustafsson et al., 2005; Mittal and Kamakura, 2001; Olsen, 2002). The relationship between satisfaction and other dimensions of loyalty such as recommendation (Brown et al., 2005), willingness to pay more (Zeithaml et al., 1996), resistance to switching (Lam et al., 2004; Yang and Peterson, 2004) or commitment (Bove and Johnson, 2006; Garbarino and Johnson, 1999; Gustavsson et al., 2005) are also considered to be positive.

However, the literature is not consistent in its findings of the SLR dimensions. For example, Brown et al. (2005) did not find any significant relationship between recommendation and satisfaction. Lam et al. (2004) found that recommendation and intentional loyalty behaved differently with respect to their antecedents. Customer value, customer satisfaction and switching cost explained a much greater variance in intended loyalty than recommendation and loyalty. The SLR also varies between products, industries and situations (Johnson et al., 2001; Szymanski and Henard, 2001). The findings are consistent with the above discussions
in the part of the conceptual–measurement approach that the different dimensions of loyalty can have different antecedents and the results depend on the way satisfaction and loyalty are defined.

Concerning the question about the relative importance of satisfaction or obstacles to intention or loyalty, most studies have used quality/performance, value or expectations (Cronin et al., 2000; Fornell et al., 1996; Taylor and Baker, 1994), and some studies have included perceived price (Yieh et al., 2007), switching cost (Lam et al., 2004) and others in addition to satisfaction in their empirical models. However, these additional variables are often suggested as the antecedents of both satisfaction and loyalty, and their effects on loyalty are mainly indirect via satisfaction rather than direct. Extending attitude theories, one recent study by Olsen (2007) found that social norms and perceived behavioural control have explanatory power not less than satisfaction on loyalty, but the effects of both these antecedents and satisfaction are mediated by involvement. Therefore, although this study makes a separate line for the satisfaction–new drivers approach from two others (i.e., the mediator–moderator and linear–nonlinear approaches), the discussions about the SLR should be in an integrated approach.

3.2.1.2. Suggestions for future research

Most studies suggest additional antecedents for future research (Cronin et al., 2000; Gustafsson et al., 2005; Olsen, 2007). The following suggestions are also in this stream.

First, many determinants of satisfaction and loyalty are suggested by Dick and Basu (1994) and Oliver (2009), but empirical evidence is insufficient. For example, accessibility or primary affect should be investigated in future research.

Second, it is also mentioned above that satisfaction can be approached as a facet of attitude, thus the formation of loyalty and the relative importance of satisfaction could be better understood by investigating satisfaction besides unexplored different constructs in consumer psychology (e.g., Olsen, 2007), such as experience seeking (Hirschman, 1984), consumer’s difficulties in choice and facilitation conditions (Tuu and Olsen, 2010), convenience orientation and consideration set (Rortveit and Olsen, 2009). Managers and researchers could also benefit from investigating new dimensions of social norms like behavioural norms, moral norms, or different assessments of the normative construct (Olsen, 2007). Future research could test the conceptual and relational differences between control or resource components on a global level, such as between perceived control, locus of control, and self–efficacy (Olsen, 2007).

3.2.2. The mediator–moderator approach

3.2.2.1. Critical review

Others studies explain the moderate magnitude of the SLR by adding mediators and moderators in this link. A mediator is a variable that has an interfering effect, while a moderator is a variable which changes the magnitude of the SLR (Baron and Kenny, 1986). It also notes that mediators and moderators often have direct associations with satisfaction and/or loyalty. However, for simplicity, this study ignores this issue and keeps it in an integrated approach that is discussed later.

Different mediators in the SLR exist in the
Figure 1: Moderators in the satisfaction–loyalty relationship

1. Consumer/customer moderators
   Demographical characteristics
   Ambivalence
   Certainty
   Delight
   Involvement
   Knowledge
   Positive emotion
   Perceived value
   Perceived quality
   Price consciousness
   Habit
   Evoke set
   Heavy use
   Purchase volume
   Firm size
   Apathetic orientation
   Economic orientation
   Personalizing orientation

2. Relational moderators
   Relational value
   Relationship age/duration
   Length of experience
   Loyalty program
   Social ties
   Trust
   Account management tenure
   Relational switching costs
   Variety seeking
   Interpersonal relationships
   Relational orientation
   Negative critical incidents

3. Marketplace moderators
   Service quality
   Convenience
   Competitive intensity
   Market structure
   Satisfaction with competitor
   Procedural switching costs
   Financial switching costs
   Attractiveness of alternatives
   Urban versus suburban

4. Situational moderators
   Price increases

Satisfaction

Agustin and Singh (2005)
Aksoy et al. (2013)
Anderson and Srinivasan (2003)
Bloemer and de Ruyter (1998)
Bloemer and Kasper (1995)
Bolton (1998)
Bolton et al. (2008)
Bowman and Narayandas (2004)
Burnham et al. (2003)
Capraro et al. (2003)
Chandrashekaran et al. (2007)
Chiou et al. (2002)
Cooil et al. (2007)
Evanschitzky and Wunderlich (2006)
Garbarino and Johnson (1999)
Homburg and Giering (2001)
Homburg et al. (2005)
Jones et al. (2000)
Kumar et al. (2013)
Mägi (2003)
Mittal and Kamakura (2001)
Olsen (2007)
Olsen et al. (2013)
Suh and Yi (2006)
Taylor and Baker (1994)
Tuu and Olsen (2010; 2013)
Tuu, Olsen and Linh, 2011
Van Doorn and Verhoef (2008)
Voss et al. (2010)
Verhoef (2003)
Woisetschläger et al. (2011)
Yi and Jeon (2003)

Loyalty
literature, such as corporate image, trust, commitment (Johnson et al., 2001), brand equity (Johnson et al., 2006), intention (Mittal and Kamakura, 2001), involvement (Olsen, 2007), switching behaviour (Sambandam and Lord, 1995) or even perceived quality (Bitner, 1990). Most of these variables (e.g., trust, commitment, involvement, perceived quality and so on) are also found as moderators in the SLR (see Figure 1). Thus, the investigation of one or another role of these variables, either as a mediator or as a moderator, may generate a more deficient understanding.

Another group of studies examines the existence of external factors moderating the SLR. In Figure 1, this study presents an overview of the recent marketing literature on the moderators of SLR. According to Seiders et al. (2005), this study categorizes these moderators into four classes: consumer/customer, relational, marketplace and situational moderators (see Figure 1).

- Consumer/customer moderators

The first class focuses on individual characteristics. The characteristics operate at the level of the individual and can be used to identify more or less valuable consumers/customers (i.e., those with higher or lower repurchase rates). These include demographical characteristics (e.g., age, education, sex, households’ income, marital status, children, area) (Cooil et al., 2007; Mittal and Kamakura, 2001; Homburg and Giering, 2001), the properties of consumer’s attitude strength (e.g., certainty, ambivalence, involvement, knowledge) (Chandrashekaran et al., 2007; Evanschitzky and Wunderlich, 2005; Olsen et al., 2005; Olsen, 2007; Seiders et al., 2005; Suh and Yi, 2006; Yi and Jeon, 2003), and other moderators in a B2C context, such as perceived value, inertia, delight, positive emotion (Anderson and Srinivasan, 2003; Bloemer and Kasper, 1995), variety seeking and consideration set (Tuu and Olsen, 2013), or in a B2B context, such as heavy use, purchase volume, firm size, apathetic orientation, economic orientation, personalizing orientation (Bowman and Narayandas, 2004).

The demographical characteristics are suggested as moderators based on the perspective of individual thresholds (Mittal and Kamakura, 2001). This viewpoint proposes that the translation of average satisfaction ratings into repurchase behaviour may vary if individuals have different thresholds or tolerance levels with respect to repurchase. Given the same rating, individuals with lower thresholds may be more likely to repurchase the brand than those with higher thresholds. Some researchers (Cooil et al., 2007; Evanschitzky and Wunderlich, 2006; Homburg and Giering, 2001) argue for the moderator role of demographical characteristics based on the premise that individuals with different demographical characteristics have different personal interaction processes, information-processing abilities, cognitive capacities and willingness to take risks.

Concerning the moderator effects of attitude strength’s properties on the SLR, most previous studies (Chandrashekaran et al., 2007; Olsen et al., 2005; Olsen, 2007; Suh and Yi, 2006; Yi and Jeon, 2003) adapt the perspectives of attitude strength theory (Visser et al., 2006) to suggest that several attributes of attitude strength (e.g., involvement, certainty, ambivalence, knowledge, and so on) may moderate the SLR. Most previous satisfaction research
focus almost entirely on the level of satisfaction and ignores the strength–related issue (e.g. Anderson and Srinivasan, 2003; Evanschitzky and Wunderlich, 2006; Lam et al., 2004; Mittal et al., 1998). Recent conceptualizations of satisfaction (e.g., Chandrashekaran et al., 2000; Chandrashekaran et al., 2007; Olsen et al., 2005) highlight the conceptual and practical utility of studying the multidimensional strength perspective of satisfaction. For example, Chandrashekaran et al. (2007) argue that satisfaction strength plays a central role in translating satisfaction into behaviour. Uncertain judgments may cause individuals to hesitate before acting on their satisfaction, which leads to the result that lower levels of certainty inhibit their satisfaction–purchasing intentions/behaviour. Similarly, individuals’ ambivalence or simultaneously favourable and unfavourable cognitions and feelings about the evaluative object may lead to inconsequential satisfaction evaluations on the intentions/behaviour relation (e.g. Olsen et al., 2005).

Some other moderators, such as perceived value, inertia, habit, delight, positive emotion (Anderson and Srinivasan, 2003; Bloemer and Kasper, 1995; Olsen et al., 2013), heavy use, purchase volume, firm size, apathetic orientation, economic orientation, personalizing orientation (Bowman and Narayandas, 2004) are based on different theoretical perspectives. However, with the limitation of its length, this study ignores this review.

- Relational moderators

The second group includes relational characteristics which capture formal and informal bonds between a company and its customers, such as relationship age, trust, (Anderson and Srinivasan, 2003; Cooil et al., 2007; Seiders et al., 2005; Verhoef, 2003), loyalty program (Seiders et al., 2005), account management tenure (Bowman and Narayandas, 2004), relational switching costs (Burnham et al., 2003), relational orientation (Garbarino and Johnson, 1999), variety seeking (Homburg and Giering, 2001), interpersonal relationships (Jones and Suh, 2000), critical incident recovery (Evanschitzky and Wunderlich, 2006) negative critical incidents (Van Doorn and Verhoef, 2008).

The theoretical explanation for the moderator effects of this group is diversity, but the most important point of view are based on the firm–customer relationships (e.g., Cooil et al., 2007) and resource–allocation theory (e.g., Seiders et al., 2005). These theories are adapted and developed from social exchange theorists (see Bowman and Narayandas, 2004), which observe that people evaluate exchanges along three dimensions of perceived fairness related to (1) the allocation of resources and distribution of outcomes (distributive fairness), (2) the process or means by which decisions are made (procedural fairness), and (3) how information is exchanged and outcomes are communicated (interactional fairness).

With repeated interactions, firms and customers develop bonds (e.g., relationship age, interpersonal relationships, relationship orientation), and the reinforcements (loyalty program participation, account management tenure) from satisfactory interactions to help build customer loyalty (Anderson and Sullivan, 1993; Cooil et al., 2007). Relational bonds can create social and financial switching barriers (see also Lam et al., 2004; Burnham et al., 2003) that provide firms with an advantage
insulated from competitor actions (Seiders et al., 2005). Thus, they enhance the positive association between satisfaction and subsequent relationship duration (Bolton, 1998; Verhoef, 2003; Verhoef et al., 2002).

Customers enter relationships in part to reduce the time and effort required for purchase decisions (Burnham et al., 2003), which suggests that relationship program participants should be less inclined to shop around and more inclined to allocate purchases to relational providers that offer superior satisfaction. These programs (e.g., loyalty programs) promote retention by enhancing customers’ perceptions of the relationship investment and increasing their trust and commitment as well as increasing financial switching barriers (De Wulf et al., 2001; Evanschitzky and Wunderlich, 2006; Rust et al., 2004).

- **Marketplace moderators**

  Marketplace characteristics feature interactions among customers, the focal firm, and competing firms that influence repurchase patterns (Seiders et al., 2005). For example, intense competition that spurs price promotions may increase switching behaviour and overall purchase volume; or new firms entering the marketplace may steal customers and market share from entrenched competitors. This group focuses on moderators, such as convenience, purchase size, competitive intensity and structure (Jones and Sasser, 1995; Seiders et al., 2005), switching costs, attractiveness of alternatives (Jones and Suh, 2000), satisfaction with competitors (Bowman and Narayandas, 2004), procedural switching costs, financial switching costs (Burnham et al., 2003) and service quality (Bolton et al., 2004).

- **Situational moderators**

  Situational moderators are suggested by Dick and Basu (1994), such as actual or perceived opportunities for engaging the attitude–consistency behaviour, incentives for brand switching through reduced price of competing brands and effective–in–store promotion. Seiders et al. (2005) also suggest some others, such as decisions influenced by transitory needs, such as those driven by emergency, point–of–purchase, or time pressure factors, which often lead customers to engage in isolated unsought, impulse, or suboptimal purchase behaviour. Such situational moderating influences warrant better understanding in terms of how they affect specific, stand–alone transactions and ongoing customer–firm relationships.

  However, there is little empirical evidence about these situational moderators. Only a few studies (e.g., Homburg et al., 2005) we know of provide empirical evidence to support for these suggested situational moderators, such as consumers’ reaction to price increases.

### 3.2.2.2. Suggestions for future research

The above review reveals lots of mediators and moderators in the SLR. However, this does not say that the research stream is saturated, instead of this, many suggestions for exploring new mediators and moderators, interaction mechanisms between moderators and mediators–moderators combinations are given (e.g., Homburg et al., 2005; Lam et al., 2004; Olsen, 2007; Seiders et al., 2005). This study proposes some directions for future research.

- **New mediators**

  The mediation perspective in this area is often based on the satisfaction–motivation–loy-
alty framework (Olsen, 2007), which takes into account the fact that consumers may move across different phases from evaluation through different motivations and to loyalty. Thus, a more comprehensive understanding of different phases of the motivational process and how these processes link satisfaction with loyalty can be of importance for managers. Future research should include several motivational constructs such as desire (Perugini and Bagozzi, 2001; Oliver, 2009), trying (Bagozzi and Warshaw, 1990), different forms of involvement (O’Cass, 2000), different dimensions of trust (Singh and Sirdeshmukh, 2000) and the like. Both conceptual aspects (reliability/validity) and structural relationships between these constructs in relation to satisfaction and loyalty could improve the knowledge of motivation in the process of loyalty formation (Olsen, 2007). It is also possible to combine some mediators in the SLR, such as desire, commitment and involvement. A horizontal model which describes different motivational stages from satisfaction before reaching loyalty is also fruitful, such as anticipated satisfaction → desire → implemented intention → goal → loyalty (Bagozzi and Warshaw, 1990; Perugini and Bagozzi, 2001).

- New moderators

The first suggestion focuses on consumer/customer moderators. Many previous suggested moderators which have no empirical evidence should be investigated in future studies, such as social norms (Dick and Basu, 1994), social and self–identity, different aspects and kinds of involvement (Olsen, 2007). Other potential moderators should be noted, such as perceived quality of competitors, consumer participation in creating product value, new experience seeking and so on (Tuu and Olsen, 2013).

Regarding relation moderators, the exploration of relational norms or social commitments adapted from different social psychology theories may be fruitful. For example, if children are often considered as a commitment between a couple to lengthen and make their marriage durable, the firm–customer relationships (in B2B) may be strengthened with the strict participation of third parties; or if the level of commitment, trust and treatment between persons varies according to different kinds of norms, such as familiar, friend, or partners, the firm–customer relationships would be enhanced not only depending on the relationship age, but also on the levels of norm used, such as contract, friend, partner or reliable partner. Other moderators to test are also suggested in the literature, such as consistent pricing policy, product/service consistency, hedonic nature of service category (Bolton et al., 2004).

Thirdly, marketplace moderators feature in interactions among customers, the focal firm, and competing firms (Seiders et al., 2005). Under this perspective, future studies would benefit by exploring some new potential moderators, such as alternative new products which increase consumer/customer’s switching behaviour or market risks, which lead customers to choose a diversity of suppliers.

Finally, as mentioned above, only a few studies explore situational moderators in the SLR suggested by Dick and Basu (1994) and Seiders et al. (2005). Thus, future studies would benefit from fulfilling this gap.

- Combined mediators–moderators

A combined mediators–moderators approach
means that one study can combined mediators and moderators in the SLR in a general structure model. The review process reveals that some variables can play a role as both a mediator and a moderator, such as involvement, commitment, switching behaviour and so on. Some moderators can also interact with each other (Bell et al., 2005; Serders et al., 2005). Thus, future studies should include some mediators and moderators which are related with each other and investigate the interactions between them, such as three-way interaction, moderated mediation or mediated moderation (Baron and Kenny, 1986). Some potential combinations may be between ‘perceived risk, trust, knowledge and certainty’ (Tuu et al., 2011); ‘involvement, ambivalence, certainty, extremity and centrality’ (Tuu and Olsen, 2010); ‘trust, commitment, switching costs and relationship investment’; or ‘perceived quality, market expertise and switching costs’ (Bell et al., 2005).

3.2.3. The linear–nonlinear approach

3.2.3.1. Critical review

Although research within the first two categories has typically been based on the explicit or implicit assumption of a linear relationship, researchers have provided theoretical and empirical support for a more complex (i.e., nonlinear) structure. However, a wide range of suggested conceptualized functional forms and empirical findings in the present literature on the nonlinear effects of satisfaction on different aspects of loyalty generates a mixed and inconclusive view of whether the effect of satisfaction on loyalty exhibits diminishing or increasing returns. Some main theories explaining the nonlinear effect of satisfaction on loyalty and important empirical evidence are reviewed in the next parts.

- Catastrophe model

Oliva et al. (1992) use a catastrophe model to suggest that the nonlinear nature in SLR depends on third variables. In other words, the non–linear nature of SLR is not itself, but is caused by a moderator, such as involvement or transaction cost. Oliva et al. (1992) indicate that, depending on the magnitude of transaction costs, the SLR can be both linear and nonlinear.

- Satisfaction thresholds

Mittal and Kamakura (2001) explain the nonlinear nature of SLR is due to the existence of the thresholds in an individuals’ characteristics. Satisfaction thresholds exist because customers/consumers may have different thresholds or tolerance levels toward repurchase that may not be fully captured in their satisfaction ratings. Because of these differences, individuals with the same satisfaction rating but with different characteristics may have different levels of repurchase behaviour. Thus, the functional form linking satisfaction ratings and repurchase behaviour is nonlinear, and the nonlinearity varies on the basis of the characteristics. Mittal and Kamakura (2001) find that intentional loyalty shows diminishing returns, but that repurchase loyalty exhibits increasing sensitivity towards satisfaction.

- Prospect theory

Others argue for the nonlinear effect of satisfaction based on prospect theory (Kahneman and Tversky, 1979) which describes the consumer decision process as consisting of two stages. First, in the editing phase, people decide which outcomes they see as basically identical and they set a reference point and consider
lower outcomes as losses and larger as gains. According to them, people’s judgments display loss aversion, suggesting that losses loom larger than gains. Homburg et al. (2005) argue that the judgment of satisfaction would be a reference, and the reference point is the expected satisfaction level. Satisfaction above the reference point would be considered a gain, whereas satisfaction below this standard of comparison would be perceived as a loss. Furthermore, marginal value of gains and losses decreases in size with increasing levels of satisfaction or dissatisfaction. In this line, Homburg et al., 2005 find empirical evidence supporting an increasing return effect of satisfaction on loyalty. By contrast, Van Doorn and Verhoef (2008) find opposite evidence.

- Need–gratification and dual–factor motivation theories

The fourth view is based on the theories of need–gratification and dual–factor motivation (Herzberg, 1966; Wolf, 1970). Gratification is the pleasurable emotional reaction of happiness in response to the fulfilment of a desire or the fulfilment of a goal. Herzberg (1966) found that the factors causing satisfaction (and presumably motivation) were different from those causing dissatisfaction. He developed the dual–motivation–hygiene theory to explain these results. He called the satisfiers motivators and the dissatisfiers hygiene factors, using the term “hygiene” in the sense that they are considered maintenance factors that are necessary to avoid dissatisfaction but that by themselves do not provide satisfaction.

According to need–gratification and dual–factor motivation theories, individual needs can be broadly classified into two categories: (1) basic, lower–order, or hygiene needs and (2) growth, higher–order, or motivator needs (Herzberg, 1966; Wolf, 1970). To the extent that unfulfilled and desired needs trigger and maintain goal pursuit, these theories argue that when the environment is deficient in hygiene need fulfillment such that the lower–order needs remain unfulfilled, the person’s goal pursuit is motivated mainly by basic, lower–order needs and not by growth and higher–order needs. However, when the environment fulfils lower–order needs, the individual goal pursuit is motivated mainly by higher order needs. The key argument is that though higher–order needs fail to motivate goal pursuit until lower–order needs are fulfilled, beyond some point of hygiene fulfillment, increasing fulfillment of higher–order needs has increasing incremental effects on goal pursuit. In contrast, beyond this point of hygiene fulfillment, increasing fulfillment of lower–order needs has decreasing incremental effects on goal pursuit. In this sense, higher– and lower–order needs are monovalent, though their motivating potential is activated in different ranges of need fulfillment.

From this perspective, Agustin and Singh (2005) argue further that at high levels of satisfaction that are beyond some points of basic need fulfillment, if consumers pursue an increase in the fulfilment of higher–level needs, satisfaction would have an increasing return effect on loyalty. By contrast, if consumers pursue an increase in the fulfilment of basic needs, satisfaction would have a decreasing return effect on loyalty. They also find that satisfaction has a decreasing return on loyalty in an inverted–U shape.

- Disappointment theory
Several studies refer to disappointment theory, such as Anderson and Mittal (2000) and Homburg et al. (2005). In according to the disappointment theory, high positive and high negative disconfirmation is much more emotionally charged than is confirmation. While positive disconfirmation results in emotions such as delight and elation (Oliver et al., 1997), negative disconfirmation leads to the emotion of disappointment (Oliver and Westbrook, 1993; Westbrook and Oliver, 1991). In contrast, mere confirmation adds almost no emotional content to a consumption or usage experience (Oliver, 2009). This state has also been described as “cool satisfaction” (Woodruff et al., 1983).

Disappointment theory suggests that disappointment occurs when the outcome of a choice is below prior expectations, whereas elation arises when the outcome of a choice exceeds prior expectations. The greater the disparity between outcome and expectations, the greater is a person’s disappointment or elation. The theory assumes that both emotions generate additional value (negative or positive) to the basic value of the consumption or usage experience from the process of confirmation/disconfirmation. More specifically, elation should generate an increment (decrement) of value. A crucial aspect of this theory is that both emotion values should increase to a greater degree at the margins, which leads to a convex shape for elation values and a concave shape for disappointment values (Loomes and Sudgen 1986).

For applications, some researchers link to the notion of customer delight, which posits that only truly delighted customers are loyal to a company (Bowman and Narayandas, 2004; Ngobo, 1999). Further, the SLR may also exhibit increasing returns, implying that satisfaction changes toward the extremes of the scale are more consequential than changes in the middle range, which is especially the case when performance exceeds customer expectations (Anderson and Mittal, 2000). Furthermore, increasing return of satisfaction is suggested to occur in situations when satisfaction is unanticipated or unusual, relative to what customers normally envision a product or service experience to entail (Anderson and Mittal, 2000).

Consideration set

Anderson and Mittal (2000) also relied on the notion of a consideration set to suggest an inverse S–shaped SLR. Satisfied customers have little motivation to seek alternatives, so their consideration sets contain few of them. As satisfaction increases, the size of the consideration set diminishes, such that satisfaction influences loyalty at an increasing rate. In contrast, as customers experience dissatisfaction, they expand their consideration sets and may even exclude the focal firm/brand from the consideration set at extreme levels. This inverse S–shaped SLR results in a concave SLR if the reasoning for extremely satisfied customers does not hold, and a convex one if the logic for extremely dissatisfied customers is not accurate (Anderson and Mittal, 2000; for empirical support for the convex and inverse S–shaped relationships).

Industry structure

Another explanation is based on the differences in industry structure (Jones and Sasser, 1995). Jones and Sasser (1995) posit that in markets with intense competition, satisfaction shows an increasing return and any decline in satisfaction results in a rapid drop in loyalty. Hence, merely satisfied and completely satis-
fied customers exhibit dramatically different levels of loyalty.

- Other theories

There are still other theoretical viewpoints about the nonlinear effect of satisfaction on loyalty. For example, Skowronski and Carlston (1989) propose that experiences with extreme satisfaction judgments (whether positive or negative) are easily accessible from memory and are diagnostic for customers. This accessibility–diagnosticity theory provides a rationale for a concave satisfaction–loyalty relationship (in a U–shaped form). It is possible to infer the deceasing return effect of satisfaction on loyalty (in an S–shaped form) based on the asymmetric impact of negative and positive performance in which negative performance on a single attribute could outweigh positive performance on many attributes combined (Mittal et al., 1998). Ngobo (1999) explains that the SLR is characterized by diminishing returns, based on the presence of a saturation effect on customer information search.

In summary, it appears that the SLR is both positive (e.g., Fornell, 1992) and nonlinear (e.g., Mittal and Kamakura, 2001). Accessibility–diagnosticity theory (Skowronski and Carlston, 1989) and need–gratification theory pertaining to lower–order economic goals (Agustin and Singh, 2005) suggest a concave relationship. In contrast, need gratification for higher–order relational goals implies a convex satisfaction–loyalty relationship (Agustin and Singh, 2005). The notion of changes in the size of customer consideration sets (Anderson and Mittal, 2000) and insights from disappointment theory (Homburg et al., 2005) provide the rationale for an inverse S–shape. Furthermore, prospect theory offers support for an (inverse) S–shaped SLR (Homburg et al., 2005). Other theoretical viewpoints also provide some explanations for the nonlinear nature of the SLR. Figure 2 provides a review of different functional forms about the nonlinear effect, both increasing and decreasing return, of satisfaction on loyalty in the literature.

3.2.3.2. Suggestions for future research

The above review reveals that most theories explaining the nonlinear nature of SLR depend on third variables, such as involvement.
and transaction cost in the catastrophe model (Oliva et al., 1992), consumers’ demographical characteristics in the point of satisfaction thresholds (Mittal and Kamakura, 2001), risk aversion in the prospect theory (Kahneman and Tversky, 1979), emotion in the disappointment theory (Loomes and Sudgen, 1986), consumer’s goals in the theories of need–gratification and dual–factor motivation (Herzberg, 1966; Wolf, 1970), accessibility in the accessibility–diagnosticity theory (Skowronski and Carlston, 1989), and other variables, such as consideration set (Anderson and Mittal, 2000) and competition intensity (Jones and Sasser, 1995; Ngobo, 1999).

The problem is that while most of these third variables have been proven as antecedents and/or moderators in the satisfaction–loyalty relationship (e.g., Anderson and Srinivasan, 2003; Bloemer and de Ruyter, 1998; Bolton, 1998; Cooil et al., 2007; Homburg and Giering, 2001; Mittal and Kamakura, 2001; Seiders et al., 2005; Suh and Yi, 2006; Yi and Jeon, 2003), most previous studies investigating the nonlinear effect of satisfaction on loyalty have often ignored the effects of their control on this relationship. This may generate biased and less robust estimations. Thus, future study would benefit by testing simultaneously structural relationships in a general model including both the nonlinear effect of satisfaction and moderators at least within one theory. More importantly, this should be done in combination with the exploration of functional forms that capture asymmetric interaction effects between satisfaction and product/customer variables (e.g., Fornell et al., 2010).

Although different theories exist in the literature, most previous studies use one or two relevant theories to explain the phenomenon and empirical evidence is often found pertaining to a specific research setting. Future study could test hierarchical models to examine the relative strength of these alternative theories. Future study may benefit by applying other theories to explain the nonlinear effect of satisfaction on loyalty. For example, social judgement theory (Nebergall, 1966) proposes that a person’s full attitude is a spectrum or continuum which refers to “latitudes of acceptance, rejection, and non-commitment”. These latitudes compose, respectively, a range of preferred, offensive and indifferent attitudes. Therefore, one’s attitude on a social issue cannot be summed up with a single point but instead consists of varying degrees of acceptability for discrepant positions. Under this perspective, satisfaction can be considered as a spectrum in which its levels may correspond to loyalty, switching and indifference. The next inferences may be similar disconfirmation or prospect theories.

As mentioned above, different conceptual–measurement approaches of satisfaction and loyalty exist in the literature. Thus, further research should explore the nonlinear relationship between satisfaction and other aspects of loyalty, which is under-explored. For example, it would be worthwhile to study the impact of satisfaction on customers’ reactions to price changes, price tolerance, willingness to pay a premium price or complaint behaviour, of which there are no studies we know of in the literature.

Finally, it could be that the SLR may change at different stages in a product’s life cycle. Thus, it would be interesting for future study
to explore the nonlinear effect of satisfaction on loyalty at different stages in a product’s life cycle. Future research could examine whether there are potential moderators that strengthen or weaken the nonlinear relationship between satisfaction and loyalty (Homburg et al., 2005). Such moderators should impact on either the two ends or only on the middle of the curvilinear form of the SLR to enhance or weaken the nonlinear relationship. This may be a big challenge for future study.

4. Conclusion

For a comprehensive view of the nature of SLR in marketing, this study makes an effort to critically review and make suggestions for future research based on over 75 papers published by top peer reviewed journals. While the SLR is often suggested to be positive, the nature of the relationship is complex, nonlinear and is affected by many moderators and mediators. Therefore, different antecedents, definitional approaches of satisfaction and loyalty, functional forms of the SLR, and different moderators and mediators are suggested to be tested in order to shed light on the complex nature of this relationship.

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