The importance of retail brand equity and store accessibility for store loyalty in local competition

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ABSTRACT

Previous research shows that the success of a retailer depends on strong retail brands and attractive, easily accessible store locations. However, little is known about the relative importance of retail brand equity and store accessibility for store loyalty in different local competitive contexts. To provide insight into this issue, we conduct on a cross-sectional study of 4151 interviews and objective data on 30 stores of a focal retailer and its local competitors. We find that store loyalty benefits more from a strong brand than from a conveniently accessible location and that location can benefit from a strong brand. We also find that competitor's brand equity has an especially negative influence on store loyalty towards a focal retailer and that the strength of the effects of brand equity and location accessibility on store loyalty depends on the local competitive context.

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1. Introduction

Retailers increasingly aim to position their chains in the minds of consumers as strong, attractive, and unique brands (Ailawadi and Keller, 2004; Verhoef et al., 2007). For example, IKEA has built a strong retail brand that mobilises customers to drive substantial distances to their stores (Jonsson and Foss, 2011), and Aldi's brand strength is evoked in the memories of consumers even before a location opens. However, although the mantra for success is still 'location, location, location' for some retailers, Grewal et al. (2004, 2009) stated that retail brand equity determines the perceived values of local stores and the images of those stores. These authors assigned the predominant role of retail brand equity to consumer behaviour, which is important because of the growing overstoring and convenience orientation of consumers, and because firms typically have one retail brand but several stores that differ in terms of local competition and access convenience. To analyse the relative importance of retail brand equity and store accessibility for store loyalty, this study focuses on two perspectives: (1) consumer evaluations of a focal retailer (i.e., a specific

chain under investigation) and its local competitors in the same type of business and (2) the relationships among a focal retailer's brand equity, store accessibility, and loyalty in different (objective) local competitive situations. Accessibility is crucial in retailing (Reilly, 1931; Grewal et al., 2009) and is understood as the perceived convenience of a store's location. Retail brand equity is understood as the qualities that consumers associate with a retail chain, which serve as an important intangible asset (Jinfeng and Zhilong, 2009). This topic is important for retailers because they must consider such effects when they allocate, for example, investments for building or supporting a strong retail brand or searching for accessible locations.

Although scholars often study location issues, they have rarely focused on the relative importance of strong retail brands and store locations. According to early research (Reilly, 1931; Huff, 1964; Achabal et al., 1982; Rust and Brown, 1986; Durvasula et al., 1992), prior studies have focused on location as the core antecedent in explaining the store choices of consumers (Nakanishi and Cooper, 1974; Finn and Louviere, 1990; Bell et al., 1998; Popkowski Leszczyc et al., 2000), their patronage, and store image (Lindquist, 1974; Mazursky and Jacoby, 1986). However, several studies have highlighted the decreasing relevance of location for the store choices of consumers (e.g., Bell et al., 1998), as explained, for example, by the increasing mobility of consumers. Furthermore, retail brand equity has increasingly garnered interest in recent literature (Grewal et al., 2004; Hartman and Spiro, 2005; Jinfeng and Zhilong, 2009; Burt and Davies, 2010). Previous studies conceptualised the determining

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role of retail brand equity in location and consumer behaviour (Grewal et al., 2009). However, despite the indisputable relevance of both retail brand equity and accessible store location, we found no research that analyses the effects of both constructs in explaining store loyalty, either in general or with regard to different local competitive situations. Thus, we aim to answer the question of whether retail brand equity or store accessibility has a stronger influence on store loyalty. Furthermore, two additional research gaps emerge.

Studies have considered local competition to be an issue of perception, such as the perceived value of local competitors (Sirohi et al., 1998) or the impression of competitive intensity (Seiders et al., 2005), but have not compared the effects of retail brands and location associations on retailers with the effects on competitors. For example, Hartman and Spiro (2005) conceptualised store equity as consumer perceptions of one retailer in relation to those of other retailers using one variable. But separate evaluations of focal retailers and their competitors would allow for advanced conclusions regarding how the strong brand equity and store accessibility of both a focal retailer and its competitors determine store loyalty towards the focal retailer. For these reasons, we analyse the dependence of store loyalty towards a focal retailer on its own and the brand equity and store accessibility of its local competitors. An analysis of these issues will advance our knowledge of whether the brand equity or store accessibility of competitors has a stronger influence on the store loyalty of consumers with respect to a focal retailer. This approach will further our understanding of the relationship between centrally managed retail brand equity and local, conveniently accessible store locations.

Many studies (e.g., Borgers and Timmermans (1987), Fotheringham (1988), Lo (1990), Cleeren et al. (2010)) have considered the objective characteristics of local competition in shopping alternatives and choice or cherry-picking behaviour (Talukdar et al., 2010). These studies have not addressed the objective differences of local competition within retail brand–location–loyalty relationships. However, those studies, in addition to research on both multi-purpose shopping and comparison shopping (e.g., Dellaert et al., 1998; Popkowski Leszczyc et al., 2004; Gijsbrechts et al., 2008), suggested that a substantial distance between a focal retailer and a competitor may strengthen the relative importance of convenient access to the focal retailer's store because consumers may not wish to drive long distances. In contrast, a large number of competing stores may enhance the relative importance of a strong brand. Both scenarios are relevant for research and practice because a retailer can benefit from knowledge of how consumers are affected by brand and accessibility in different competitive situations. This knowledge may assist retailers in determining whether future investment allocations should support strong retail brands or accessible locations in their store networks.

In sum, this study aims to answer three research questions. Does retail brand equity or a convenient, accessible store location provide a greater contribution to the store loyalty of a focal retailer? To what extent do the retail brand equity and store accessibility of local competitors affect store loyalty towards a focal retailer? How do different objective competitive situations affect the brand and location effects on a focal retailer?

By investigating these questions, this study contributes to the retailing literature, particularly with respect to brand effects, location, and local competition. From a theoretical perspective, we respond to the recommendation of Grewal et al. (2004) for further research on retail branding and their call for more current studies on the issue of store location (Grewal et al., 2009). Additionally, we present store loyalty as an important issue that remains worthy of further research (Puccinelli et al., 2009), but

loyalty is also a well-known outcome variable and thus facilitates our task of interpreting our findings in the context of past research. Furthermore, this study provides a detailed perspective on how retail brands predict the location perceptions and store loyalty of consumers, particularly in the context of local competition (subjective and objective). The latter has not been addressed in the retail literature; thus, centrally managed chain brands have not yet been properly studied. The findings of this study may further enhance retail managers' understanding of the current roles of strong retail brands and convenient, accessible locations in local competition. The remainder of the article is structured as follows. Based on theory and past studies, we derive a set of hypotheses that are tested using a cross-sectional consumer sample from 30 cities. The results are presented and followed by a discussion of the study and its limitations.

2. Conceptualisation and hypothesis development

2.1. Conceptual framework and theory

Our conceptual model summarises the set of relationships that are examined in this paper (see Fig. 1). Using the work of Grewal et al. (2004, 2009) and schema theoretical reasoning, we propose that the brand equity of a focal retailer's chain determines store loyalty both directly and indirectly via its influence on consumer perceptions of store accessibility. Moreover, we suggest that a focal retailer's store loyalty also depends on influences from each store's environment and thus focus on the influence of local competitors. Thus, we argue that consumers' subjective perceptions of retail brand equity and the store accessibility of local competitors (Sloot et al., 2005; Gauri et al., 2008b) influence consumer store loyalty towards a focal retailer. Finally, we propose that the effect on store loyalty is moderated by the objective characteristics of local competition because the literature shows that these characteristics may change the scope of the effects concerning focal retailers (Seiders et al., 2005; Gauri et al., 2008b).

Store loyalty is defined as the intention and readiness to repurchase at a particular store or recommend a store (Oliver, 1999; Evanschitzky and Wunderlich, 2006). Therefore, store loyalty is understood as conative loyalty that represents the penultimate stage in loyalty formation (Harris and Goode, 2004) and is viewed as a core predictor of consumer spending (Macintosh and Lockshin, 1997). Retail brand equity is defined as a consumer's associations of a focal or competing retail chain as a strong, unique, and attractive brand (Verhoef et al., 2007, p. 100). Retail brand equity refers to a chain-level retailer (Burt and Davies, 2010); therefore, it corresponds to the 'Gestalt view' of a retail brand (Keaveney and Hunt, 1992) and differs from the perspective of Martineau (1958), who interpreted store image as the sum of store-level associations (Ailawadi and Keller, 2004). Store accessibility is defined as the consumer-perceived convenience
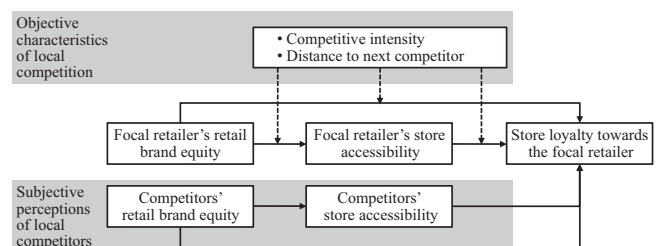

Fig. 1. Conceptual framework.

of store access in terms of ease, speed, and simplicity (Teller and Reutterer, 2008).

To address our research questions, we draw from three streams of theory and consider how past studies have examined loyalty, location, and competition from different theoretical perspectives (for an overview, see Craig et al., 1984; Brown and Dant, 2009).

We refer to schema theory (Bartlett, 1995; McVee et al., 2005; Puligadda et al., 2012) and thus rely on network models of consumer memory to explain retail brand equity and store accessibility as the antecedents of store loyalty. A network consists of nodes or concepts, such as objects and attributes, which represent stored information (e.g., Nelson et al., 1993), and the links between those nodes that are based on past experience (Mandler, 1979). For example, consumers possess information regarding a chain's retail brand and its stores as nodes in their minds as well as links between them; in hierarchical networks, retail brands are linked to subcategories (Cowley and Mitchell, 2003), such as store-level information. Thus, brand equity and store accessibility represent different levels in a retail brand schema. As general information regarding retail brands is stored on the corporate (retail brand) level, retail brand equity refers to superior-level associations rather than store-level information, such as store accessibility. Referring to this structure of general retail brand associations and store-level attributes in the memories of consumers, we believe that retail brand equity influences the store location accessibility perceptions of consumers. This view supports the conceptualisation provided by Grewal et al. (2004, 2009).

Further, we draw on the theory of the allocation of time (Becker, 1965) and the law of retail gravitation (e.g., Reilly, 1931) because both notions addressed (objective) local competition and proposed that competitive intensity and distance to the nearest competitor influence relationships with the focal retailer. These theories assist in clarifying how the strength of the effects of a focal retailer's retail brand equity and store accessibility differ as a result of varying local competitive situations (Seiders et al., 2005). Thus, we follow Dellaert et al. (2008), who asserted that varying contexts influence mental representations or information retrieval and thus also influence the determining effects on store loyalty. Consequently, we focus on two well-established variables: competitive intensity (i.e., the number of competitors in the trading area of a focal retailer (Sloot et al., 2005)) and (geographic) distance to the next competitor (Gauri et al., 2008b). Both of these variables are known to influence store choice and switching behaviour (Seiders et al., 2005; Gauri et al., 2008b). The theory of the allocation of time is used to explain the influence of competitive intensity and distance to the next competitor on the effect of a focal retailer's store accessibility. As an increasing number of consumers encounter situations of time poverty, they tend to seek an optimal allocation of their time (Jacoby et al., 1976). Retail gravitation theory implies that there is a trade-off between store attractiveness and distance to a store. This theory is used to explain the influence of local competitive intensity and distance to the next competitor on the effects of a focal retailer's retail brand equity.

In the following sections, we first hypothesise the effects of a focal retailer and its competitors, and we then hypothesise the effects of the objective characteristics of local competition.

2.2. Hypotheses regarding the perception of a focal retailer and its competitors

Three relationships are explained based on schema theoretical reasoning in this section: (1) the effects of retail brand equity and store accessibility on loyalty, (2) the relationship between retail brand equity and store accessibility, and (3) the relative strength of both constructs on loyalty.

As noted previously, schema theory explains how information is stored in and retrieved from the memories of consumers (e.g., when deciding whether to shop at a store). For example, such brand schemes are stored in the memories of consumers as associative networks (Anderson, 1983). Consumers refer to these associations when deciding whether to repurchase. In fact, Sirgy and Samli (1985) reported that consumers refer to schemata when deciding where to purchase; thus, a focal retailer's retail brand equity and store accessibility can be considered the antecedents of store loyalty.

The same logic applies to the relationship between the retail brand equity and store accessibility of competitors, as consumers consider these elements of the brand schemes of competitors when deciding whether to repurchase at a specific retailer's location. Customers tend to compare local retailers (Hoch et al., 1995). If local competition is high and competitors are located near the focal retailer, then competitive advantages may erode (Seiders et al., 2005). Thus, customers tend to be less loyal to a focal retailer when the brand schemes of its competitors are more positive (Gounaris and Stathakopoulos, 2004), as perceptions of competitors may affect store loyalty towards the focal retailer negatively if equally strong retailers are competing with one another.

In sum, considering schema theory and empirical studies (Pan and Zinkhan, 2006; Chaudhuri and Ligas, 2009; Jinfeng and Zhilong, 2009), we argue that a focal retailer's retail brand equity and store accessibility positively affect store loyalty towards the focal retailer. Furthermore, as consumer associations with a competitor's retail brand and store accessibility compete with those with a focal retailer (James et al., 1976), we conclude that positive competitor associations will negatively affect loyalty to a focal retailer. Therefore, we propose the following hypothesis:

H1. (a) The retail brand equity and (b) store accessibility of a focal retailer have a positive effect on its store loyalty.

H2. (a) The retail brand equity and (b) store accessibility of competitors have a negative effect on store loyalty towards the focal retailer.

Second, to understand the relationship between retail brand equity and store accessibility, one can again refer to the hierarchical networks that suggest that the cognitive representations of consumers follow a hierarchical structure (e.g., Nedungadi, 1990; Hutchinson et al., 1994), whereas in our model, the nodes of the network represent the concepts of the retail brand (on the general 'gestalt' level) and a store node, with its attributes (such as store accessibility) that are linked in the network as elements of different hierarchical levels. The retail brand of a chain store retailer acts as an 'umbrella' that comprises each individual store. However, each local store generates specific associations, has individual characteristics, and is thus perceived in an individual manner. For example, retailers such as Carrefour have locations that are easy or difficult to access from the perspectives of their customers and thus differ with regard to store-level associations (i.e., perceptions of store locations). As noted previously, associations with a retail brand and those with a store are elements of the hierarchically structured network in which consumer associations are stored in their memories. For our research context, we expect the influences to spread (Anderson, 1983; Cowley and Mitchell, 2003), flowing from the hierarchically higher level (i.e., the retail brand level) to the hierarchically lower level (i.e., the store level). For example, the retail brand node is activated through a television image campaign, and this activation allows for the activation of other related nodes (e.g., information

regarding the accessibility of a particular store, which accounts for the store's node). Therefore, we expect retail brand associations (i.e., retail brand equity) to have a positive influence on perceived store accessibility. The directionality of this relationship also reflects the exposure to new information (e.g., a new store) that consumers attempt to integrate into an existing chain or corporate brand node to facilitate attitude formation with respect to the new entity (e.g., Boush and Loken, 1991). In this case, a retailer's name serves as a retrieval cue (Biehal and Sheinin, 2007) for information that is stored in consumer memories and for the categorisation process if the information is consistent. If categorisation is successful, then consumers transfer their corporate associations to the new entity (the new store). Such behaviour has already been observed in early studies that analysed consumers who had recently moved to a new apartment building and used a brand as a retrieval cue to chose a store at the new place of residence (e.g., Atkin, 1962) as well as more recent studies on store brands (Jacoby and Mazursky, 1984; Grewal et al., 1998; Martenson, 2007; Bao et al., 2011).

These considerations are consistent with the conceptualisation of Grewal et al. (2004, 2009), who emphasised the effects of retail brands on the evaluation of store attributes (e.g., Bloemer et al., 1998 for quality perceptions), which, in turn, influence consumer satisfaction, intention, and word of mouth. Thus, we conclude that strong and positive retail brand equity results in more positive perceptions of store accessibility. For example, a strong brand could induce consumers to drive a relatively long distance even if a store is (on an objective level) not easily accessible. The same relationship is expected with regard to the retail brand equity and store accessibility of competitors. Thus, we propose the following hypothesis:

H3. (a) The retail brand equity of a focal retailer has a positive effect on its store accessibility, and (b) the retail brand equity of competitors has a positive effect on the store accessibility of these retailers.

Third, it is of interest to analyse whether retail brand equity or store accessibility offers a greater contribution to store loyalty. It is well known that consumers retrieve information that is stored in their memories to plan, solve problems or make decisions, and thus to decide whether to repurchase at a store. To explain which of these concepts is a stronger predictor of store loyalty we can rely on the strength of the linkages of both concepts. The strength of the linkages can be explained through the degree of activation. According to numerous scholars (Anderson, 1983; Krishnan, 1996; Lei et al., 2008), the strength of activation and the number of connections between a node and its associations increases with practice and thus with repeated activation. Thus, the possibility of retrieving a node is higher for nodes with more connections and with more frequent activation. Following this reasoning and knowing that the strength of links is based on the degree of repetition, practice, and recurring experience (Eckblad, 1981; Anderson, 1983; Malle and Horowitz, 1995; Campbell and Keller, 2003; Cowley and Mitchell, 2003; Lei et al., 2008), one may imagine that the retail brand concept is activated and updated more frequently and that the store accessibility concept is used and activated less frequently. These differences may occur because the retail brand concept is activated directly and indirectly (e.g., via a retailer's advertising, information in newspapers, personal recommendations or via stores as the point of purchase). Furthermore, the accessibility concept may be less frequently activated in a direct manner if consumers do not frequently think about convenient accessibility. As the retail brand node is activated more often, it is likely that the respective store attribute of accessibility is retrieved less frequently by consumers. Thus, we

propose that retail brand equity has a stronger influence on store loyalty than does store accessibility.

H4. (a) The retail brand equity of a focal retailer influences its store loyalty more strongly than its store accessibility does, and (b) the retail brand equity of competitors influences store loyalty towards the focal retailer more strongly than the competitors' store accessibility does.

2.3. Hypotheses regarding the effects of the objective characteristics of local competition

In the following sections, we first hypothesise the moderating effects of competitive intensity considering the effects on a focal retailer, and we then hypothesise the moderating effects of distance to the next competitor considering the effects on the focal retailer.

Focusing first on competitive intensity, we assume that greater competitive intensity is associated with a weaker positive effect of a focal retailer's store accessibility on store loyalty. The theory of the allocation of time (Becker, 1965) states that one portion of overall household time is dedicated to consumer shopping activities. Thus, transportation and search costs are included in the total costs of shopping (Gauri et al., 2008b). The search costs for a specific product increase if time and money are needed to determine exactly what a consumer wants to purchase and where he or she wishes to shop. With regard to multi-purpose or comparison shopping and depending on the product category, consumers may need to spend time visiting stores in several locations. Consequently, if a large number of retailers in an area sell the same products, then the search costs of customers decrease. A search for a specific product entails less time and lower costs because the distances between the stores are shortened. Thus, especially in the context of comparison shopping, highly competitive situations reduce the costs that consumers pay when searching for a specific product because they can easily determine where, for example, the product quality, price, or service is best (Gijsbrechts et al., 2008). Thus, high competitive intensity (for example, in retail agglomerations) creates synergy effects for consumers with regard to their shopping tasks, and these effects may attenuate the influence of store accessibility on store loyalty. Therefore, a context with numerous retailers in the same area with the same accessibility leads consumers to activate the respective retail brand nodes rather than retrieving accessibility information to determine where to shop. Consequently, we assume that competitive intensity will reduce the positive effect of store accessibility on store loyalty.

Additionally, we suppose that with increasing competitive intensity, the influence of retail brand equity on store loyalty will increase. We offer this supposition because if there is a high concentration of competitors, then retail brand strength is likely to be more important in forming store loyalty. In situations in which customers can easily compare retailers, such as situations with high competitive intensity on the local level, competitors react to these or other retailers' marketing activities, which in turn leads to an alleviation of retailer offerings; thus, the relative advantages of each store are narrow (Seiders et al., 2005). However, these effects account for only the unsustainable dimensions of the retailer marketing mix that are easy to copy or to compensate (e.g., pricing policy or promotion activities). In such situations, strong retail brands induce differentiation. Thus, the influence of retail brand equity on store loyalty increases as competitive intensity increases. Moreover, as retail brand equity reflects the overall favourability of a retailer that is transferred to each single store, the influence of retail brand equity on consumer perception of store accessibility increases with the degree of

competitive intensity. A higher number of shopping alternatives in an area (i.e., a higher competitive intensity) indicates that more retailers sell the same products in the same area, and this higher number has a positive influence on comparison shopping scenarios and implies that the gravitational effect of an associated retail agglomeration also increases (Nelson, 1958). In this situation, the relevance of a specific store location assessment by a consumer depends less on aspects that include distance to the store (as it is more or less similar for all stores in an area); rather, the gravitational pull is greatest for the most favourable retail brand. This context may in turn lead to a more positive assessment of a single store's location, as the assessment processes include positive, more confirmative effects of brand familiarity (Campbell and Keller, 2003). Therefore, the presence of numerous retailers in the same area with the same accessibility leads consumers to deemphasize the node that considers accessibility because all retailers are located near consumers, and brand information is thus retrieved. Consequently, a focal retailer can use a strong retail brand to overcome the erosion of location-specific advantages that may be caused by growing local competition (James et al., 1976). Thus, we hypothesise as follows:

H5. For a focal retailer's stores with higher competitive intensity, (a) the positive influence of store accessibility on store loyalty will decrease, (b) the positive influence of retail brand equity on store loyalty will increase and (c) the positive influence of retail brand equity on store accessibility will increase.

Focusing second on the distance to the next competitor, we assume that a larger distance to the next competitor is associated with a stronger positive effect of the focal retailer's store accessibility on store loyalty. Shopping costs will increase for consumers if the next closest shopping alternative for a specific product is located far from the focal retailer. Thus, when the distance between a retailer and its closest competitor is greater, the convenience and accessibility of the focal retailer's store will be more important (both for multi-purpose and comparison shopping tasks); thus, the focal retailer's specific store location will serve as the base for consumer store loyalty. Therefore, consumers retrieve accessibility information rather than brand information when considering where to purchase if the next potential competitor is far away. This reasoning is supported by Clark and Rushton (1970), who found that distance and accessibility play a smaller role in the choice of a competitor if the competing store is located far from the focal store. These assumptions are also supported by gravitation theory. With growing geographic distance between a focal retailer and its competitors, the relevance of a store location assessment increases. However, retail brand equity continues to act as an important element of the gravitational force for stores; nevertheless, with growing distance among competitors, consumers who want to patronise a series of stores (for example, if they are engaging in multi-purpose or comparison shopping tasks) must consider the higher cost of shopping and thus focus more strongly on store accessibility.

In turn, as already argued in the context of the effects of competitive intensity, if several shopping alternatives are nearby, then retail brand equity will be more important to consumer store choice (Craig et al., 1984) and thus to store loyalty. Accordingly, if the next competitor is nearby, then a consumer need not be concerned about the accessibility of a store and may then retrieve brand information to decide where to shop. Therefore, consumers retrieve brand information rather than accessibility information if the next competitor is nearby. Consequently, the accessibility of a focal retailer increases in relevance with a larger distance to the next competitor. Therefore, retail brand

equity will play a less important role in determining store loyalty and store accessibility. Thus, we present the following hypothesis:

H6. When there is greater distance between a focal retailer's stores and its next closest competitor, (a) store accessibility will have a greater influence on store loyalty, (b) retail brand equity will have a lower influence on store loyalty, and (c) retail brand equity will have a lower influence on store accessibility.

3. Empirical study

3.1. Sample design

To analyse our hypotheses, we conducted a consumer survey. To develop the sample, we cooperated with a leading European chain store retailer in the home improvement and do-it-yourself (DIY) sector. This retailer has more than 250 stores located in suburban (downtown) areas and uses a standardised retail brand that is coordinated and communicated centrally. To ensure the independence of consumer perceptions with regard to the focal retailer's stores, we asked the chief marketing officer and area sales managers to suggest stores with varying degrees of productivity (in terms of rental space) in different cities across the country. We randomly chose 30 of the 60 cities that they proposed for the survey. We verified that specific promotional activities were not conducted during or one week prior to the data collection period. Following Verhoef et al. (2007), we created a sector-specific quota sampling method based on age and gender. Our aim was to interview 120–150 consumers per city. The sample distribution of typical DIY consumers was provided by the independent national DIY organisation.

After the pre-tests were administered, the survey was conducted using a standardised questionnaire and face-to-face-interviews over the course of one week in each city, with approximately the same number of interviews conducted each day. This method was intended to prevent possible biases, as the number of customers and sales may differ depending on the day of the week. Every third person who passed the interviewers in the city centre and conformed to the sample was asked to participate (similar to Orth and Holancova, 2004). Each respondent was first asked to list the local DIY retailers with which he or she knew. Subsequently, the respondents were asked to describe the frequency with which they purchased from each of the retailers. Only the respondents who knew of the focal retailer and had shopped at the particular store participated in the survey. The latter procedure was chosen to ensure that the conveniently accessible location was known to the consumers and because the pre-tests underscore the difficulties of consumers in evaluating the accessibility of stores that they have never visited before. Additionally, the first competitor that was mentioned (top of mind) by each respondent from which the respondent had purchased products was used as the second retailer to evaluate in this study. Thus, depending on the city, up to seven competitors are included in the survey. This procedure provided a total of 4151 respondents for an average of 138 respondents per city. The actual sample distribution satisfied the planned quota sample (see Table 1).

3.2. Measurement

All of the measurements of the latent constructs were based on previous studies (see Table 2) and were obtained from a survey using 7-point Likert-type scales (from 1=strongly disagree to 7=strongly agree). Following Teller and Reutterer (2008), we measured store accessibility using three items (speed, simplicity, and ease of access to a store). We measured retail brand equity according to the scale of Verhoef et al. (2007), who used four

items (strong, well-known, favourable, and unique brand). Although retail brand equity is understood at a superior organisational level, the scale was measured at the store level, as other scholars have measured similar constructs (e.g., Arnold et al., 1983; Jacoby and Mazursky, 1984; Jinfeng and Zhilong, 2009). Store loyalty is measured using three items in accordance with the research of Sirohi et al. (1998). The store accessibility and retail brand equity of competitors were measured analogically. Specifically, we adapted the store accessibility measure using a single item with three components (quick, simple, and easy). The scales were pre-tested by conducting two consumer focus groups and by using a questionnaire in a single city ($N=170$). The quantitative pre-test provided satisfactory values for reliability and validity. However, the brand equity scale item "well-known brand" was excluded from the main study because of a low item-to-total correlation and low factor loading. The objective measures were based on previous studies and have been adapted to our retail sector. Competitive intensity (i.e., the number of competitors within a radius of two kilometres) and distance to the next competitor (in kilometres) were measured by following Talukdar et al. (2010). The choices were based on information from the focal retailer's sales managers on relevant competitor distances in the retail sector and were handled by the median split technique (for a similar mehtod, see, e.g., Gauri et al., 2008a). We differentiated between low and high competitive intensity (≤ 2 and > 2 competitors) and between short and long distance

to the next competitor (≤ 2 and > 2 km). The information on the number of competitors and the relevant distances was provided by the managers and was double-checked using two commercial databases.

We controlled for two groups of variables: consumer-related variables and individual-store variables. As the sector-specific sample structure does not follow the general distribution of the base population and as consumer behaviour may be influenced by gender ($0=$male, $1=$female) and age (Schenk et al., 2007), we controlled for both variables. We also included a variable that describes the DIY ability as a covariate (self-reported on a four-point scale ranging from beginner to expert) based on the work of Pan and Zinkhan (2006), who suggest that personality traits, such as self-confidence, may influence store patronage. Finally, we controlled for four store location-related variables using binary covariates ($0=$no, $1=$yes): closeness to a freeway; closeness to a national road (Kim and Choi, 2007); closeness to a residential area (González-Benito et al., 2005); and an agglomeration (Fox et al., 2007), which is understood as the proximity of a DIY store to other types of retail stores. The data on store-related covariates were collected during the study.

Prior to the analysis of confirmatory and structural modelling, we tested for univariate normality with regard to kurtosis and skewness (Finch et al., 1997) and multivariate normality using Mardia's coefficient (Vlachopoulos, 2008). All values indicated that the data are normally distributed.

3.3. Method

The methodical approach that was used was threefold. First, the measurements were tested for reliability, validity, and possible biases. Second, the requirements for multilevel modelling were checked. Third, the hypotheses were tested.

To confirm the reliability of the measurements (see Table 2), we ensured that the corrected item-to-total correlation was above .5 (Hair et al., 2006). The threshold was not met for the uniqueness items of the retail brand constructs; thus, these items were excluded from further analysis. To assess construct reliability, we computed Cronbach's alpha and composite reliability. These values exceed the recommended thresholds of .7 (Nunnally, 1978) and .6 (Bagozzi and Yi, 1988), respectively. Face validity

Table 1
Sample characteristics.

Age groups (years)	Actual quota sample						Planned quota sample		
	Male		Female		Total		Male	Female	Total
	No.	%	No.	%	No.	%	%	%	%
16 < 30	408	10.1	172	3.8	580	14.0	8.4	2.6	11.0
30 < 40	665	16.5	235	5.2	900	21.9	16.7	5.3	22.0
40 < 50	786	19.5	270	6.0	1056	25.4	21.3	6.7	28.0
50 < 65	749	18.6	270	6.0	1019	24.6	18.2	5.8	24.0
≥ 65	456	11.3	140	3.0	596	14.4	11.4	3.6	15.0
Total	3064	76.0	1087	24.0	4151	100.0	76.0	24.0	100.0

Table 2
Reliability and validity of measurements.

Construct	Item	MW/Std.[a]	ItTCa	α[a]	CR[a]	λ[a]	Source
Store accessibility of the focal retailer (SA)	I can get to store X quickly	5.1/1.7	.788	.882	.889	.859	Teller and Reutterer (2008)
	I can get to store X without problems	5.6/1.3	.736			.798	
	I can get to store X easily	5.4/1.5	.813			.894	
Retail brand equity of the focal retailer (RBE)	Retailer X is a strong brand	5.2/1.2	3	.509[2]	.687	.636	Verhoef et al. (2007); Keller (1993)
	Retailer X is an attractive brand	5.0/1.3	3			.800	
	Retailer X is a unique brand[b]	3.9/1.6	–			–	
Store loyalty towards the focal retailer (SL)	I'm sure to repurchase at store X	5.5/1.5	.647	.820	.754	.743	Adopted from Sirohi et al. (1998)
	In the future, I will buy more at store X than at another retailer	4.3/1.7	.667			.762	
	I would recommend store X to friends and others	4.8/1.5	.726			.841	
Competitors' store accessibility (CSA)	Store Y is accessible (quick and easy)	5.4/1.4	–	–	–	–	Adopted from Teller and Reutterer (2008)
Competitors' retail brand equity (CRBE)	Retailer Y is a strong brand	5.2/1.3	c	.543[c]	.720	.637	Verhoef et al. (2007); Keller (1993)
	Retailer Y is an attractive brand	5.3/1.3	c			.852	
	Retailer Y is a unique brand[b]	4.1/1.6	–			–	
Goodness-of-fit statistics for CFA: CFI .956; TLI .930; RMSEA .075; SRMR .032; $\chi^2(35)=854.279$							
Competitive intensity	Number of competitors within two kilometres	2.4/1.4	–	–	–	–	Talukdar et al. (2010)
Distance to next competitor	Distance of next competitor in kilometres	2.2/2.3	–	–	–	–	

[a] MW/Std.: Mean values and standard deviations, ItTC: Item-to-total correlation ($\geq .5$), α: Cronbach's alpha ($\geq .7$), CR: Composite reliability ($\geq .6$), λ: Standardised factor loadings (CFA) ($\geq .5$).
[b] Item deleted after ItTC.
[c] ItTC and α cannot be computed for two items. Thus, the Pearson correlation is provided instead of α.

was assessed using pre-tests. For construct validity, all of the factor loadings of the confirmatory factor analysis (CFA) were above. 5 (Hair et al., 2006), and the average variance extracted (AVE) values with a threshold of. 5 provided support for convergent validity (Bagozzi and Yi, 1988). We also tested the five latent constructs for discriminant validity (Fornell and Larcker, 1981). As all of the squared correlations were smaller than the two respective AVE values, discriminant validity is confirmed (see Table 3). Finally, the fit values for the confirmatory model were satisfactory (Browne and Cudeck, 1992; Hu and Bentler, 1999; Hair et al., 2006) (CFI .956; TLI .930; RMSEA .075; SRMR .032; $\chi^2(35)=854.279$), despite the χ^2/df value (Hinkin, 1995). As the latter is dependent on sample size, a value beyond the recommended threshold can be considered acceptable (Wheaton, 1987, p .128; Kline, 2011, p .204). The probability of non-response bias was controlled only by the selection procedure during the data collection process. Regarding common method bias we used an appropriate questionnaire design a priori and employed a successful single-factor test using a confirmatory factor analysis (Podsakoff et al., 2003) a posteriori. The model with all items loading on a single factor (CFI .625; TLI .532; RMSEA .195; SRMR .119; $\chi^2(44)=6972.673$) showed significantly poorer fit values in comparison with our model ($\Delta\chi^2(9)=6118.394$, $p < .000$). Thus, we can assume that common method bias is reduced within our sample.

Because the data have a hierarchical structure (the consumers are nested within the 30 stores), we tested for the requirements of multilevel modelling (Wagner et al., 2006) and found small intra-class correlations for all of the items (under .038). However, as the variance of our dependent variable was not significant

among the stores, there is no significant variation in consumer perceptions among the stores. Therefore, we did not test the hypotheses with multi-level modelling, as no additional explanation of variance can be provided.

To test H1–H4, we applied a structural equation model using a robust maximum likelihood estimation (MLR) with Mplus, which showed satisfactory global fit values for the proposed model (CFI. 937; TLI .911; RMSEA .051; SRMR .033; $\chi^2(94)=1128.450$). Additionally, we calculated two rival models. Retail brand equity may be affected by store accessibility, and the retail brand equity of competitors could be influenced by their store accessibility. Applying retail brand equity as a mediator rather than store accessibility resulted in poorer fit values (CFI .930; TLI .902; RMSEA .049; SRMR .035; $\chi^2(94)=1239.394$; $\Delta\chi^2(0)=110.944$, ΔBIC$=132.482$). We further calculated a nested model without effect between retail brand equity and store accessibility (model without mediating effects). The fit measures of this second model were significantly poorer than those of the proposed model (CFI. 893; TLI .853; RMSEA .066; SRMR .069; $\chi^2(96)=1848.237$; $\Delta\chi^2(2)=719.787$, $p < .001$). These results supported the proposed model. To test H5 and H6, we applied two multiple group analyses (using the median split technique (Gauri et al., 2008a)) and considered unstandardised structural coefficients (Singh, 1995). We conducted a test of measurement invariance to assess the measurement equivalence among the considered groups (Cheung and Rensvold, 2002) (i.e., between low and high competitive intensity and between short and long distance to the next competitor). The results indicated the good fit of the confirmatory models (Hu and Bentler, 1999, p. 27; Chen et al., 2008). Additionally, the findings showed that partial scalar invariance holds for all of the constructs and groups (see Table 4). The derived partial invariance models of both moderators (competitive intensity and distance to the next competitors) are used in the subsequent analyses of hypothesis testing. The global fit measures for the calculated multiple group structural equation models, which consider the moderating effects of competitive intensity (CFI .932; TLI .909; RMSEA .052; SRMR .037; $\chi^2(196)=1316.823$) and distance to the next competitor (CFI .929; TLI .905; RMSEA .054; SRMR .040; $\chi^2(197)=1372.049$), were satisfactory.

3.4. Results

Because retail brand equity (.634, $p < .001$) and store accessibility (.361, $p < .001$) have positive and significant effects on store loyalty towards the focal retailer (see Table 5), H1a and H1b

Table 3
Discriminant validity.

Constructs	AVE	SA	RBE	SL	CRBE
SA	.731	–			
RBE	.528	.157	–		
SL	.508	.360	.496	–	
CRBE	.568	.000	.095	.002	–
CSA	–	.001	.003	.002	.074

Notes: AVE: Average variance extracted ($\geq .5$); values in italics represent the squared correlations between the constructs; SA: store accessibility; RBE: retail brand equity; SL: store loyalty (all for the focal retailer); CSA: competitors' store accessibility; CRBE: competitors' retail brand equity.

Table 4
Measurement invariance tests.

Model	χ^2/df (scaling correction factor)	χ^2-difference (*p*-value)	CFI (ΔCFI)	TLI (ΔTLI)	RMSEA (ΔRMSEA)
Low and high competitive intensities					
Model 1: Configural invariance	746.756/70 (1.211)	–	.951	.923 (−)	.068 (−)
Model 2: Full metric invariance	759.146/76 (1.218)	15.633 (< .025)	.950 (.001)	.928 (.005)	.066 (.002)
Model 3: Partial metric invariance[a]	749.691/75 (1.220)	7.653 (< .200)	.951 (.000)	.928 (.005)	.066 (.002)
Model 4: Partial metric and full scalar invariance	793.100/81 (1.204)	40.109 (< .001)	.948 (.003)	.930 (.002)	.065 (.001)
Model 5: Partial metric and partial scalar invariance[b]	759.791/78 (1.211)	5.562 (< .150)	.950 (.001)	.930 (.002)	.065 (.003)
Short and long distances to the next competitor					
Model 1: Configural invariance	735.186/70 (1.205)	–	.952	.925 (−)	.068 (−)
Model 2: Full metric invariance	748.937/76 (.000)	16.861 (< .025)	.951 (.001)	.930 (.005)	.065 (.003)
Model 3: Partial metric invariance[c]	743.084/75 (1.203)	6.835 (< .200)	.952 (.000)	.929 (.004)	.066 (.002)
Model 4: Partial metric and full scalar invariance	784.151/81 (1.187)	37.342 (< .001)	.949 (.003)	.931 (.002)	.065 (.001)
Model 5: Partial metric and partial scalar invariance[d]	755.981/79 (1.191)	6.670 (< .150)	.951 (.001)	.932 (.003)	.064 (.002)

Notes: SA: store accessibility; RBE: retail brand equity; SL: store loyalty (all for the focal retailer).

[a] The factor loading is freed for the third SL item.
[b] The intercepts are freed for the first SL item, the first RBE item, and the first SA item.
[c] The factor loading is freed for the second SA item.
[d] The intercepts are freed for the second SL item and the first RBE item.

Table 5
Results.

		Model 1		Model 2		Model 3	
		Structural coefficients	*p*-value	Structural coefficients	*p*-value	Structural coefficients	*p*-value
H1b,	SA→SL	.377	***	.373	***	.361	***
H4a	RBE→SL	.558	***	.625	***	.634	***
H1a							
H3a,	RBE→SA	.398	***	.385	***	.390	***
H2b,	CSA→SL			−.031	*	−.034	*
H4b	CRBE→SL			−.224	***	−.226	***
H2a							
H3b	CRBE→CSA			.289	***	.268	***
Controls							
	Age					−.013	ns
	Gender					.039	**
	DIY ability					.061	***
	Closeness to freeway					.012	ns
	Closeness to national road					.036	**
	Closeness to residential area					−.003	ns
	Agglomeration					−.021	ns
	Indirect effect of RBE on SL	.150	***	.143	***	.141	***
	Indirect effect of CRBE on SL			−.008	*	−.009	*
	R^2	.621	***	.660	***	.670	***
Goodness-of-fit statistics							

Model 1: CFI .977; TLI. 962; RMSEA .059; SRMR .029; $\chi^2(17)=261.072$.
Model 2: CFI .948; TLI .925; RMSEA .067; SRMR .039; $\chi^2(38)=748.850$.
Model 3: CFI .937; TLI .911; RMSEA .051; SRMR .033; $\chi^2(94)=1128.450$.

Notes: ns=not significant; standardised coefficients and *p*-values are illustrated; SA: store accessibility; RBE: retail brand equity; SL: store loyalty (all for the focal retailer); CSA: competitors' store accessibility; CRBE: competitors' retail brand equity.

* $p < .05$.
** $p < .01$.
*** $p < .001$.

are supported. Accordingly, both the retail brand equity of competitors ($-.226$, $p < .001$) and their store accessibility ($-.034$, $p < .05$) have negative significant effects on store loyalty towards the focal retailer. This finding supports H2a and H2b. H3a and H3b are also supported because retail brand equity has a positive significant effect on store accessibility (.390, $p < .001$), and the retail brand equity of competitors has a significant positive effect on their store accessibility (.268, $p < .001$). Furthermore, the indirect effect of retail brand equity on store loyalty is positive (.141, $p < .001$) (Sobel, 1987), and the indirect effect of the retail brand equity of competitors on store loyalty is negative ($-.009$, $p < .01$). Regarding the strength of the effects on store loyalty, H4a and H4b are supported. The retail brand equity of the focal retailer has a more positive and direct effect on its store loyalty (.634, $p < .001$) than does its store accessibility (.361, $p < .001$). This finding supports H4a. As the retail brand equity of competitors ($-.226$, $p < .001$) has a more negative and direct effect on store loyalty towards the focal retailer than the store accessibility of competitors ($-.034$, $p < .05$) does, H4b is also supported. Thus, from the consumer perspective, store loyalty is primarily determined by the retail brand equity of the focal retailer and its competitors' rather than by the accessibility of stores.

With regard to the control variables, gender (.039, $p < .01$), DIY abilities (.061, $p < .001$), and closeness to a national road (.036, $p < .01$) significantly affect store loyalty. Thus, store loyalty is more positive for women, consumers who are experts in DIY, and stores that are close to a national road. The greater loyalty of women to the focal retailer's store is noteworthy. This finding may result from the less pronounced DIY experiences and abilities of women and, therefore, their diminished seeking behaviour. However, a higher level of experience (DIY experts) also positively supports loyalty.

With respect to the objective competitive data concerning the effects for the focal retailer, the hypotheses are partly supported

(see Table 6). A high level of competitive intensity significantly decreases the effect of store accessibility on store loyalty (from .323, $p < .001$ for low competitive intensity to .228, $p < .001$ for high competitive intensity). This finding supports H5a. Thus, the store accessibility of the focal retailer is less important for securing the store loyalty of consumers if there are more shopping alternatives in an area. However, H5b and H5c are not supported. Thus, for the focal retailer's stores with high competitive intensity, there were no increases in the positive influences of retail brand equity on store loyalty or on store accessibility.

A great distance to a retailer's next competitor significantly increases the effect of store accessibility on store loyalty (from .240, $p < .001$ for a short distance to the next competitor to .306, $p < .001$ for a long distance to the next competitor) and significantly decreases the effect of retail brand equity on store loyalty (from 1.035, $p < .001$ for a short distance to the next competitor to .769, $p < .001$ for a long distance to the next competitor). These findings support H6a and H6b. Thus, when the distance to the next shopping alternative for a specific product is greater, store accessibility is more important, and retail brand equity is less important for securing consumers' store loyalty towards the focal retailer. However, H6c is not supported. Thus, for the focal retailer's stores with longer distances to the next competitor, the positive influence of retail brand equity on store accessibility does not decrease.

4. Discussion and conclusions

4.1. Summary of findings

In this study, we examine whether retail brand equity or store accessibility have a greater effect on store loyalty and how these effects are determined through local competition (both the subjective perceptions and objective characteristics of local

Table 6
Results of multiple group analyses.

	Competitive intensity				Distance to next competitor			
	Low (≤ 2 competitors) $N=2205$	High (> 2 competitors) $N=1946$	p^a		Short (< 2 km) $N=2033$	Long (> 2 km) $N=2118$	p^a	
SA→SL	.323 ***	.228 ***	***		.240 ***	.306 ***	**	
	(.401) ***	(.322) ***	H5a		(.294) ***	(.427) ***	H6a	
RBE→SL	.851 ***	.898 ***	ns		1.035 ***	.769 ***	***	
	(.595) ***	(.671) ***	H5b		(.704) ***	(.571) ***	H6b	
RBE→SA	.729 ***	.707 ***	ns		.781 ***	.692 ***	ns	
	(.409) ***	(.375) ***	H5c		(.434) ***	(.369) ***	H6c	
CSA→SL	−.030 *	−.014 ns	ns		−.024 ns	−.021 ns	ns	
	(−.037) *	(−.021) ns			(−.030) ns	(−.029) ns		
CRBE→SL	−.309 ***	−.313 ***	ns		−.362 ***	−.277 ***	ns	
	(−.209) ***	(−.248) ***			(−.250) ***	(−.208) ***		
CRBE→CSA	.451 ***	.529 ***	ns		.622 ***	.381 ***	***	
	(.250) ***	(.287) ***			(.345) ***	(.207) ***		
Controls								
Age	−.001 ns	.000 ns			−.001 ns	−.001 ns		
	(−.017) ns	(−.003) ns			(−.007) ns	(−.017) ns		
Gender	.084 ns	.127 **			.111 *	.069 ns		
	(.033) ns	(.055) **			(.045) *	(.028) ns		
DIY abilities	.056 *	.0993 ***			.091 **	.059 *		
	(.043) *	(.089) ***			(.074) **	(.049) *		
Closeness to freeway	−.035 ns	.101 *			.084 ns	−.054 ns		
	(−.013) ns	(.048) *			(.039) ns	(−.017) ns		
Closeness to national road	.093 *	.075 ns			.200 ***	−.007 ns		
	(.038) *	(.025) ns			(.081) ***	(−.003) ns		
Closeness to residential area	−.050 ns	.028 ns			.031 ns	−.071 ns		
	(−.019) ns	(.012) ns			(.014) ns	(−.027) ns		
Agglomeration	.012 ns	−.046 ns			−.113 *	.012 ns		
	(.005) ns	(−.022) ns			(−.046) *	(.006) ns		
R^2	.677 ***	.672 ***			.702 ***	.663 ***		

Goodness-of-fit statistics.
Competitive intensity: CFI .932; TLI .909; RMSEA .052; SRMR .037; $\chi^2(196)=1316.823$.
Distance to next competitor: CFI .929; TLI .905; RMSEA .054; SRMR .040; $\chi^2(197)=1372.049$.

ns: not significant; standardised coefficients in brackets; SA: store accessibility; RBE: retail brand equity; SL: store loyalty (all for the focal retailer); CSA: competitors' store accessibility; CRBE: competitors' retail brand equity.

[a] Significance in differences among groups.
* $p < .05$.
** $p < .01$.
*** $p < .001$.

competitors). This under-researched area is relevant because retailers view location as a core success factor, whereas studies indicate that location is declining in relevance (e.g., Bell et al., 1998) and that strong branding is becoming increasingly important (Ailawadi and Keller, 2004; Grewal et al., 2004). With respect to schema theory, the results strongly support the argument that both a strong brand and a convenient, accessible store location determine the store loyalty of consumers', that retail brand has a stronger effect on store loyalty than store accessibility, and, furthermore, that a strong retail brand strengthens perceptions of location. Moreover, the strength of the effects of a focal retailer's brand and the accessibility of its stores on store loyalty is dependent on the competitive situation. The results differ substantially when an objective competitor's intensity and the distance to the next competitor are considered. Furthermore, the loyalty to a focal retailer is negatively influenced by the brand strength and location accessibility of the retailer's local competitors. These observations allow for three major theoretical implications and conclusions for managers.

4.2. Theoretical implications

With respect to our first research question, which asks whether the retail brand equity or store accessibility of a focal retailer offers a greater contribution to store loyalty towards a focal retailer, the results show that retail brand equity (.634)

influences store loyalty towards the focal retailer more strongly than store accessibility (.361) does. We will now discuss two conclusions in greater depth.

First, we can conclude that a strong retail brand drives store loyalty almost twice as strongly as a convenient store location does; this result corresponds to the research of James et al. (1976), who found that a strong retail brand can be used to overcome the uncertainties that result from growing local competition. This conclusion also supports the findings of Clark and Rushton (1970) and their proposition regarding the gravitational pull of a strong retail brand.

Second, convenient and accessible store locations positively influence loyalty. However, a strong brand induces customers to drive longer distances to reach stores and thus positively influences store accessibility. The effect of retail brand equity on store accessibility is reliable, as this outcome was observed for both the focal retailer (.385) and the competitors (.390). This finding both underlines the importance of the relationship between brand and location and supports the conceptualisations of Grewal et al. (2004, 2009), who found that a retail brand affects perceptions of retail attributes, including location. The alternative model, in which location determines retail brand equity, shows weaker results. Moreover, we do not find hierarchical effects among the focal retailer's 30 stores with regard to the store loyalty of consumers, but significant differences among certain groups of stores may exist. Thus, further research could, for example,

investigate the effects with respect to focal retailer store groups with low or high levels of store loyalty.

With respect to our second research question regarding the extent to which the retail brand equity and store accessibility of competitors affect store loyalty towards a focal retailer, we find that the retail brand equity of competitors influences store loyalty towards the focal retailer more negatively than the store accessibility of competitors does. Thus, we conclude that the stronger effect of retail brand equity is also stable, as this effect occurred for the brand equity of both the focal retailer and the competitors. Furthermore, we note that a deeper understanding of consumer behaviour can be obtained if the perceptions of local retailers (both a focal retailer and its competitors) are viewed separately rather than in comparison with one another (Hartman and Spiro, 2005).

In response to our third research question, the objective characteristics of local competition influence the effects of retail brand equity and store accessibility on store loyalty towards the focal retailer, we discuss two major conclusions below.

First, a long distance to the next competitor increases the importance of store accessibility as a driver of the store loyalty of consumers but decreases the importance of retail brand equity (see the calls of Peterson and Balasubramanian, 2002; and Grewal et al., 2009). The data provide similar results for a situation characterised by low competitive intensity. The enhanced importance of store locations in both situations of low competitive intensity and situations of great distance to the next competitor clearly indicates the convenience orientation of consumers (i.e., they are more loyal to a convenient, accessible retailer and prefer not to drive greater distances). However, retailers should not rely solely on accessible store locations as a competitive advantage because a competitor could build a new store nearby. Thus, a retailer should not neglect necessary investments in its own stores, particularly investments in building a strong retail brand, because retail brand equity is still a strong determinant of the store loyalty of customers.

Second, we found that retail brand equity is the primary driver of store loyalty in all objective competitive situations. However, in different competitive situations, the direct effects of retail brand equity on store loyalty vary significantly, although the supporting effects on store accessibility are stable in all situations. Thus, this supporting effect on store accessibility does not depend on competition. Hence, retail brand equity may always support perceptions of local stores, the accessibility of store locations and other store attributes. We can conclude that a strong retail brand is the primary attraction for consumers (Craig et al., 1984).

4.3. Managerial implications

This study provides managerial implications by highlighting the differing effects of retail brand equity and store accessibility on store loyalty in varying competitive situations. In practice, although expansion managers spend a significant amount of time searching for favourable store locations, consumer perceptions of retail brand equity always drive consumer behaviour more strongly than store accessibility does. Thus, although a convenient store location is still a relevant driver of long-term success (Ghosh and Craig, 1983), a retail brand is more important for store loyalty and, in turn, retailer success. Consequently, a retail brand is an appropriate asset that acts as a competitive advantage in situations of intensifying competition (James et al., 1976).

However, we believe that not all retailers devote adequate attention to this fact. Consequently, unlike well-known brand manufacturers, fewer retailers are providing professional retail brand management. Of course, retail branding is more complex (Ailawadi and Keller, 2004), highly frequented locations are

expensive, and "the disadvantages of a poor location are extremely difficult to overcome" (Craig et al., 1984, p. 5). However, the favourability of easily accessible locations (especially locations in which the next competitor is far away) can easily be diminished by the new store openings of a competitor. Thus, chain store retailers will profit from a strong and centrally managed retail brand.

4.4. Limitations and further research

A better understanding of the effects of retail brand equity and convenient, accessible store locations on consumer behaviour requires further research because of the limitations of the current study.

Because we collected data from one retail sector (from the self-selected locations of only one focal retailer without standardised store layouts and from its local competitors), this study is limited in scope. Broadening the database would mitigate these limitations and allow for further conclusions. For example, the actual distances from customer homes or offices to an evaluated store could be studied (Gauri et al., 2008b) because it would be worthwhile to analyse whether store accessibility or real distances influence store loyalty towards a focal retailer in different ways. Methodologically, a dataset that allows for a multilevel analysis would enable the direct use of objective variables rather than a multiple group analysis and the inclusion of further measures for each observed store (e.g., financial performance). Furthermore, this study focused on only one facet of store location (namely, its convenient accessibility) and on retailers within the same type of business. Thus, further analysis can extend these conclusions by, for example, considering a more general view, such as the attractiveness of a location, or focusing on the effects by means of agglomerations with retailers in other sectors or nearby shopping centres (Teller and Reutterer, 2008). Such analyses may assist in differentiating between the reduced and compensated effects of location on consumer behaviour. Finally, our results may indicate a type of reciprocal relationship between retail brand equity and store location. Addressing such bidirectional relationships, which are seldom analysed in retailing, may be advantageous in further research (for methodological issues, see, e.g., Nguyen and Leblanc, 2001; Kwon and Lennon, 2009). However, we believe that the dominance of retail brand equity will persist.

Regarding future research, a high priority should be given to the inclusion of additional variables concerning consumer behaviour, such as store and brand familiarity, because both determine the information processing in memory (Cowley and Mitchell, 2003; Inman et al., 2009; Benedicktus et al., 2010) or self-confidence (see Pan and Zinkhan, 2006 which mention self-confidence as an important but less observed factor in this context; and the call of Schenk et al., 2007). In conjunction with the chosen sector, self-reported DIY abilities as a sector-specific proxy for self-confidence may be an interesting topic to research, as the results of the corresponding control variable are positively significant in all of the analysed models.

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