A Comprehensive Model of Customer Trust in Two Retail Stores

Paolo Guenzi
Institute of Marketing, Department of Management,
SDA Bocconi School of Management, Bocconi University, Milan, Italy

Michael D. Johnson
School of Hotel Administration, Cornell University, Ithaca, New York, USA

Sandro Castaldo
Institute of Marketing, Department of Management, SDA Bocconi School of Management,
Bocconi University, Milan, Italy

Abstract

Purpose – The purpose of this paper is to develop and test a comprehensive model of customer trust in a retail service setting. Three levels of the customer-to-store relationship are simultaneously taken into account: customer to sales associates, customer to store branded products, and customer to the store itself.

Design/methodology/approach – Using partial least square (PLS) on a sample of 393 customers of an Italian supermarket retailer, a model linking customer trust (in the store, in store branded products and in sales associates) to overall perceived value and store loyalty intentions and behaviors is tested. Subsequently an expanded model to determine the influence of managerially controlled antecedent variables (salespeople’s trustworthiness, store environment, store assortment, and communications) is estimated on the various trust levels.

Findings – Trust in the salesperson and trust in store branded products have positive effects on overall store trust. Store trust, in turn, increases perceived value and loyalty intentions. Looking at the drivers of the three levels of customer trust, salesperson trustworthiness positively affects only trust in the salesperson. Store environment has a positive impact only on overall trust in the store. Store communication fosters all three levels of customer trust, while store assortment increases both overall trust and trust in store branded products.

Practical implications – Findings of the study suggest an alternative perspective to the dominant strategies in grocery retailing services. To foster store patronage, retailers have typically invested in price cuts, promotions and loyalty schemes. Store managers may rather use sales associates, the store environment, store assortment, store branded products, and communication to foster customer trust and increase customer loyalty. Managing store brands with the goal to build trust, as opposed to increase immediate
profit margins, may call for a completely different approach to private labels. Similarly, the potential relevance of interpersonal trust may suggest retailers to devote more resources to selection, recruitment and training of sales associates, and may stimulate changes in evaluation criteria, incentive schemes and reward systems.

Originality/value – The study aims at filling two important gaps in the literature: the scarcity of comprehensive store patronage models and the lack of exploration of the operational means of improving customer trust in retail services.

Keywords Trust, Interpersonal relations, Retail management, Customer satisfaction

Paper type Research paper
Introduction

Retail consumers typically develop multiple relationships that, taken together, can contribute to loyalty building: relationships with the store, with front line employees (e.g. sales associates) and especially in the case of grocery markets, with store branded products. The consideration of this multiplicity of levels is very relevant both from a theoretical and a managerial perspective, but it has been largely overlooked in extant research. Moreover, there is scarcity of empirical testing of comprehensive models on loyalty building in retailing services (Too et al., 2001). In fact, studies of relationship marketing in retailing have focused primarily on the impact of promotions and loyalty schemes on relationship development. Yet the use of such tools for such a goal is largely ineffective (Noble and Phillips, 2004) and has been strongly questioned as being short-term oriented (Ailawadi and Keller, 2004), frequently generating price wars and attracting the wrong customers (Bucklin and Lattin, 1991). Similarly, loyalty schemes are seldom a manifestation of relationship marketing: empirical evidence shows that they often reflect transactional strategies and that the huge databases they generate are rarely used for developing customized marketing actions (Hart et al., 1999; Uncles et al., 2003). As a result, just “how customers develop loyalty to a particular store and how that loyalty can be maintained are open questions” (Sirohi et al., 1998, p. 224). As pointed out by Pan and Zinkhan (2006, p. 229) in their meta-analysis on the topic:

[.. .] the relationship between various predictors and a shopper’s retail patronage are unclear, which in turn, complicates our efforts to develop a comprehensive understanding of what affects shoppers’ decisions to patronize a retail outlet.

We argue that, within a supermarket retail environment, customers maintain a variety of separable relationships that includes the people in the store, the products or brands that may be unique to the store, and the place or store itself. Among the various measures used to address the overall strength of a relationship, customer satisfaction, trust and commitment are perhaps the most prominent (Garbarino and Johnson, 1999; Johnson and Selnes, 2004; Morgan and Hunt, 1994). Because trust is equated with high levels of satisfaction (Jones and Sasser, 1995) and is the building block for relationship commitment (Morgan and Hunt, 1994), we focus on delineating different levels of trust to gain a better understanding of the complexity of a customer’s relationship to a store, its people and its products.

The goal of this study is to develop and test a comprehensive model of retail trust. Our model is consistent with the recent meta-analysis on relationship marketing (Palmatier et al., 2006), since it incorporates relational antecedents, relational outcomes and one relational mediator (i.e. trust). Figure 1 depicts the model we test in our research.

We simultaneously take into account three levels of the customer-to-store relationship: customer to sales associates, customer to store branded products, and customer to the store itself. Prior studies have either focused on one or two of these levels at a time (Babin et al., 1999; Macintosh and Lockshin, 1997; Wong and Sohal, 2003). Even when more than one level has been examined, the linkages among the different levels have not (see Macintosh and Lockshin, 1997). We contribute to the literature on retail service marketing by developing and supporting a comprehensive framework that links the different levels of trust to overall perceived value and store loyalty intentions and behaviors. A second contribution is that we extend the model to estimate how a variety of factors from human resources to communications to merchandise, influence the various levels of trust, loyalty intentions and store patronage. This provides a more concrete view of where resources should be allocated to build retail relationships. In the following
sections, we first develop and test a model of the levels of store trust, investigate how to build trust, and then discuss the empirical study.

**Figure 1**

Research Model

---

A comprehensive model of retail trust

Consistent with previous research (Nijssen et al., 2003), we define loyalty intentions as the customer’s intention to perform a diverse set of behaviors, like recommending the store to a friend, remaining loyal to the store or spend more in the store, that signal a motivation to maintain a relationship with the store (Zeithaml et al., 1996). Perceived value is defined as the consumer’s perceptions of the benefits enjoyed versus costs incurred in buying products at the store or what you get for what you pay (Bolton and Lemon, 1999; Sirohi et al., 1998).

Trust can be defined as one party’s confidence in an exchange partner’s reliability and integrity (Morgan and Hunt, 1994). In our case, trust can be interpreted as the expectations held by the consumer that the store, its people, and its products are dependable and can be relied on to deliver on their promises (Sirdeshmukh et al., 2002). Since trust is the key construct in our model, we discuss it in detail.

Our focus on trust is motivated by the fact that, as highlighted by Gundlach and Murphy (1993, p. 41), “the variable most universally accepted as a basis of any human interaction or exchange is trust”. The importance of trust in service environments, like retailing, has been pointed out by Berry (1996, p. 42) who states that “the inherent nature of services [. . .] positions trust as perhaps the single most powerful relationship marketing tool available to a company”. Nevertheless, it has been noticed (Harris and Goode, 2004, p. 151) that “the centrality of the concept within service dynamics has previously been understated, overlooked, or ignored”. Importantly, Gwinner et al. (1998) found that confidence benefits (i.e. trusting the service provider) are the most important relational outcomes of long-term relationships for customers across service categories. In keeping
with this evidence, and consistently with the increasing relevance of a relational perspective, in the present study we use trust per se as the proxy for analyzing a customer’s overall satisfaction, trust and commitment in a retail context. Because trust is a key mediating variable between satisfaction and commitment (e.g. Garbarino and Johnson, 1999; Geyskens et al., 1998; Morgan and Hunt, 1994), it serves as a proxy for these constructs in our model.

**Three levels of trust**

The overall relationship a customer has with a company usually incorporates a set of different but strictly interconnected relationships, which can all contribute to build and reinforce (or deteriorate) customer loyalty. In all these relationships, trust plays a fundamental role (Claycomb and Martin, 2002). In consumer services markets, a distinction can be made between individual-to-individual and individual-to-firm relationships (Iacobucci and Ostrom, 1996). The first type is particularly relevant in service environments (e.g. in retailing), where interpersonal interactions take place between customers and other individuals (e.g. salespeople and front line employees). The second type is characterized by customers’ familiarity with the selling organization in general, with its brand(s) and products or services. If a consumer-centric perspective is adopted (Bendapudi and Berry, 1997; Gwinner et al., 1998), customer-to-firm, customer-to-brand, customer-to-product/service, and customer-to-employee relationships can be identified. In keeping with these foundations, we argue that a model of customer relationship with a store should incorporate not only the focal construct of customer trust in the store, but also the related constructs of customer trust in the store’s salespeople and in store branded products. Moreover, the model should examine the linkages among the three trust constructs. In our empirical context, because salespeople only sell unbranded products (e.g. fish) we do not hypothesize the existence of an association between customer trust in the salesperson and customer trust in store branded products.

In the following we discuss the hypotheses in our model.

Generally speaking, customer trust in the salesperson is positively associated to customer trust in the selling firm (e.g. Doney and Cannon, 1997). In the specific context of retailing, it has been demonstrated that interpersonal relationships positively affect overall customer trust in the store (Wong and Sohal, 2003). Wong and Sohal (2002) and Sirdeshmukh et al. (2002) found that customer trust in the salesperson increases customer trust in the store. It is important to underline that interpersonal trust may not always be important in retailing. Generally speaking:

> [...] customer trust has a future risk contingency orientation as customers place themselves at some risk of undesirable outcomes if the salesperson lacks the competence necessary to provide valid information or the motivation to protect the customer’s interests (Swan et al., 1999, pp. 94-5).

Accordingly, in designing our research we chose a setting (i.e. sales associates selling unbranded food products like meat and seafood) where consumers’ perceived risk is relatively high (suffice it to mention contamination risks: for example, in Europe meat consumption recently dropped dramatically due to the mad cow syndrome and the bird flu) and salespeople (unlike other front line employees like, for example, cashiers) can significant decrease such risk by providing information, suggestions, recommendations, etc. which can reduce consumers’ uncertainty and feelings of vulnerability. In other words, trusted sales associates can act as substitutes for trusted customers buy unbranded food products.

To sum up, although the specific linkages between interpersonal trust and trust in
the store have not been deeply investigated in literature on retailing, extant research on the
topic consistently support the existence of a positive association between the quality of the
personal relationship with the sales associate and the quality of the overall relationship with
the store (Babin et al., 1999; Beatty et al., 1996; Reynolds and Beatty, 1999a; Sivadas and
Baker-Prewitt, 2000). Moreover, even when reciprocal influences were considered, the
impact of trust in the salesperson on overall trust in the company has been found to be
stronger than the opposite (e.g. Doney and Cannon, 1997; Sirdeshmukh et al., 2002).

Hence:

**H1.** Customer trust in the salespeople has a positive effect on customer trust in the
store.

Brands can elicit trust from consumers by reducing perceived uncertainty and vulnerability.
Brand trust can be defined as “the willingness of the average consumer to rely on the
ability of the brand to perform its stated function” (Chaudhuri and Holbrook, 2001, p. 82).
Chaudhuri and Holbrook (2001) showed that brand trust positively affects behavioral and
attitudinal loyalty, but research on this topic is almost completely lacking in the context of
retailing. Despite the growing relevance of store brands in relation to retailers’ revenues
and strategy, an in-depth analysis of the linkage between trust in the store and trust in
store branded products is lacking. Dick et al. (1995) and Semeijn et al. (2004) found a
positive association between store image and customer attitude toward the store brand.
Similarly, Collins-Dodd and Lindley (2003) showed that consumers’ perceptions of store
brand image are positively associated to their perceptions of store image. Although
reciprocal influences may exist between these two constructs, in keeping with the
argument provided by Jacoby and Mazursky (1984) that store brands influence store
image, we posit:

**H2.** Customer trust in store branded products has a positive effect on customer
trust in the store.

**Trust, perceived value and intentions**

Value has been found to be a consequence of trust in different settings, like internet
environments (Sarkar et al., 1998) and business-to-business markets (e.g. Walter et al.,
2001). In a retailing context, Sirdeshmukh et al. (2002) showed that perceived value serves
as a mediating variable between trust and loyalty.

The hypothesis of a positive association between trust in the store and behavioral
loyalty intentions to the store is consistent with general findings on store image (Williams
and Burns, 2001; Zimmer and Golden, 1988). Accordingly, we hypothesize that customer’s
overall trust in the store has both a direct effect and indirect effect via value on customers’
loyalty intentions. This argument is also consistent with the conceptual model suggested by
Grewal et al. (2004). In keeping with the need to investigate this topic, we hypothesize:

**H3.** Customer trust in the store has a positive effect on customer perceived value.

**H4.** Customer trust in the store has a positive effect on store loyalty behavioral
intentions.

**Trust in the salesperson, perceived value and store loyalty behavioral intentions**

In many service environments, the firm’s relational intent and ability are to a great
extent personified and expressed in practice by the front line employees (Price and
Arnould, 1999) and interpersonal relationships are a key element of the offering (Berry,
1995; Czepiel, 1990). Research shows that the creation of strong relationships between
customers and service personnel has a positive impact on customer-to-firm relationships. In fact, by providing social and confidence/trust benefits (Adelman et al., 1994; Hennig-Thurau et al., 2002), this relationship contributes to the creation of value and, in turn, to customer loyalty (Butcher et al., 2001; Reynolds and Beatty, 1999a). Importantly, it has been demonstrated that, across different service industries, social benefits are a fundamental class of relational benefits in the customer’s perspective (Gwinner et al., 1998). We focus our attention on a specific category of front line employees, i.e. salespeople. In the personal selling literature, many authors point out that the interpersonal relationship between the salesperson and the customer can have a substantial impact on important relational outcomes for the selling firm, because it fosters customer satisfaction, commitment and trust in the supplier, as well as repurchase intentions and willingness to recommend the provider to other potential customers (e.g. Johnson et al., 2003; Kennedy et al., 2001; Langerak, 2001; Liu and Leach, 2001; Tam and Wong, 2001).

In the specific context of retailing, research finds that salespeople’ responsiveness increases customers’ perceptions of value (Naylor and Frank, 2000), and that customer relationships are primarily with the salesperson rather than with the firm, although this interpersonal customer loyalty partially transfers to the firm (Beatty et al., 1996; Reynolds and Beatty, 1999a, b). Despite the fact that most of the literature suggests a positive impact of customer-sales associate relationship quality on store loyalty intentions, it should also be noticed that some studies reported different findings. For example, Williams and Burns (2001) showed that salespeople’s service has no impact on store loyalty. Hence, more investigation is needed. We hypothesize that:

H5. Customer trust in the salesperson has a positive effect on customer perceived value.

H6. Customer trust in the salesperson has a positive effect on store loyalty behavioral intentions.

Trust in store branded products, perceived value and store loyalty intentions

Academic research on store branded products mainly focused on their contribution to the retailer’s profitability and to the analysis of power distribution between manufacturers and retailers (e.g. Ailawadi, 2001; Ailawadi and Harlam, 2004). Moreover, the focus has almost always been in analyzing the short-term impact of store branded products on the retailer’s financial performance, instead of their impact on long-term relational outcomes such as customer trust, loyalty and store patronage (Pauwels and Srinivasan, 2004). However, because of their exclusive distribution, store branded products can play a more strategic role in building differentiation (Corstjens and Corstjens, 1995; Sudhir and Talukdar, 2004) and overall store loyalty (Dick et al., 1996; Steenkamp and Dekimpe, 1997). Although a couple of studies have demonstrated that customer store brand use positively affects customer behavioral loyalty (Ailawadi et al., 2001; Corstjens and Lal, 2000), no empirical research to date analyzed the relationship between customer trust in the store branded products, on the one side, and customer’s behavioral loyalty intentions to the store, on the other. Similarly, in comparison with the many studies focusing on the contribution of national brands to store image (e.g. Mazursky and Jacoby, 1986), the analysis of the impact of store branded products on overall trust in the store is lacking. Importantly, Corstjens and Lal (2000) showed that premium quality store brands play a role in building store loyalty. Richardson et al. (1994) found that consumers believe that private label products, compared to national brands, offer better value for money. Baltas (2003, p. 1499) pointed out that “in European markets, store brands have been established as […]
good value for money”, and empirically found that store brands enhance customer loyalty to the store. Hence:

**H7.** Customer trust in store branded products has a positive effect on customer perceived value.

**H8.** Customer trust in store branded products has a positive effect on store loyalty behavioral intentions.

In the context of retailing, Baker *et al.* (2002) found that merchandise value perceptions mediate the impact of store environmental cues and store choice criteria (e.g. merchandise quality) on store patronage intentions. Similarly, Sirdeshmukh *et al.* (2002) found evidence that perceived value affects loyalty intentions. Finally, Grewal *et al.* (2004) have conceptually posited that in retailing perceived value should drive to customer loyalty intentions and called for an empirical investigation on this topic. Hence:

**H9.** Customer perceived value has a positive effect on store loyalty behavioral intentions.

Grewal *et al.* (2004) also argued that customer perceived value should drive actual store patronage behavior. Nevertheless, there is scarcity of empirical testing of this prediction. Consequently, we hypothesize that:

**H10.** Customer perceived value has a positive effect on store patronage.

Loyalty intentions should predict actual customers’ behaviors. Nonetheless, there is scarcity of empirical studies on this topic, which consequently deserves special attention (Chandon *et al.*, 2005). Most of the studies using loyalty intentions as the final dependent variable underlined the need to investigate actual behaviors in future research (see, for example, Sirdeshmukh *et al.*, 2002). Hence, we test the following hypothesis:

**H11.** Store loyalty behavioral intentions have a positive effect on store patronage.

Customer’s patronage to a specific store is also a function of the overall frequency of shopping, which is contingent upon many factors others than trust, such as family type, free time available for shopping, distance to store locations, transportation availability, and so on. We thus include frequency as a control variable in our model to help predict store patronage.

**Building trust**

Although trust *per se* has received considerable attention, there are fundamental gaps in our understanding of the factors that companies can use to build trust. Sirdeshmukh *et al.* (2002) developed and tested a model of the antecedents of customer trust in the retail context using two levels of trust (i.e. trust in the front-line employees behaviors and in the store’s management policies and practices) and as independent variables the related dimensions of trustworthiness (i.e. operational competence, operational benevolence, and problem-solving orientation of front line employees and of management policies and practices, respectively). We add a third level of trust, namely trust in store branded products, as a dependent variable and consider a broader set of potential drivers that store managers can leverage: store environment and atmosphere, assortment, communication, and salesperson’s trustworthiness. By doing so, we fill two
important gaps in the literature: the scarcity of comprehensive store patronage models and the lack of exploration of the operational means of improving trust (Baker et al., 2002). The importance or impact of specific performance attributes and benefits varies both across contexts and over time (Gustafsson and Johnson, 2004). Therefore, we do not posit formal hypotheses regarding their impact. Rather, our purpose is to illustrate the practical importance of the model with respect to continuous quality improvement. We use a set of attributes related to salespeople, store environment, merchandise, and communication to evaluate their impact on customer trust in the store, in the salespeople and in the store branded products. In our model, we chose not to incorporate some variables which have been used in existing literature on the drivers of store image and store patronage. Location was not considered because we are interested in exploring the impact of drivers that managers can leverage. In contrast, location is a strategic choice to be made before opening the store: once decided, it cannot be modified. Moreover, mainly due to current prevailing shopping expeditions types, location no longer explains most of the variance in store choice decisions (Bell et al., 1998). As for promotions, research shows that they do not directly influence a consumer’s store choice decision, but rather they affect where specific categories are purchased by customers who typically shop in more than one store (Bucklin and Lattin, 1991). Moreover, promotions are mainly short-term oriented and are difficult to incorporate in a complex model, because their investigation would require the consideration of frequency and depth of promotions (Ailawadi and Keller, 2004). Finally, our framework does not include loyalty schemes because research shows that their contribution to build store loyalty is more limited than might be hoped and mainly generates spurious loyalty based on simple economic evaluations which do not foster customer trust (Hart et al., 1999; Uncles et al., 2003; Noble and Phillips, 2004).

Salespeople’s trustworthiness

Trust is a focal construct in customer-sales associate relationships (Hawes et al., 1993). In retail service companies, the quality of the relationships between customers and front-line employees incorporates both a professional and a social dimension (Beatty et al., 1996; Reynolds and Beatty, 1999a, b; van Dolen et al., 2002) The meta-analysis by Swan et al. (1999) on drivers of customer trust in the salesperson found that both competence (i.e. the “professional” or “functional-task” dimension) and likeability (i.e. the “social” or “friendship” dimension), as well as benevolence are immediate antecedents of interpersonal trust. Finally, specific to a retail context, Sirdeshmukh et al. (2002) found evidence that “operational competence”, “operational benevolence” and “problem-solving orientation” of front line employees are predictors of customer trust toward them. Hence, in keeping with the above-cited studies, we analyze the impact of competence, integrity, likeability and problem solving on customer trust in the salesperson but also on the other trust constructs in the model (Beatty et al., 1996; Reynolds and Beatty, 1999a, b).

Store environment

In the services literature, contributions related to environmental psychology (Mehrabian and Russel, 1974), store atmosphere (Donovan and Rossiter, 1982) and servicescapes (Bitner, 1992) analyzed the impact of the service environment on consumer responses. In the specific context of retailing, research lacks a comprehensive model analyzing the impact of store environment on customer response (Baker et al., 2002). The specific impact of store environment perceptions on customer trust in the store has not been tested to the best of our knowledge. We argue that customer perceptions of store environment may cause both cognitive and affective responses that are captured by the customer trust concept. Our conceptualization and measurement of store environment is mainly based on layout design for many reasons. First, empirical research on the topic has
shown that store design is more important than other “ambient” factors (such as music) in affecting consumer response (Baker et al., 2002). Second, environmental psychology argues that the most important role of a store is its ability to facilitate the goals of its occupants (Canter, 1983), which in the case of supermarkets are mainly related to efficient movement through the store: this is basically achieved by means of an appropriate design of the layout (Titus and Everett, 1995). We thus expect that store environment has a positive influence on trust in the store and/or the other trust constructs, like trust in the sales associate: in fact, some evidence suggests that store atmosphere can affect customers’ perception of salespeople’s credibility (Sharma and Stafford, 2000).

**Store assortment**

The importance of assortment for retailers is evident in the literature. Fox et al. (2004) find that, in grocery stores, consumer expenditures respond more to varying levels of assortment than to price. Merchandise assortment has consistently been considered as a fundamental dimension of store image (Mazursky and Jacoby, 1986; Zimmer and Golden, 1988) and an important predictor of consumer choice of shopping destination (Oppewal et al., 1997). Ailawadi and Keller (2004) argue that the quality of manufacturer brands carried by the retailer is an important extrinsic cue which is likely to positively affect the perceptions of private labels. Unfortunately, this assertion has not been tested. Assortment should influence trust in the store, and may have carry over effects on the other trust constructs.

**Communication**

The company’s communication is a primary element in building and managing customer’s relationship with a brand or with the company itself (Duncan and Moriarty, 1998), but there is scarcity of studies on the topic in retailing literature. Communication is an important driver of customer trust (Bendapudi and Berry, 1997; Doney and Cannon, 1997; Morgan and Hunt, 1994; Spreng et al., 1996). This is especially true when the company’s communication is perceived as credible, clear and complete. Since we focus on corporate communication, we predict that store communication influences store trust and also affects customer trust in the salesperson and in store branded products (Duncan and Moriarty, 1998).

**Empirical study of trust levels**

We test both our theoretical and applied predictions using a customer survey from a large, branded supermarket retailer in Italy. The survey data was collected by a market research supplier. Respondents were randomly approached by professional interviewers, at various times of the day both during the week and on the weekend, at the end of their shopping expedition in two different stores of the supermarket chain located in the same city. The prominent private label strategy of the retailer makes it an ideal candidate to explore all three levels of trust in Figure 1. Regarding the salespeople, direct interactions with customers take place when buying meat, fish, bakery, and gastronomy (delicatessen-type) products. Having interacted with a sales associate during the shopping expedition was a necessary precondition for running the interview. The final number of usable questionnaires is 393. In the sample, 84 per cent of the respondents were females and 16 per cent were males. This is consistent with the shopping habits of this population, where women do the majority of grocery shopping. Respondents are well distributed across different age classes: 22 per cent are between 18 and 44 years old, 22 per cent between 45 and 54, 28 per cent between 55 and 64, and 28 per cent are older than 65. In terms of length of the relationship with the store,
97 per cent are customers from more than one year. As for frequency of visit to the store, consistently with average figures in the supermarket sector (Gomez et al., 2004), 72 per cent of respondents visit it more than once per week, 23 per cent once per week, and only the remaining 5 per cent less frequently. Overall, the grocery retail context examined here is characterized by relational exchanges between the customers and the store, and allows the respondents to express cumulative evaluations. Moreover, 97 per cent of the respondents stated that they had bought store branded products, and 92 per cent declared they have been buying these products for more than one year.

Measures
To measure the model constructs we used multi-item scales with the exception of frequency of visit to the store and store patronage (Table I). In most cases, measures were taken or slightly adapted from existing scales. In some instances, due to the complexity of our model, for reasons of parsimony we selected only some items from the original scales, which have been typically adopted in studies investigating a much more limited set of constructs.

Perceptions about salespeople’s competence, integrity and likeability were measured using items mainly derived by Hawes et al. (1993) because this is one of the few studies exploring salespeople’s behaviors in the specific context of retailing. Some minor adjustments were made taking into account studies focusing on drivers of trust in the salesperson, such as Andaleeb and Anwar (1996), who also focused on store sales associates, and Swan et al. (1999) meta-analysis on the drivers of trust in the salesperson. As for salespeople’s problem solving (i.e. helping, assistance) behaviors, we developed two new items based on Reynolds and Beatty (1999a). Items regarding store atmosphere were taken from Thang and Tan (2003), while measures for store assortment were adapted from Homburg et al. (2002). For the “communication” construct, a new scale was developed, incorporating items related to its transparency (Ball et al., 2004) ability to stimulate credibility (Bobinski et al., 1996) and the customer’s willingness to visit the store (Gijsbrechts et al., 2003). Items for trust in store-branded products were taken from Chaudhuri and Holbrook (2001). The scales for trust in the salesperson and trust in the store incorporate three items: one is a general measure of trust, the others refer to reliability and benevolence, respectively, which are the two key facets of this construct (Swan et al., 1999). This is consistent with the approach adopted by Doney and Cannon (1997, p. 43), who note that “Although credibility and benevolence could be conceptually distinct [...] they may be so intertwined that in practice they are operationally inseparable” and consequently choose to treat trust as a unidimensional construct including items that tap the credibility and benevolence aspects of trust, along with some global measures of trust. The value construct was measured using items based on Baker et al. (2002), while behavioral loyalty intentions were taken by Sirohi et al. (1998). Store patronage was measured by asking respondents the percentage of their total expenditures for grocery products accounted for the focal store (De Wulf and Odekerken-Schröder, 2003). In fact, share of wallet is the best indicator for this construct. Frequency of visit to the store was measured by an 8 points reverse scale ranging from 1 (more than once a week, i.e. high frequency) to 8 (less than once a year, i.e. low frequency).
Following Olsen and Johnson (2003), we first estimate the conceptual model in Figure 1. We subsequently estimate an expanded model to determine the influence of
salespeople’s trustworthiness, store environment, store assortment, and communications on the various trust levels. When estimating our conceptual model and its extension it is important to consider the specification of the latent constructs and complexity of the model per se. Whereas the theoretical constructs in our conceptual model (Figure 1) are reflective constructs, Gustafsson and Johnson (2004) argue that the more concrete and separable attributes of performance should be modelled as formative constructs for quality improvement purposes. Following Fornell and Cha (1994) and Bagozzi (1994), reflective specifications are deductive. The starting point is the latent construct which, if present, implies specific observable events or measures. This is consistent with our definitions of trust, perceived value and loyalty intentions. In contrast, formative specifications are inductive, where the latent construct is made up of, or defined by, a specific formation of measurement variables. This definition is consistent with our communication, store environment and merchandise variety constructs.

Salesperson trustworthiness is somewhat different. Whereas each component of salesperson trustworthiness is itself a reflective construct (e.g., multiple reflective measures of competence or likeability), taken together the components are arguably formative indicators of overall salesperson trustworthiness. We resolve this issue by extracting the first principal component of each subset of measures, and then using these indices or weighted averages as formative indicators of salesperson trustworthiness. In each case there was only one principal component with an Eigenvalue greater than one, where the competence, integrity, likeability and problem solving indices explained 67 per cent, 59 per cent, 84 per cent and 90 per cent of the variation in the measures, respectively. Given our use of both reflective, theoretical constructs, and more concrete, formative constructs, our estimation method must accommodate both reflective and formative specifications. The estimation method should also be consistent with the complexity of the model, which in the case of the final extended model involves 11 latent variables and 37 measurement variables (see Table I). Bagozzi and Yi (1994), Fornell and Cha (1994) and Diamantopoulos and Winklhofer (2001) argue that partial least squares (PLS) is uniquely suited to estimating a complex model that contains formative as well as reflective measures. PLS integrates aspects of principal-components analysis with multiple regression (Wold, 1982).

PLS models are typically evaluated on four key criteria:

<table>
<thead>
<tr>
<th>Construct/items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store loyalty behavioral intentions (seven-point, strongly disagree-agree)</td>
<td>Sirohi et al. (1998)</td>
</tr>
<tr>
<td>I will continue shopping at this store</td>
<td></td>
</tr>
<tr>
<td>In the future I will use the store for more of my product/category needs in the next 12 months</td>
<td></td>
</tr>
<tr>
<td>I will recommend this store to a friend</td>
<td></td>
</tr>
<tr>
<td>Frequency of visit to the store (8 points scale, with 1 = more than once a week, 2 = once a week, 3 = once every two weeks, etc.)</td>
<td>De Wulf and Odekerken-Schröder (2003)</td>
</tr>
<tr>
<td>How frequently do you visit this store?</td>
<td></td>
</tr>
<tr>
<td>Store patronage (10 points scale, with 1 = 0-10%, 2 = 11-20%.. 10 = 91-100%)</td>
<td></td>
</tr>
<tr>
<td>What % of your total expenditures for grocery products do you spend at this store?</td>
<td></td>
</tr>
</tbody>
</table>
the reliability of the constructs;
(2) the discriminant validity of the constructs;
(3) the size and significance of the path coefficients; and
(4) the ability of the model to predict, in this case loyalty intentions (Hulland, 1999).

However, the discriminant validity criterion and the reliability criterion on which it is based do not apply to formative constructs per se (Bagozzi and Yi, 1994; Fornell and Cha, 1994). Formative constructs are only conceptually related and thus need not be highly correlated or reliable. Therefore, we focus on the reliability and discriminant validity of our three trust constructs, perceived value, and loyalty intentions. We first analyze the estimation results for the conceptual model in Figure 1 and then describe the results for the extended model.

**Conceptual model analysis**

The measurement loadings on these constructs should exceed 0.707 to ensure that at least half of the variance in the observed variable is shared with the construct. When averaged across the measures of a given construct, this reliability criterion is referred to as average communality or, in the case of the standardized results reported here, average variance extracted (AVE; see Fornell and Larcker, 1981). Table II reports the measurement loadings and AVE for each construct. In every case the measurement loadings and the AVEs for the constructs exceed the reliability criterion, which supports the reliability of the measurement model. The discriminant validity of the constructs is also supported, since the AVE measures for any given pair of constructs exceed the squared correlation between the constructs (Fornell and Larcker, 1981). The path coefficients for the conceptual model as well as the variance explained in the endogenous constructs are presented in Figure 2. Jackknife estimates were generated to evaluate the significance of the paths in the model (Chin, 1998a, b). The general approach to jackknifing is to delete every nth case or observation, estimate the model parameters, and repeat this sample-resample procedure to generate a set of standard errors for the model parameters (Hjorth, 1994). Following Tukey’s guidelines, 5 per cent of the sample was removed during the re-sampling procedure resulting in 20 sub-samples per model (Fornell et al., 1996). Overall, 9 of the 12 path coefficients are significant (p < 0.05). The non-significant paths are the direct effects of salesperson trust on perceived value and loyalty intentions and the direct effect of perceived value on store patronage.

**Conceptual model results**

The results reveal that both salesperson trust and trust in store branded products have significant positive effects on overall store trust. Store trust, in turn, has relatively large impacts on perceived value and loyalty intentions. Perceived value also has a positive, albeit smaller impact on intentions (0.141). A particularly interesting finding is that salesperson trust only impacts overall perceived value and intentions indirectly via store trust. In contrast, trust in store branded products has direct as well as indirect effects on value and intentions. Thus, while the effects of salesperson trust on value and intentions are completely mediated by store trust, the effects of trust in store branded products are only partially mediated. This finding may be the result of the relatively small amount of resources invested by retailers in human resources development, compared to the huge investments made to create and reinforce store brands. This aspect deserves special attention in future research. Finally, store loyalty intentions and frequency of visit influence store patronage behavior (i.e. share of wallet). Another interesting
finding is that perceived value does not influence patronage directly. Rather, it affects patronage indirectly by increasing loyalty intentions.

Extended model results
The purpose of the extended model is to explore the practical means by which store managers may influence the various trust levels. As is common in applied studies, we first estimated an initial model, dropped the non-significant path coefficients and re-estimated the model. The structural model demonstrates predictive power as the variance explained ($R^2$) in key endogenous constructs was 0.24 for store patronage, 0.43 for store loyalty behavioral intentions, 0.23 for perceived value, 0.52 for trust in the store, 0.48 for trust in the salesperson and 0.19 for trust in store branded products. The findings show that our extended model explains a large part of the variance in the endogenous variables, with an average $R^2$ of 0.35. Another important part of model evaluation is the examination of fit indexes reflecting the predictive power of estimated model relationships. As pointed out by Tenenhaus et al. (2005, p. 173):

[... ] differently from SEM-ML, PLS path modeling does not optimize any scalar function so that it naturally lacks of an index that can provide the user with a global validation of the model (as it is instead with $x^2$ and related measures in SEM-ML). The GoF represents an
A general criterion for evaluating goodness-of-fit (GoF) is to calculate the geometric mean of the average communality and the average $R^2$ (Tenenhaus et al., 2005). Average communality is computed as a weighted average of the different communalities with the weights being the number of manifest variables per each construct. In our case, GoF = $\sqrt{0.76 \times 0.35} = 0.52$, which can be considered as satisfactory (Tenenhaus et al., 2005; Ringle et al., 2008).

Table III reports the size of the path coefficients for the performance constructs on each level of trust as well as the formative weights of the measurement variables. Like the path coefficients, the measurement weights for the formative constructs are interpretable as beta coefficients in regression analysis (Gustafsson and Johnson, 2004). For the sake of brevity, the reliability and discriminant validity of the core conceptual model is again supported in this case. As the path coefficients for the same constructs between the conceptual and extended models are, with one exception, almost identical, we focus on the results involving the trust drivers. The exception is the impact of store brand trust on overall store trust, which becomes non-significant in the extended model. As it turns out, once the common antecedents of brand and store trust are included, specifically merchandise variety, the direct effect is no longer significant. Foremost the results in Table III and Figure 3 illustrate how trust is built in this context. Not surprisingly, salesperson trustworthiness shows a positive relationship only with salesperson trust. By far the most important antecedent of interpersonal trust is likeability. Store environment, in contrast, has a positive relationship only with overall store trust, and the layout and comfort-level of the store are the most important attributes. Store assortment, in turn, has sizable correlations with both brand trust and overall store trust. The relationship with
trust in store branded products is logical given the private label strategy of the chain. In this case, all three attributes of assortment are relatively important. Finally, the quality of store communication has a significant correlation with all three levels of trust: the store, the people, and the brand. It is interesting that the greatest impact is on trust toward the salespeople. The most important communication attribute is its transparency. As for performance levels of trust builders (see Table IV), store environment, store communication and store assortment gain similar evaluations (5.97, 5.68 and 5.65, respectively). Moreover, within each construct, evaluations about every single item differ slightly. In contrast, evaluations of the four dimensions of salesperson trustworthiness show relevant differences, varying from 6.64 of likeability to 3.66 of problem solving, with competence and integrity in the middle (5.07 and 4.37, respectively). Importantly, sales associates perform better just in those behaviors having stronger impact on interpersonal trust.

### Table III. Significant trust builders

<table>
<thead>
<tr>
<th>Formative attribute weights and path coefficients</th>
<th>Formative weight (standardized)</th>
<th>Impact on trust in the store</th>
<th>Impact on trust in the salesperson</th>
<th>Impact on trust in store branded products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salesperson trustworthiness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salesperson competence</td>
<td>0.236</td>
<td>ns</td>
<td>0.640</td>
<td>ns</td>
</tr>
<tr>
<td>Salesperson integrity</td>
<td>0.177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salesperson likeability</td>
<td>0.237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salesperson problem solving</td>
<td>0.172</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like a lot the layout of this store</td>
<td>0.392</td>
<td>0.272</td>
<td>rs</td>
<td>rs</td>
</tr>
<tr>
<td>In this store I feel comfortable</td>
<td>0.366</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In this store the display of merchandise is excellent</td>
<td>0.317</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In this store signals and posters are very clear</td>
<td>0.046</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store assortment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In this store the quality of merchandise is very high</td>
<td>0.373</td>
<td>0.192</td>
<td>rs</td>
<td>0.310</td>
</tr>
<tr>
<td>In this store the number of different merchandise categories (breadth of products) is very high</td>
<td>0.363</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In this store the number of stockkeeping units within merchandise categories (depth of products) is very high</td>
<td>0.377</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Store communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication of this store is transparent</td>
<td>0.578</td>
<td>0.150</td>
<td>0.320</td>
<td>0.200</td>
</tr>
<tr>
<td>Communication of this store is complete</td>
<td>0.288</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication of this store makes me want to buy here</td>
<td>0.297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ns, not significant

### Conclusions and implications

Our study developed and tested a comprehensive model of trust levels and the role trust plays in building relationships with retail customers. Several important contributions emerge.

First, compared to the vast majority of the studies to date, which typically focused on a limited set of relational outputs, we investigate a broad set of relationship marketing outcomes, including perceptions, attitudes (i.e. trust), intentions and behaviors.

Second, we analyze three different levels of our focal constructs, i.e. customer trust, as well as their interdependencies. Third, we examined how these levels of trust are built for a particular retailer and context. Importantly, whereas some studies on customer relationships with retailers have been conducted in simulated environments based on video-taped scenarios (e.g. Baker et al., 2002), in the present research we analyze true customer shopping experiences.

The focal object of this study was customer relationships with grocery retailing stores. We investigated these relationships at three levels: relationships with salespeople, with store branded products and with the store as a whole. When looking at the linkages between such
levels and store patronage, different paths emerged. In fact, interpersonal trust has only an indirect effect on store patronage by increasing trust in the store, while it has no direct impact on it, nor on key mediators (i.e., perceived value and store loyalty intentions); but customer trust in store branded products, in contrast, has both a direct and an indirect influence on store patronage, since it positively affects customer trust in the store, perceived value and store loyalty intentions. Our research shows that customer trust in the store, which is affected by both trust in the sales associate and trust in store branded products, has a positive impact on store loyalty intentions both directly and indirectly, that is by increasing perceived value, which in turn fosters loyalty intentions. Store loyalty intentions finally stimulate store patronage. Looking at the drivers of the three levels of customer trust, salesperson trustworthiness shows a positive relationship only with trust in the salesperson, similarly, store environment has a positive impact only on overall trust in the store; store communication fosters all three levels of customer trust; while store assortment increases both overall trust and trust in store branded products.

Taken together, these findings, we believe that this study properly addresses the challenge to identify and understand how managerially controlled variables influence important relationship marketing outcomes (Hennig-Thurau et al., 2002).

We argue that the vast majority of empirical studies on the topic, in the context of retailing services, failed to recognize that customers may develop relationships at different

![Extended model results](image-url)
although interconnected levels. As a consequence, researchers focused on one level at time, without investigating the joint contributions of such levels to the ultimate goal of building store patronage. Moreover, such studies typically focused on a narrow set of outcomes, without deepening the understanding of the interrelationships among different types of consumer response (cognitions, attitudes, intentions and behaviors). Finally, researchers traditionally explored either a broad set of outcomes without considering their drivers (e.g. Cronin et al., 2000), or, on the contrary, investigated a large set of antecedents of store patronage failing to analyze the multiplicity of loyalty levels and consumer responses (e.g. Thang and Tan, 2003). The very few studies trying to combine these two approaches (e.g. Sirohi et al., 1998) focused on one level only of customer-retailer relationship. We see this as a major limitation in extant literature, since all levels we include in our framework have widely been recognized to be important drivers of store patronage.

To the best of our knowledge this is the first study specifically investigating, in the context of grocery retailing, the impact of store cues/quality dimensions (i.e. salesperson trustworthiness, store environment, and store assortment) and store communication on three different levels of customer trust. Similarly, this is the first study analyzing the impact of customer trust in store-branded products on customer overall trust in the store, perceived value and loyalty intentions. We argue that, because consumers live their shopping expeditions as holistic experiences, our framework and analysis can help academics and managers alike develop a more comprehensive understanding of customer reactions to retailers’ strategies aimed at building store patronage. In terms of managerial implications, findings of our study may suggest an alternative perspective to the dominant strategies in grocery retailing. To foster store patronage, retailers have heavily invested in price cuts, promotions and loyalty schemes. We contend that understanding and leveraging on trust builders might be a more efficient and effective strategy, especially for high-end supermarkets. In fact, trust positively affects perceived value and ultimately stimulates loyalty intentions and store patronage. Managing store brands with the goal to build trust, as opposed to increase immediate profit margins, may call for a completely different approach to private labels in many retailers. Similarly, the potential relevance of interpersonal trust may suggest retailers to devote more resources to selection, recruitment and training of sales associates, and may even stimulate changes in evaluation criteria, incentive schemes and reward systems. In order to set improvement priorities, store managers should investigate the relative importance of trust drivers, together with consumers’ perceptions of the retailer’s performance on each driver. By replicating our analysis on a bigger sample of customers, retailers may segment shoppers based on the factors that are most correlated with their trust. This segmentation may serve as a key input information to facilitate sales associates’ adaptive selling when they interact with customers. This is important since adaptive selling (i.e. matching the proper sales approach with each selling situation and customer type) makes salespeople more successful (e.g. Franke and Park, 2006). For example, shoppers of different age or gender (which are easily observable shopper characteristics) may be more sensitive to some dimension of salesperson’s trustworthiness, and this information may help sales associates better tailor their interaction style to customers’ needs and preferences. For example, in their study on retail salespeople, Goff et al. (1994) identified three types of consumer’s susceptibility to salesperson influence (informational, recommendational and relational influence) and found that males are more susceptible than female shoppers to relational influence, and that older consumers are more susceptible than younger consumers to informational and relational influence. Similar considerations hold true for shoppers visiting the store at different hours during the day, who may be characterized by different shopping needs and preferred interaction styles. Retailers may even re-design the work shifts of their salespeople, for example by placing the most competent sales associates in opening hours where most shoppers are sensitive to these characteristic. Retailers willing to invest on sales associates as...
key contributors to customer trust may also re-design the work shifts of their salespeople in order to maximize the probability to increase the frequency of interaction with the same customers over time. This can be done especially if most customers tend to visit the store always at the same hour in the same days. Retailers using their front line employees as relevant trust builders may also decide to use members of their staff as testimonials in their advertising campaigns.

Our study inevitably bears limitations. The research design is cross-sectional and data were collected from two stores from the same retail chain in the same retail format. Hence, any attempt to generalize the research findings and to theorize causal relationships must be undertaken with caution. Longitudinal studies should be welcome (e.g. Gómez et al., 2004). Another limitation is that we use a self-reported measure of store patronage as a proxy for actual patronage behavior. Future research may use broader conceptualizations and more comprehensive measures of customer trust. In this study, due to parsimony goals suggested by the high number of constructs under investigation, we relied on a relatively narrow measure of trust, which nevertheless incorporates both the reliability and the benevolence facets. Researchers may also add more trust drivers, such as store promotions or after-sale service, and analyze the separate impacts of different communication tools (e.g. advertising, direct mailing, etc.). Specific antecedents of trust in store branded products (e.g. perceived quality) should also be investigated. Another aspect deserving attention in future research is the adoption of a contingency approach (as recommended, for example, by Silvestro and Cross, 2000) and the consideration of potential moderators, such as customer’s brand sensitivity (Odin et al., 2001), interpersonal relationships sensitivity (Macintosh and Lockshin, 1997) and length of the relationship with the store, salespeople or store branded products (Coulter and Coulter, 2003). Furthermore, sub-sample analysis may be run by segmenting respondents in many ways: for example based on the typology of shopping expedition (Putrevu and Lord, 2001). In fact, since utilitarian and hedonic shoppers behave differently, consumer beliefs about store attributes and the relative importance of trust drivers may strongly vary (Stoel et al., 2004). Finally, the increasing internationalization of retail chains suggests making cross cultural comparisons: for example the contribution of interpersonal trust to store trust depends to a large extent on interpersonal relationships sensitivity, which may vary dramatically from culture to culture.
References


