

Store Managers – The Seismographs in Shopping Centres

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Store Managers – The Seismographs in Shopping Centres

Abstract

Purpose: The aim of this paper is to investigate (1) the link between store managers' evaluation of how customers assess a shopping centre and their own evaluation of the centre and, based on that, (2) the relevance of store managers in reflecting upon and informing the management and marketing practices of the local shopping centre management.

Methodology: A conceptual model is developed based on the network and boundary-spanning theories. The model is tested using a web-based survey of 217 managers, representing stores located in shopping malls, and by applying covariance-based structural equation modelling.

Findings: The study reveals store managers to be engaging in a significant information-processing pathway, from customers' evaluation of the shopping centre (as perceived by the store manager) to their own evaluation of the centre in terms of managerial satisfaction and loyalty.

Research limitations: The empirical study focuses exclusively on shopping malls and thus does not consider other shopping centre forms such as town centres and retail parks.

Practical implications: This paper concludes that store managers have the potential to be informational boundary spanners and thus valuable resources to inform and give feedback to shopping centre management.

Originality: The contribution of this paper is to provide a more complete understanding of the role of the store manager as an integral actor in the shopping centre in terms of informational boundary spanning between the retail organisation, the customers and local shopping centre management.

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Introduction

Store managers and shopping centres

Fisher (2009) describes retail stores as amalgams of factories and sales offices, where the role of store managers and their staff is to execute processes according to the retail management's specifications. In line with that view, the literature considers store managers' core responsibilities as focused on store operations, whereby they fulfil a cross-functional role within retail organisations by acting as an interface to retail buying, logistics, marketing etc. (Lusch and Jaworski, 1991). More recent articles have focused on the more direct influence of store managers on store performance (Arnold *et al.*, 2009; Lichtenstein *et al.*, 2010; Netemeyer *et al.*, 2010). Nonetheless, the view on store managers' role remains largely that of a compliant executer of processes related to managing human resources and merchandise, controlling costs and providing customer service (Levy and Weitz, 2011).

Is there more to the role of a store manager than this, though? Over twenty years ago, Lusch and Serpkenci (1990) described the exposure of store managers to other external key stakeholder groups of a retail organisation, as follows: "Retail store managers occupy an indispensable boundary role between the corporate organisation, the store operations, and the marketplace, ..." (p. 99). As such, store managers' are at the skin of the organisation (Katz and Kahn, 1978), sending and receiving stimuli to and from the store environment. This information accumulates, and is processed into tacit as well as explicit knowledge (Dollinger, 1984). Thus, store managers' position at the organisational interface potentially makes them a valuable source of customer as well as operations-related information and knowledge, relevant for managing and marketing not only the store but also the extra-store environment

(Tushman and Scanlan, 1981, p. 289). Store managers' customer-related knowledge can become key in driving organisations' success and competitiveness (Stalk *et al.*, 1992).

Store managers closeness to customers, and their customer knowledge, become of particular importance since stores are embedded in a wider store environment, whether for example as a solus store in an urban location or more particularly in our case as part of a retail agglomeration or shopping centre such as a shopping mall, factory outlet centre or town centre (Nelson, 1958; Finn and Louviere, 1996; Dennis *et al.*, 2002; Oppewal and Holyoake, 2004; Teller, 2008). The effective management and marketing of a shopping centre, taking into account the varying wants, needs and resource inputs of different (place-based) actors, has become key to the competitiveness and ultimately the survival of both the centres and the stores located therein (Teller and Elms, 2010). Store managers are exposed to and have knowledge of customers' perceptions and behaviour, and are able to relate this to the management measures of their own retail organisation and those of any centre management. Consequently, they are a potentially valuable informational resource that contributes to value creation within a shopping centre and thus its attractiveness to both consumers and businesses (Dollinger, 1984; Rigopoulou *et al.*, 2012). Such a contribution entails the collection and provision of customer-related information that supports decision making on measures related to the management and marketing of the centre, for example the organisation of events, promotional campaigns, and refurbishment measures.

Literature on store managers

The marketing (retail and service) literature has clearly concentrated on consumers' perspectives of store environments. Studies consider the evaluation of front-line employees - alongside other core shopping centre attributes such as the tenant mix, atmosphere or convenience-related factors (e.g. Reimers and Clulow, 2009; Chebat *et al.*, 2010) - as an element of a store's or agglomeration's image that influences customer satisfaction, loyalty

and patronage behaviour (e.g. Pan and Zinkhan, 2006; Ruiz, 1999; Raajpoot *et al.*, 2008; Ghosh *et al.*, 2010; Teller and Elms, 2010). The store management literature mostly takes an intra-organisational view when it comes to store managers being a valuable informational source for retail management (e.g. Arnold *et al.*, 2009; Netemeyer *et al.*, 2010). Oppewal *et al.* (2000) reveal the link between changes in the environment and retail managers' reactions. Birtwistle *et al.* (1999) conclude that front-line employees including store managers are valuable sources of consumer-related and more holistic store-related information that can be used by retail management to enhance the retail marketing mix.

Apart from these studies, there is, to our knowledge, a lack of detailed studies on how store managers process consumer-related information from the wider shopping centre, and on store managers' contribution to managerial decisions (see also Grewal and Levy, 2007). Furthermore, the literature gives insufficient attention to store managers' important role in collecting information about, and interpreting, the perceptions, attitudes and behaviours of customers, as affected by the wider store environment. Previous research also fails to adequately consider the potential of store managers to provide decision support to both their retail organisation and to those responsible for the management of the shopping centre. This lack of consideration exists despite store managers' important role as the interface between retail operations, the shopping centre and related operations and the customers, and despite the knowledge - both tacit and explicit - that such a role can generate (Salvaggio *et al.*, 2007; Arnold *et al.*, 2009; Netemeyer *et al.*, 2010).

Research focus

Based on this research gap and the proposed informational potential of store managers within shopping centres, this paper aims to investigate (1) the link between the store manager's evaluation of how customers assess a shopping centre and their own evaluation of the shopping centre environment and, based on that, (2) the relevance of store managers in

reflecting upon and informing the management and marketing practices of the local shopping centre management (Schneider *et al.*, 2005; Arnold *et al.*, 2009; Netemeyer *et al.*, 2010). To contextualise the relationship and information flows between customers, and the store, retail and shopping centre managers, we draw upon network theory (e.g. Håkansson and Ford, 2002b) and boundary-spanning theory (e.g. Tushman and Scanlan, 1981).

The overall contribution of this paper is that it provides a more complete understanding of the role of the store manager as an integral actor in the shopping centre in terms of informational boundary spanning between the retail organisation, the customers and the local shopping centre management. From a practical point of view our work encourages a greater awareness regarding store managers being a valuable informational resource with significant potential to support the shopping centre management process.

The remainder of this paper is structured as follows. The next section outlines a theoretical framework. Based on that, research hypotheses are then derived as part of a conceptual model. The presentation of an empirical study and the results from testing the conceptual model follows. The paper discusses the implications of the results for theory and practice related to retail and shopping centre management, and concludes with a consideration of the study's limitations and the outlook for further research.

Theoretical framework

A transposition of Brass *et al.*'s (2004) view on networks to the context of shopping centres emphasises that actors (or nodes), that is, stores as a representation of retail and service organisations, are embedded in a network of interconnected relationships. As such the network theory supports understanding of the contribution of stores within the context of a shopping centre. In an inter-organisational context the network theory describes nodes in relation to their roles, positions and relationships within networks as well as their resource

(e.g. Möller, 2010). This view emphasises that a network is more than just a sum of its parts - a set of stores in the case of shopping centres (Teller and Schnedlitz, 2012). To understand and to manage networks effectively it is crucial to consider the various interdependencies and relationships between the nodes and actors of a network (Håkansson and Ford, 2002a). For networks in general and shopping centres in particular, the sought-after benefit for a firm (represented by a store) of being part of a network is to maximise efficiencies and synergies, and to promote opportunities for organisational learning by sharing resources (Chetty and Wilson, 2003). Based on the notions of Tax *et al.* (2013) shopping centres qualify as service delivery networks. That is to say, they are a set of independent operations that - in the view of consumers – provide a holistic service experience. In a retail/service context the network view emphasises the importance of appreciating that each network actor and node contributes to a combined overall service provision and experience for customers. In other words service delivery networks in general and shopping centres in particular represent quasi-organisations, are perceived by customers as a single entity, and deliver combined services and overall customer experiences (Haytko, 2004; Gallouj and Savona, 2009).

In shopping centres, store managers represent the most exposed part of the node, that is, the store as a physical unit within the centre (Teller and Schnedlitz, 2012). In other words, the store manager is a hub for the setting up and management of network relationships with the consumers, the shopping centre's management and their superordinate unit, namely, the management of the retail or service organisation (Netemeyer *et al.*, 2010). As such, store managers represent a valuable network resource that can enhance the combined network value creation process that underlies the competitiveness of shopping centres (Möller and Rajala, 2007; Hult, 2011; Yiu and Xu, 2012).

Along with the understanding of shopping centres as inter-organisational networks the boundary spanning theory helps to conceptualise the role and behaviour of store managers

within inter-organisational networks. This theory describes the capabilities, activities and characteristics of individuals who link the ‘internal’ area of an organisation with the ‘external’ areas of an organisation and its environment (e.g. Tushman, 1977; Tushman and Katz, 1980). Store managers within shopping centres potentially qualify as “boundary spanning individuals” (Tushman and Scanlan, 1981, p. 289) bridging their retail organisation with both the shopping centre management organisation and the shopping centre’s customers (Edmondson and Boyer, 2012).

In line with the notions of Bettencourt and Brown (2003), store managers are involved in influencing not only customers but also their own management and that of the shopping centre. This is achieved by relaying information to customers about centre activities and feeding back to management on customer perception of these. Consequently, they help to improve the shopping environment. Through their constant presence and representation of the retail organisation, as well as the centre, store managers possess information on and knowledge of customers that is relevant for more strategic decision making as well as for retail service delivery (Salvaggio *et al.*, 2007; Arnold *et al.*, 2009; Netemeyer *et al.*, 2010).

Within this network, store managers represent the informational link between the retail organisation and its customers, and between the retail organisation and the local shopping centre management. In line with Tushman and Katz (1980) and Teigland and Wasko (2003), store managers are informational gatekeepers who collect, process and relay information and knowledge about the demand side of a centre, that is, customers, with this process mediated by their knowledge and understanding of the supply side, that is, the resources and capabilities of the network underpinning the shopping centre. Figure 1 depicts the informational relationships between the different primary actors within a shopping centre. It should be seen as indicative with respect to the focus of this paper, rather than comprehensive with respect to all actors and nodes within a shopping centre.

Figure 1 here

Store managers thus operate like seismographs within shopping centres - constantly detecting and being able to report changes in consumer perceptions, attitudes and behaviours. Consequently, store managers represent a network resource, and their informational boundary-spanning activities represent network capabilities that can be used to support and inform decisions related to the management of the shopping centre (Dollinger, 1984).

This decision support includes, for example, feeding back information on the strengths and weaknesses of the shopping centre, including the tenant mix and mall atmosphere, and the effectiveness of marketing initiatives such as shopping centre events, and collaborative promotional or advertising campaigns. They can also give feedback on the satisfaction with the infrastructural services provided by the centre, such as public toilets, recreational areas and opening hours (Chebat *et al.*, 2010; Teller and Elms, 2010). The next section presents a conceptual model in order to further explore store managers' role and potential as a valuable informational network resource.

Research hypotheses and conceptual model

Links between the evaluations of shopping centre customers and store managers

Store managers have an in-depth knowledge of, and privileged access to, information about customers' behaviour and perceptions, and the immediate shopping environment (Netemeyer *et al.*, 2010). They are the people most likely to understand the customers' specialised language and to be able to translate their perceptions and behaviour for the benefit of the retail and shopping centre organisations (Salvaggio *et al.*, 2007). For example, they are able to interpret, reflect on and provide feedback on customers' assessments of collaborative

marketing schemes between the retail tenants and the shopping centre, or about infrastructural changes to the centre undertaken by the shopping centre's management (Konopa and Zallocco, 1981). Given the substantial impact of the external store environment and location on store performance, constant monitoring of such aspects should be a core necessity and responsibility for store personnel in general and the store managers in particular (Pauler *et al.*, 2009; Bell *et al.*, 2010). In line with their mediating role between customers and the retail business, managers' evaluations of the centre in which 'their' store is located are based on their assessments of customers' evaluations of core attributes, as well as the overall attractiveness of the centre (Dollinger, 1984; Oppewal and Timmermans, 1997). Most frequently mentioned core attributes, such as tenant mix, atmosphere and convenience related attributes such as orientation and infrastructural services (e.g. Pan and Zinkhan, 2006; Chebat *et al.*, 2010) can be manipulated by the centre's management (Finn and Louviere, 1996). Attractiveness represents the extent to which consumers display attachment to a shopping centre, which is reflected in their perceptions, attitudes and patronage behaviour (Finn and Louviere, 1996).

Dollinger's (1984) notions on the information-processing capabilities of boundary spanners are also relevant here. Through their constant presence in their store and exposure to customers, store managers fulfil this boundary-spanning role, collecting and processing customer information and converting it into knowledge. This gives them the insight and expertise to understand and explain the perception-behaviour link related to patronage behaviour. In terms of shopping centres, this link represents the perception of core attributes of the centre, the evaluation of its overall attractiveness and the resulting consumer behaviour (Finn and Louviere, 1996). This proposed link leads to our first hypothesis:

H₁: The higher is the evaluation of shopping centre attributes relevant to customers ((a) tenant mix, (b) atmosphere, (c) orientation and (d) infrastructural services), the higher is the attractiveness of the shopping centre to the customers (as evaluated by the store manager).

Such a demand-side view of the centre also informs the store manager's overall managerial evaluation (supply-side view) related to the centre in terms of satisfaction with the retail location. Satisfaction thus reflects a judgement of strengths and weaknesses from the store manager's point of view (Stedman, 2002). Nevertheless, this judgement is not exclusively influenced by how consumers perceive and evaluate the centre's attributes and attractiveness but also by factors related to the operational performance of the store (Konopa and Zallocco, 1981; Netemeyer *et al.*, 2010). Examples include the supply of products to the store, rents, costs and obligations imposed by the centre's management.

Given their role, store managers have a professional empathy towards customers and are aware, or can become aware, of their likes and dislikes regarding a centre. We thus propose a link between how store managers evaluate customers' judgement of a centre and their own managerial evaluation of the centre in the second hypothesis:

H₂: The higher is the attractiveness of a shopping centre to the customers, as evaluated by the store manager, the more satisfied is the store manager with the shopping centre.

Core attributes of shopping centres are seen to be determinants for retail patronage, for example operationalised by the share of visits or spending of customers (Pan and Zinkhan, 2006). This close relationship between attributes and behavioural outcome is closely related to the performance of a centre and consequently stores (Teller and Schnedlitz, 2012). The latter thus becomes of significant and direct importance for store managers who are usually evaluated against sales figures (Netemeyer *et al.*, 2010). This centre attribute-store performance link is rooted in the network character of a centre meaning that the store is

closely linked to its network environment or wider store location. Thus store managers satisfaction with a centre is thus interwoven with core attributes of a centre as perceived by the customers. This link between centre attributes and store performance provides the rationale for our third hypothesis.

H₃: The higher is the evaluation of shopping centre attributes relevant to customers ((a) tenant mix, (b) atmosphere, (c) orientation and (d) infrastructural services), the more satisfied is the store manager with the shopping centre.

Our first three hypotheses are linked and we therefore observe that the overall judgment of how customers perceive the attractiveness of a centre mediates the effect between the perception of core attributes of a centre and managerial satisfaction. In other words the knowledge of the customer base is aggregated in the perception of the centres attractiveness which in turn feeds into the evaluation of the centre from an operational perspective (Finn and Louviere, 1996; Lichtenstein *et al.*, 2010). We propose the mediating role of the evaluated centre's attractiveness in our next hypothesis:

H₄: The attractiveness of a shopping centre to customers, as evaluated by the store manager, mediates the effect of the evaluation of shopping centre attributes ((a) tenant mix, (b) atmosphere, (c) orientation and (d) infrastructural services) on the satisfaction of the store manager with the shopping centre.

The centre's attractiveness-satisfaction-loyalty effect

Store managers are at the skin of the organisation (Katz and Kahn, 1978) and thus act as gatekeepers between the external environment and their organisation. As such, they collect and understand customer-related information and can convert this information "...into terms that are meaningful and useful to ..." (Tushman and Katz, 1980) decision makers within the retail organisation and the wider store environment. Consequently they can meaningfully

contribute to wider management decision making (Tushman, 1977; Sturdy and Wright, 2011).

Store managers' understanding of what customers think and feel about a shopping centre informs their managerial judgement of the location with respect to their key objectives such as enhanced customer retention (dwell) time, sales and profits (Levy and Weitz, 2011). Oppewal *et al.* (2000) provide empirical evidence of this linkage between the environment and managers' perceptions and behaviour. They illustrate that store managers show significant reactions – in terms of managerial decision making - to changes in the sales or image of a store. In the context of our study, the perceived attractiveness to customers affects the managers' views on the present suitability of a shopping centre as a store location, and their loyalty towards it in terms of its future suitability (Howard, 1997; Oppewal and Timmermans, 1997). When judging loyalty related to a location's suitability, store managers connect external information about the centre with internal information on their goals related to the store (Tushman and Scanlan, 1981; Dollinger, 1984). They process information from the consumers' point of view and transfer this information into their own professional judgement about the shopping centre, as expressed by their loyalty to a location. Thus, the fifth hypothesis is:

H₅: The higher is the attractiveness of a shopping centre to customers, as evaluated by the store manager, the more loyal a store manager is towards that shopping centre as a store location.

The place marketing literature links businesses' satisfaction with a place to retention in and loyalty towards that place (e.g. Kotler *et al.*, 1993). Within the context of this research, this perception-behaviour link leads to the proposition that the more general evaluation of the shopping centre – taking into consideration the customer's point of view – translates into a

judgement of that shopping centre as a store location (Konopa and Zallocco, 1981; Prendergast *et al.*, 1998).

Evaluations as to the degree of suitability relate to attachment or loyalty to a place, based on managerial judgement with respect to its future suitability as a store location (Konopa and Zallocco, 1981; Kotler *et al.*, 1993). As such, the penultimate hypothesis is:

H₆: The more satisfied is a store manager with a shopping centre, the more loyal the store manager is towards that shopping centre as a store location.

Based on the last two hypotheses and the attractiveness-satisfaction link we finally propose mediation of the relationship between the attractiveness of the centre and the managerial loyalty. The rationale for this last hypothesis is that the attractiveness construct only captures customer related perceptions which feeds into the view on strengths and weaknesses in terms of managerial satisfaction which in turn affect a professional judgement of the centre location. In this second mediation hypothesis we thus propose a cross-boundary information transfer (Teigland and Wasko, 2003) and thus a combination of the consumer or demand view with the managerial/supply view within a shopping centre.

H₇: Managerial satisfaction with the centre mediates the effect of attractiveness of the shopping centre to the customers (as evaluated by the store manager) on the loyalty of the store manager towards that shopping centre as a store location.

The seven hypotheses span the conceptual model that is depicted in Figure 2. The proposition behind the model is that store managers' information and knowledge of how consumers feel, think and behave, that is to say, their evaluation of consumers' perceptions of mall attributes and place attractiveness, is processed into a managerial evaluation of the shopping centre (Dollinger, 1984).

Figure 2 here

Methodology

Survey design and sample characteristics

The focus of this study is on shopping malls, which represent a ubiquitous and successful example of a purpose-designed and constructed, clearly defined and controlled, shopping centre (Dennis *et al.*, 2005; Levy and Weitz, 2011). More specifically, the attention of the empirical investigation is placed upon two of the most common mall types found: five regional shopping malls consisting of between 17 and 47 stores, and four supra-regional malls comprising between 72 and 134 stores. Each mall is relatively recently built, and each has been under the same ownership and management since its opening.

The population of interest is 570 store managers representing all of the tenants within the shopping centres. Following pre-notification via the centre managers, we contacted the store managers by mail and e-mail to notify them about the web-based survey that was to follow. After several rounds of reminder letters and e-mails, the final sample contains 217 usable questionnaires, giving a response rate of 38%. We controlled the response process by including interactive elements to prevent non-response to some items, and monitored the quality of the responses based upon observing the total answering time and each individual response process (Grant *et al.*, 2005). The absence of obviously unreliable answering behaviour provides reassurance as to the quality of the data.

To evaluate the non-response issue, the characteristics of the sample stores were compared with those of the entire population, that is, all tenants of the targeted malls. A chi-square test revealed no significant differences in terms of store size and sector ($\chi^2_{(1)} < 3.841$). One out of

three stores has more than EUR 600,000 in sales per annum. Half of the stores represented by the respondents are larger than 120 m² and have footfalls of 66 customers per day or more.

Measures

The latent reflective constructs were taken from the literature and adapted to the purpose of this study (see Table 1).

Attributes (ξ_1 - ξ_4): We included the four centre attributes which (1) have been most frequently mentioned in the literature as being of relevance for the attractiveness of a centre and (2) can be manipulated by a centre's management (for an overview, see e.g. Pan and Zinkhan, 2006; Teller and Reutterer, 2008; Chebat *et al.*, 2010). The most important of these were the tenant mix, measured by the width and depth of the store range (Teller and Reutterer, 2008), and the atmosphere in terms of atmospheric stimuli such as smell, temperature, lighting, and mood (Michon *et al.*, 2005). The other two factors were related to the convenience for customers, such as the orientation within the centre measured by the arrangement of the stores and ease of movement around the mall, and basic infrastructural services in terms of the availability of sufficient toilets, cash dispensers and recreational areas (Reimers and Clulow, 2009).

Attractiveness (ζ_5 , ζ_{51} - ζ_{53}): Following the measurement approach of Teller and Reutterer (2008), the attractiveness of the shopping centre - as perceived by the customers - represents a second-order construct, that is type one reflective first order, and reflective second order (Jarvis *et al.*, 2003), comprising satisfaction, loyalty intentions and retention proneness (see Figure 2). The theoretical rationale for subsuming these three latent constructs under a higher-order layer is the proposed and frequently tested covariance between satisfaction and behavioural intentions (e.g. Oliver, 1980; Szymanski and Henard, 2001). Together, they represent a consumer-related centre evaluation labelled attractiveness that is derived from

evaluating different centre attributes (Finn and Louviere, 1996). The higher-order construct thus comprises judgements, including cognitive and affective dimensions as well as behavioural components related to the perceived attractiveness of a shopping centre (Mittal *et al.*, 1998). Thus, attractiveness is a latent construct standing behind and affecting satisfaction (i.e. the overall perception of the attractiveness of a mall), loyalty intentions (i.e. the perception of its future attractiveness), and retention proneness (i.e. the perceived situational attractiveness of a shopping mall). Each of these dimensions focuses on the shopping centre, including the stores as an integral part of it (Oppewal and Holyoake, 2004). The attractiveness of a centre as a macro-location is of considerable importance for a store's management since it translates directly into shopping behaviours that influence sales, profits and retail image (Anderson *et al.*, 1994; Bloemer and de Ruyter, 1998; Arnold *et al.*, 2009).

The satisfaction scale originates in the work of Mägi (2003), the loyalty (or repatronage) construct of Mittal *et al.* (1998) and the retention proneness constructs of Wakefield and Baker (1998). All the constructs are operationalised by three indicators (manifest variables).

Managerial satisfaction (η_1) and loyalty (η_2): In the absence of measures for satisfaction, in terms of an overall evaluation of a shopping centre from a management point of view (Finn and Louviere, 1996), we adapted the wording of the items in Mägi's (2003) satisfaction construct to reflect a store manager's holistic judgement of a shopping centre. In doing so, we preserved the logic so as to capture the overall evaluation dimensions of overall satisfaction (y_{11}), level of meeting expectations (y_{12}) and closeness to an ideal store environment (y_{13}).

To reflect place loyalty and the attachment dimensions behind the judgement of loyalty in terms of the future suitability of a store location, we decided to draw on Mittal *et al.*'s (1998) loyalty construct, which we amended for the purposes of this study. Loyalty in this specific place-related context subsumes the willingness to recommend the shopping centre from an expert's point of view (y_{21}) and to keep the store within the mall in the future (y_{22} ; y_{23}).

Control Variables: We considered four control variable in our model that potentially influence the effects hypothesised above and thus store managers' perceptions and evaluations related to their shopping centres: shopping centre size (c_1), store size (c_2), role of the store in the shopping centre (c_3) and industry affiliation (c_4) (see Table 1). The attractiveness of shopping centres is closely related to its size as well as the retail/service offer (Reilly, 1931; Huff, 1964). Thus centres of different sizes are perceived and evaluated differently by both consumers, and consequently managers, in terms of being an appropriate location to shop or operate a store. A key measure of size is the number retail and non-retail tenants of a centre which also indicates the choice that is offered to customers (Teller, 2008).

The contribution of each store to the overall attractiveness of a centre varies within a centre (Finn and Louviere, 1996). For example key or anchor tenants that are of bigger size and represent strong as well as well-known retail brands generate more footfall compared to usually smaller and less well known tenants that benefit from that footfall rather than attracting customers independently (Teller and Schnedlitz, 2012). We capture this difference in the importance of stores and thus the roles they play in a centre by using the objective measures of store size and the subjective measure of the power of a store to generate footfall as opposed to benefitting from the footfall generated by other stores.

The last control variable that potentially has an impact on the effects proposed is related to the main industry affiliation of the stores. Shopping centres include both retail (for example fashion, consumer electric, footwear, furniture stores) and service stores (for example coffee shops, restaurants, fast food, mobile phone or shoe repair stores), where the latter represent the augmentation of the retail offer (Yiu and Xu, 2012). These distinctive roles of retail and service stores as well as the generic differences in store operations reflects potential differences in store managers' perceptions and evaluations.

Table 1 here

Measurement model

The applied evaluation of the constructs' psychometric properties followed the notions of Churchill (1979) and Bagozzi and Yi (1988) and included the estimation of a confirmatory factor analysis (CFA) model. In this test of the local fit of the measurement model, all the constructs show a good internal consistency, with Cronbach's alphas (α) above 0.70 (Fornell and Larcker, 1981). Indices showing the constructs' composite reliability ($\rho > 0.60$; AVE > 0.50) meet the recommended cut-off criteria (Fornell and Larcker, 1981; Bagozzi and Yi, 1988). With regard to the constructs' discriminant validity, the average variance extracted (AVE) is larger than the highest of the squared intercorrelations with the other factors in the measurement model, that is, the Fornell-Larcker ratio (FLR) is less than 1.0 (Fornell and Larcker, 1981; see Table 2).

Table 2 here

The relationships between the dependent and independent constructs were investigated using covariance-based structural equation modelling (Kline, 2011). The testing of the global fit reveals that the indices measuring the absolute (root mean square error of approximation, RMSEA, 0.071, cut-off value < 0.08), incremental (Tucker-Lewis index (TLI), 0.916, and comparative fit index (CFI), 0.931, cut-off value > 0.9 for both) and parsimonious (normed χ^2 (CMIN/df), 2.087, cut-off value < 3) fits meet the recommended thresholds; therefore, the

empirical data fit the proposed model to a satisfactory degree (Anderson and Gerbing, 1988; Hu and Bentler, 1998, 1999).

The estimation of the second-order factor model shows highly significant factor loadings (λ_{112} , 0.868; λ_{113} , 0.911; both $p < 0.001$; λ_{111} , 0.825 (loading fixed to 1)) from attractiveness on the three first-order factors. Further, the global fit measures are in an acceptable range. The correlations between the first-order constructs are substantial and significant, which finally indicates that the three scales converge sufficiently under the second-order construct, attractiveness.

Since the data gathered are based upon self-reports, applying measures to prevent and examine any common method bias proved to be necessary, and we did so by following the notions of Podsakoff *et al.* (2003). In terms of the structure of the research instrument, we clearly separated the questions and applied a variety of rating scales throughout the questionnaire (see Table 2). Further, neither the pre-notification letter, nor the reminder letters nor the questionnaire revealed the specific purpose of the project, and all assured confidentiality to the respondents. A CFA subsuming all indicators under one latent factor, that is a common method variance factor, shows a suboptimal global fit with the empirical data (RMSEA, 0.199; TLI, 0.533; CFI, 0.568; CMIN/df, 8.625), which indicates the absence of common method bias.

Impact of control variables

We evaluate the effects of our four control variables (c_1 , c_2 , c_3 , c_4) on the main effects in our model (see Figure 1) by following the procedure applied by Robson *et al.* (2008). The intercorrelation values in Table 2 indicate that the relationships between the control variables and all the other constructs in the model are very weak. Table 3 depicts the impact of the control variables on the three dependent constructs (centre's attractiveness from the

customer's point of view as evaluated by the store managers (ζ_5), the managerial satisfaction with the centre (η_1) and managerial loyalty towards the shopping centre as a suitable future store location (η_2). In all cases these effects are both insignificant at a 0.05 level and very low. To test for the invariance of our structural effects we applied X^2 -difference tests ($\Delta X^2_{(df)}$) (Kline, 2011). We compared the effect sizes of our structural paths ($\gamma_{11}-\gamma_{15}$, $\gamma_{51}-\gamma_{54}$, γ_{25} , β_{21}) between models include and excluding the control variables and found that all $\Delta X^2_{(1)}$ values are very low ($\ll 3.841$) and insignificant at a 0.05 level. We can conclude that no significant change occurred in the estimates of our structural paths due to the inclusion of our control variables in the model. This finally suggests that the control variable do not confound the proposed effects in our conceptual model.

Structural model estimation

The significance levels of the structural effects, as measured by p -values, are used as indicators to confirm or reject the hypotheses. The sizes of the standardised effects serve as measures of the strengths of the effects; these were interpreted using the suggestions of Cohen (1988). Table 3 summarises the results of estimating the structural effects proposed in the conceptual model.

Hypothesis 1(a, b, c, d): The test of the first hypothesis reveals significant ($p < 0.001$) and strong effects of both the tenant mix (ζ_1 , 0.401) and the atmosphere (ζ_2 , 0.471) on the attractiveness of the shopping centre to consumers (as evaluated by the store managers) (ζ_5). Both centre attributes thus turn out to be antecedents of the centre's attractiveness to customers in the eyes of store managers. To the contrary, the convenience-related constructs, orientation (ζ_3 ; 0.157) and infrastructural services (ζ_4 ; -0.035), show no significant ($p > 0.05$) and substantial impact on the perceived attractiveness of the centre. We therefore confirm H_{1a} and H_{1b} and reject H_{1c} and H_{1d} . The coefficient of determination (r^2), indicating the degree to

which the independent constructs, that is attributes, explain the variance of the dependent construct, that is attractiveness, has a remarkably high value of 0.659.

Hypothesis 2(a, b, c, d): The only antecedent of the managerial satisfaction with the centre (η_1) in terms of attributes is the tenant mix (ζ_1 , 0.209, $p < 0.01$), showing a significant but relatively small effect. None of the other three attributes (ζ_2 , 0.156; ζ_3 , 0.062; ζ_4 , -0.086) affect managerial satisfaction significantly ($p > 0.05$) and substantially. We thus only confirm H_{2a} and reject the other hypotheses for the attributes of atmosphere, orientation and infrastructural services (H_{2b} , H_{2c} , H_{2d}).

Hypothesis 3: Further, the results indicate a close link between the centre's attractiveness from the customer's point of view as evaluated by the store managers (ζ_5) and the managerial satisfaction with the centre (η_1 ; 0.507, $p < 0.001$). This clearly leads to the acceptance of hypothesis H_3 . Overall, attractiveness is the most significant and substantial antecedent of managers' satisfaction within the model. The share of variance explained by the attributes and by attractiveness is well beyond 50% (r^2 , 0.564).

Hypothesis 4(a, b, c, d): Since we had identified significant indirect effects of both the tenant mix and atmosphere on managerial satisfaction, we further examined whether attractiveness mediates this effect, following the four-step procedure suggested by Baron and Kenny (1986). As required by the first three steps, and as already indicated by the results above, we see (1) that the potentially mediated effect between the two attributes (ζ_1 , ζ_2) and the outcome construct, managerial satisfaction (η_1), is significant, (2) that the direct effect between the attributes and the proposed mediator, attractiveness (ζ_5), are significant as well, and (3) that the mediator significantly affects managerial satisfaction. The final step (4) consists of an investigation into whether this indirect effect is different from zero, carried out by applying Sobel's test (Sobel, 1982). Sobel's z is found to be 6.497 ($p < 0.001$) for the tenant mix and 6.797 ($p < 0.001$) for the effect of atmosphere on managerial satisfaction. This thus

indicates that both indirect effects are significantly different from zero. Finally, the measure ‘variance accounted for’ (VAF), based on Shrout and Bolger’s (2002) formula, reveals the size and strength of the mediating effects. The VAF values turn out to be 0.442 and 0.475, respectively. By interpreting this coefficient using the notions of Cohen (1988), we can say that the mediating power of ζ_5 is of a substantial size, which leads to the conclusion that the relationships between the two core attributes of the centre and managerial satisfaction are mediated by attractiveness. Taking into account the notions of Zhao *et al.* (2010) and considering both the direct and indirect effects between the attributes and managerial satisfaction (see Table 3) we can thus confirm H_{4a} in terms of a partial mediation and H_{4b} in terms of a full mediation of attractiveness, respectively.

Table 3 here

Hypotheses 5, 6 and 7: When estimating the effect of perceived attractiveness (ζ_5) on the managerial loyalty towards the shopping centre as a suitable future store location (η_2 ; 0.115, $p > 0.05$), we found an insignificant and marginal effect. Thus we cannot confirm the fifth hypothesis. Nevertheless, the results reveal a very close managerial satisfaction-loyalty link. The effect of η_1 on η_2 (0.729, $p < 0.001$) is both highly significant and very substantial, leading to the acceptance of hypothesis H₆. The r^2 -coefficient related to managerial loyalty shows a remarkable value of 0.676, which indicates that two thirds of the variance of this construct is explained by attractiveness and managerial satisfaction.

The insignificant direct and significant indirect effects again suggest a mediating role played by managerial satisfaction (η_1) on the effect between attractiveness and managerial loyalty. By again applying the test procedure of Baron and Kenny (1986), we can clearly

reveal mediation that is both significant (z , 7.892) and substantial (VAF, 0.470). This result clearly suggests accepting H₇. Taking into account the insignificant direct effect of attractiveness on managerial loyalty (see Table 3) we can conclude that managerial satisfaction fully mediates the effect (Zhao *et al.*, 2010).

Discussion

The conceptual model underpinning the empirical study and the findings can be contextualised in terms of Lichtenstein *et al.*'s (2010) concept of the 'chain of influence' that we transfer from a retail organisation towards a shopping centre setting. Both the discussion of the literature and of the empirical findings reveal the retail store manager to be an informational link between his/her retail organisation, the customers, and the management of the shopping centre. Before discussing the core contributions of this paper and our study we want to emphasise that - given the insignificant impact of our control variables on our model - our findings are homogenous across different shopping centres as well as stores of different sizes, varying power to generate footfall in their centres and industry affiliation.

Links between the evaluations of shopping centre customers and store managers

In line with the notions of Hult (2011), store managers are at the forefront of the shopping centre and of the retail organisation and, as such, are an important stakeholder group that forms the interface between the customers and the management. We confirm the main findings from several consumer-related studies on the antecedents of centre patronage, and identify the tenant mix and the atmosphere as the core drivers of attractiveness for customers (e.g. Nelson, 1958; Van Kenhove *et al.*, 1999; Turley and Milliman, 2000; Turley and Chebat, 2002; Oppewal and Holyoake, 2004; Michon *et al.*, 2005; Teller, 2008). Although the result that the convenience-related attributes of shopping centres do not affect their perceived attractiveness in the eyes of consumers disconfirms Reimers and Clulow's (2009)

notions, it is in line with the empirical evidence from Teller and Reutterer (2008) and Teller and Elms (2012). In other words, the evaluation of store managers' perceptions of how customers see the four attributes of a centre leads to a distinction between "motivators" that can increase satisfaction, loyalty and retention proneness, and "hygiene factors" that are taken for granted on a certain level and do not have a substantial impact on attractiveness (Pan and Zinkhan, 2006). The finding that store managers distinguish between motivators and hygiene factors in the same way that customers do (Teller and Reutterer, 2008) confirms the relevance of store managers as informational boundary spanners (Arnold *et al.*, 2009; Netemeyer *et al.*, 2010) and their potential to inform a centre's management and marketing activities.

The results clearly identify a significant effect between the store manager's evaluation of how customers assess a shopping centre – measured by the centre's attributes and attractiveness - and the store manager's own evaluation of the centre, measured by their satisfaction with the centre. The tenant mix is the core antecedent of managerial satisfaction in terms of the centre's attributes. This indicates that managers see the importance of having the right set of stores within a centre for generating synergetic effects for both consumers and tenants and thus enhancing the success and competitiveness of the centre (Oppewal and Holyoake, 2004). The attribute 'atmosphere' has no direct impact on the store managers' overall evaluation of the centre but is mediated by the attractiveness of the centre, assessed through the consumers' eyes. Thus, atmosphere proves to be considered of such great importance for customers that, despite a lack of direct impact, it translates into managerial satisfaction. This result indicates the multi-faceted nature of store managers' evaluations, distinguishing what is relevant and important for customers from what impacts upon their own assessments. The two convenience-related attributes do not have an impact on managerial satisfaction. This lack of impact confirms that neither orientation for customers nor basic infrastructural services within a centre drive customers' assessments of

attractiveness (e.g. Teller and Elms, 2010); consequently they are also of only marginal importance for managers.

Overall, the identification of core attributes, their mediated effect on managerial satisfaction, as well as the strong impact of attractiveness, complement the notions of Netemeyer *et al.* (2010), confirming that store managers' evaluations of how customers perceive a shopping environment affect their own overall evaluations of the shopping centre in terms of their managerial satisfaction. Despite this link being substantial, the results clearly show that there are other determinants that are not focused on the demand side of the centre and not included in the model (see r^2 values). Such factors may be related to store operations, logistics or other company- and centre-related administration processes.

Thus, the first core contribution of this paper is identifying a link between (perceived) customer evaluations and managerial evaluations of a shopping centre. This indicates store managers' potential to undertake informational boundary spanning, by collecting, processing and integrating external, customer-related information and knowledge (Tushman and Scanlan, 1981; Edmondson and Boyer, 2012).

The centre's attractiveness-satisfaction-loyalty effect

Although the direct effect of evaluated attractiveness on managerial loyalty (reflecting the future suitability of the shopping centre as a store location) is not significant, the indirect effect is, and is thus fully mediated by the store manager's overall evaluation. This mediation indicates that the customer-related view of both the attributes and the overall attractiveness is filtered by a more holistic and aggregated view of the centre, namely, managerial satisfaction. This finding reflects Teigland and Wasko's (2003) notions on cross-boundary information transfer. In this case, the information crossing the organisational boundary is customer

perceptions, and the related reconfiguration of this information into knowledge that is relevant for the organisation is related to the store's location and its wider environment.

Knowledge of the customer base (Lichtenstein *et al.*, 2010) feeds into the evaluation of the centre from an operational perspective and is particularly relevant to the shopping centre managers who are responsible for increasing the centre's attractiveness to customers (Howard, 1997). Store managers become agents for the customer, being able to sense and articulate any dissonance and gaps between the customers' perceptions and needs, and the shopping centre management's perceptions and decision making. As such, they represent a valuable informational source of market and marketing research for both the retailer and the shopping centre organisation. This conclusion supports Lusch and Serpkenci's (1990) notions of retail store managers playing a boundary role between the organisations – retail and shopping centre – and the market place. Compared to the information generated by mostly cross-sectional consumer surveys, their knowledge and expertise relates to the store's and the centre's clientele and thus contributes towards a more comprehensive view of customers' changing perceptions, attitudes and behaviour.

Another major finding of this study is a close managerial satisfaction-loyalty link, meaning that the overall evaluation impacts upon store managers' views as to the current and future appropriateness of the store's location within the shopping centre in question. As such, location planning decisions related to store portfolio management can be informed by the store managers' views on the shopping centre. Such views take into consideration in-depth knowledge based on daily observation of and contact with customers and other local place actors (Lichtenstein *et al.*, 2010).

To summarise the second core contribution, our research indicates that store managers undertake the role of, and have the capacity to be utilised as, seismographs, measuring and reporting changes in consumers' behaviour within shopping centres. Thus, store managers

can both assist in, and provide an evaluation of, the activities and decisions of shopping centre operators and managers.

Practical implications

Boundary spanning potential: The discussion in this paper clearly suggests that given the amount of managed space, e.g. shopping malls, and the heightened competition that they face from other channels, increasing the understanding and the utilisation of boundary spanning potential of store managers is important. Thus, store managers should be considered as a powerful asset for shopping centre as well as retail management due to their privileged position on the boundaries of organisations and customers.

Informational source in shopping centres: Particularly store managers' informational value to both the shopping centre and the retail management emanates from their continued presence and contact with the customers and front-line employees they represent. Thus, they can potentially be used as informational boundary spanners in shopping centres (Bettencourt and Brown, 2003). This suggests that store managers should be considered as a powerful source for gathering information on both customers as well shopping centre operations.

Sounding boards on managerial effectiveness: Besides their core role of operating their stores, they can inform management and marketing initiatives related to the shopping centre and later feed back information on their effectiveness. As such, store managers have a wider boundary-spanning role, beyond the customer-oriented perspective typically developed in the literature (Bettencourt *et al.*, 2005; Edmondson and Boyer, 2012). This role is becoming increasingly important as, for example, shopping centre operators face pressure to improve their asset management activities (Konopa and Zallocco, 1981; Howard, 1997).

Limitations and outlook for further research

As with all empirical research, the study presented in this paper has some limitations that can stimulate future research endeavours.

Supplementary qualitative research: This study is very much quantitative in nature. As a next step, researchers could confront store managers with the findings of this study, and ask them to further elaborate on, for example, the chain of effects and their possible boundary-spanning role in shopping centres, through a focus group discussion or in-depth interviews. Such an alternative research design would enable a further assessment of the store managers' potential to contribute significantly to the value-creation process of networks such as shopping centres.

Complementary views: Given the focus of this paper we investigated informational boundary spanning by surveying store managers exclusively and thus neglected the view of other key actors in shopping centres, such as front-line employees, regional retail managers or shopping centre managers. Future research could complement this research by look at how these other actors see store managers potential and ability to act as seismographs in shopping centres.

Store managers and town centres: The empirical evidence underpinning this study derives from a sample of shopping centre (mall) tenants. We thus did not consider any other shopping centre formats, such as inner-city retail clusters or factory outlet centres. Future research should also consider - beside other formats - town centres as a research setting. The complexity of such evolved shopping centres, including the multiplicity of actors, adds a further component to the debate (Evans, 1997).

Representational boundary spanning: Finally, the current study looks exclusively at the informational side of the relationship between store managers and customers. Subsequent

research could include the representational dimension of these relationships and focus on the ambassadorial role the store manager plays between customers, their own organisation and the shopping centre.

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Figure 1: Informational relationships between key actors in shopping centres

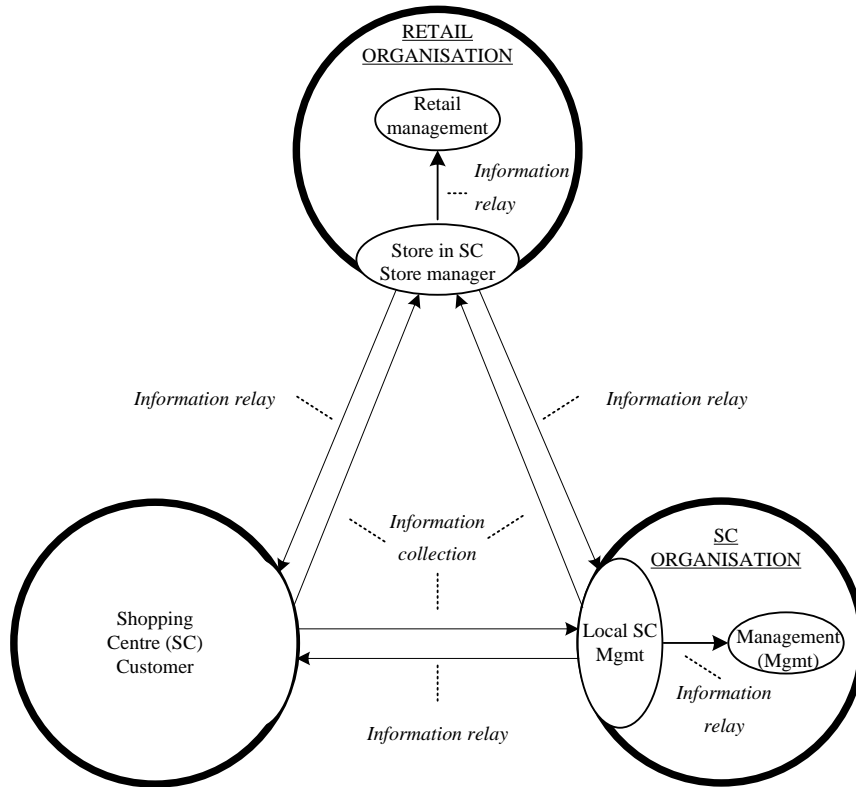
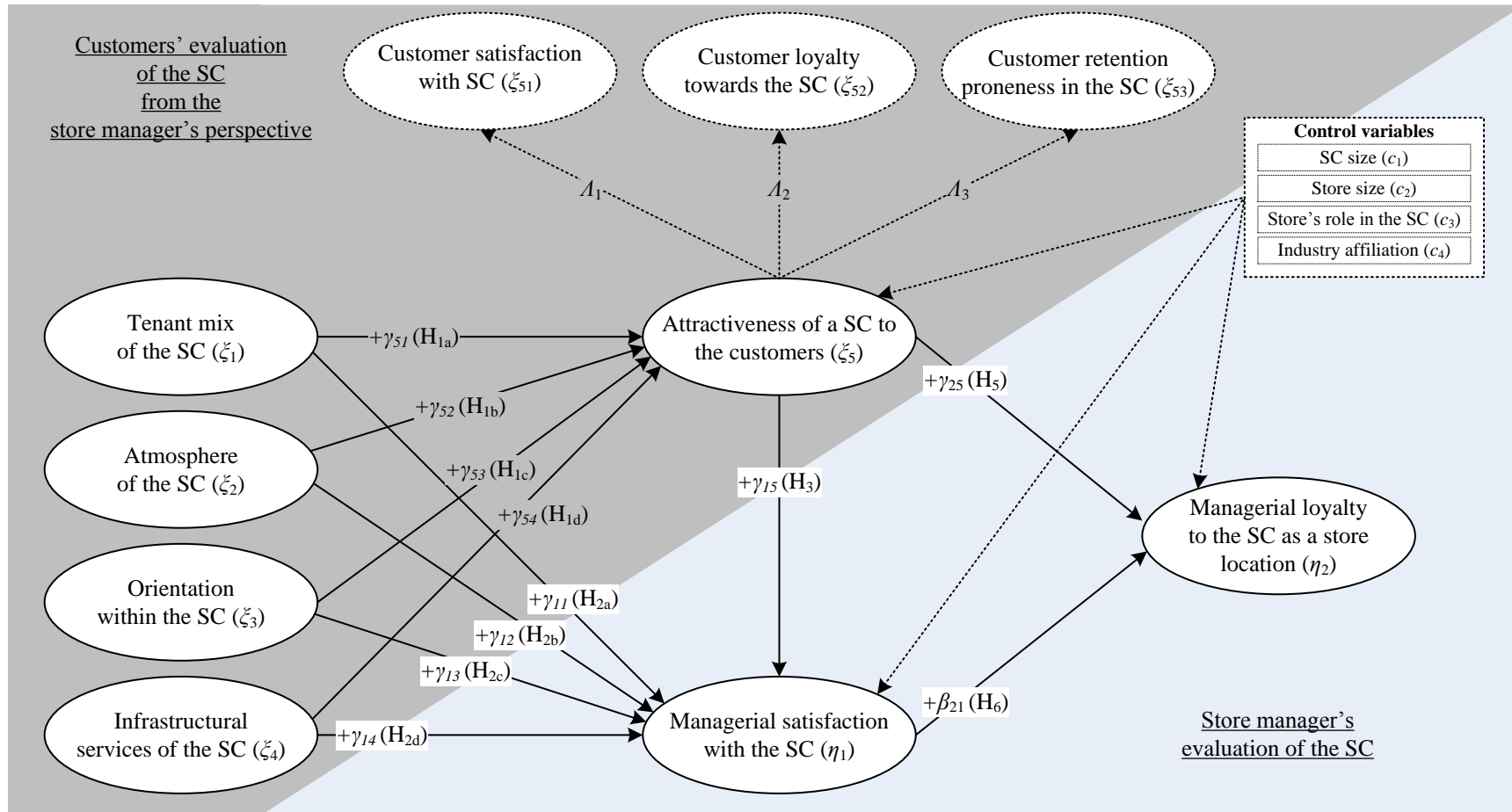


Figure 2: Conceptual model



Notes: Hypotheses H₄ (proposed mediation of ζ_5) and H₇ (proposed mediation of η_1) not shown.

Table 1: Measurement scales, confirmatory factor analysis results and reliabilities

(Latent) Construct Indicator	μ (σ)	λ	α/ρ AVE
[Customer-relevant centre attributes]			
Tenant mix (ξ_1)			
x ₁₁ : The SC has a broad range of retail stores. ^a	4.3 (1.6)	0.92	0.92/0.93
x ₁₂ : The SC has an attractive range of retail stores. ^a	4.3 (1.6)	0.96	0.81
x ₁₃ : There are many well-known retail stores in the SC. ^a	4.9 (1.4)	0.80	
Atmosphere (ξ_2)			
x ₂₁ : The odour is not disturbing in the SC. ^{a†}	4.8 (1.4)		
x ₂₂ : The air is pleasant in the SC. ^{a†}	4.4 (1.7)		
x ₂₃ : The temperature is pleasant in the SC. ^{a†}	3.9 (1.8)	0.83	0.93/0.94
x ₂₄ : The light is pleasant in the SC. ^{a†}	5.0 (1.3)		0.85
x ₂₅ : It is always clean in the SC. ^{a†}	5.0 (1.4)		
x ₂₆ : The architecture is appealing in the SC. ^{a†}	4.4 (1.8)		
x ₂₇ : There is a good mood in the SC. ^a	4.6 (1.3)	0.95	
x ₂₈ : The atmosphere is pleasant in the SC. ^a	4.6 (1.3)	0.95	
Orientation (ξ_3)			
x ₃₁ : You can move around safely and quickly in the SC. ^a	5.4 (.9)	0.65	0.80/0.84
x ₃₂ : You can easily orientate yourself within the SC. ^a	4.9 (1.2)	0.86	0.65
x ₃₃ : Stores are arranged clearly in the SC. ^a	5.0 (1.2)	0.87	
Infrastructural services (ξ_4)			
x ₄₁ : There are enough toilets in the SC. ^a	4.3 (1.7)	0.71	0.76/0.76
x ₄₂ : There are enough cash dispensers in the SC. ^a	4.5 (1.6)	0.65	0.52
x ₄₃ : There are enough recreational areas in the SC. ^a	4.1 (1.8)	0.78	
[Centre's attractiveness for customers]			
(Evaluated) customer satisfaction with the shopping centre (ξ_{51})			
x ₅₁₁ : How satisfied are customers with this SC? (very dis-/satisfied) ^b	1.5 (1.4)	0.95	0.92/0.93
x ₅₁₂ : How well does this SC meet customers' expectations? (not at all/totally) ^b	1.4 (1.4)	0.95	0.81
x ₅₁₃ : Think of an ideal SC from a customer's point of view. To what extent does this SC come close to that from a customer perspective? (not close/very close) ^b	1.2 (1.5)	0.81	
(Evaluated) customer loyalty towards the shopping centre (ξ_{52})			
x ₅₂₁ : Would customers recommend this SC to other persons? (definitely not/definitely yes) ^c	6.4 (2.2)	0.86	0.94/0.94
x ₅₂₂ : How likely are customers to visit this SC again? (very unlikely/very likely) ^c	6.8 (1.9)	0.96	0.84
x ₅₂₃ : How likely are customers to visit this SC again and buy something then? (very unlikely/very likely) ^c	6.7 (1.9)	0.94	

(Evaluated) customer retention proneness in the shopping centre (ξ_{53})			
x_{531} : Are customers willing to stay in this SC as long as they can? ^c	5.4 (2.2)	0.82	0.903/0.906
x_{532} : Do you think customers enjoy spending time in this SC? ^c	5.8 (2.1)	0.96	0.763
x_{533} : Are customers usually involved in many activities here in this SC? ^c	5.8 (2.2)	0.84	
[Managerial evaluation of the SCE]			
Managerial satisfaction with (overall evaluation of) the shopping centre (η_1)			
y_{11} : How satisfied are you with this SC? (very dis-/satisfied) ^b	1.3 (1.6)	0.85	0.93/0.93
y_{12} : How well does this SC meet your expectations? (not at all/totally) ^b	1.1 (1.6)	0.97	0.83
y_{13} : Think of an ideal shopping SC from your point of view. To what extent does this SC comes close to that from your perspective? (not close/very close) ^b	1.1 (1.5)	0.90	
Managerial loyalty (in terms of future suitability) to the shopping centre as a store location (η_2)			
y_{21} : Imagine you are an independent expert in your industry. Would you recommend to other businesses that they locate their stores in this SC? (definitely not/definitely yes) ^c	1.1 (1.8)	0.90	0.95/0.93 0.82
y_{22} : If it were possible to move the store to a nearby location outside this SC, would you prefer this store to remain inside this SC? (definitely not/definitely yes) ^c	1.7 (1.7)	0.93	
y_{23} : How likely is it that this store will remain located within this SC? (very unlikely/very likely) ^c	2.0 (1.4)	0.89	
[Control variables]			
c_1 : Number of stores within the shopping centre?	63.3 (35.8)	-	-
c_2 : How big is your store in square metres/feet?	429.0 (933.5)	-	-
c_3 : How important is your store in terms of generating footfall in this shopping centre? (benefits completely from the footfall generated by other stores/one of the main footfall generator in this shopping centre) ^d	2.8 (.8)	-	-
c_4 : Industry affiliation of retailer/store (retail vs. service) ^e	79.3%/20.7%	-	-
<p>Caption: μ, mean value; σ, standard deviation; α, Cronbach's alpha; ρ, composite reliability; AVE, average variance extracted; λ, standardised factor loadings; a, seven-point rating scale (anchors 0-6; totally disagree – totally agree); b, seven-point rating scale (anchors -3 to+3; middle category 0); c, ten-point rating scale (anchors 0 and 9); d, five-point rating scale (0-5); e, dichotomous scale; †, indicators were constructed by calculating mean values for the sake of the parsimony of the measurement model and because of the high correlation between indicators ($r>0.85$); -, N/A;</p> <p>Notions: Global fit measures of the CFA model: absolute fit measure: RMSEA, 0.071; incremental fit measures: CFI/TLI, 0.932/0.913; parsimony fit measures: normed χ^2 (CMIN/df), 2.099; df=360; all factor loadings are significant at the 0.1% level ($p<0.001$).</p>			

Table 2: Discriminant validity measures

	ζ_1	ζ_2	ζ_3	ζ_4	ζ_{51}	ζ_{52}	ζ_{53}	η_1	η_2	c_1	c_2	c_3	c_4
Tenant mix of the shopping centre (ζ_1)	(0.81)												
Atmosphere of the shopping centre (ζ_2)	0.24	(0.85)											
Orientation within the shopping centre (ζ_3)	0.03	0.31	(0.65)										
Infrastructural services of the shopping centre (ζ_4)	0.12	0.39	0.42	(0.52)									
Customer satisfaction with shopping centre (ζ_{51})	0.29	0.46	0.19	0.16	(0.81)								
Customer loyalty towards the shopping centre (ζ_{52})	0.34	0.38	0.16	0.21	0.64	(0.84)							
Customer retention proneness in the shopping centre (ζ_{53})	0.36	0.41	0.15	0.22	0.54	0.58	(0.76)						
Managerial satisfaction with the shopping centre (η_1)	0.34	0.36	0.13	0.14	0.44	0.39	0.40	(0.85)					
Managerial loyalty to the shopping centre as a store location (η_2)	0.21	0.24	0.10	0.08	0.36	0.40	0.24	0.67	(0.82)				
Size of the shopping centre (number of tenants) (c_1)	0.12	0.00	0.00	0.01	0.02	0.03	0.03	0.00	0.00	(-)			
Size of the store (floor space) (c_2)	0.01	0.01	0.01	0.00	0.03	0.04	0.00	0.01	0.05	0.01	(-)		
Self-perceived role of the store within the centre (c_3)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.15	(-)	
Industry affiliation (retail vs. service stores) (c_4)	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	(-)

Caption: Average variance extracted values (AVE) are presented on the diagonal. Squared correlation matrix for latent constructs shown below the diagonal.

Table 3: Direct and indirect structural effects

Direct effects		Coefficients
+ γ_{51}	Tenant mix (ζ_1) \rightarrow Attractiveness (ζ_5)	0.401***
+ γ_{52}	Atmosphere (ζ_2) \rightarrow Attractiveness (ζ_5)	0.471***
+ γ_{53}	Orientation (ζ_3) \rightarrow Attractiveness (ζ_5)	0.157 \dagger
+ γ_{54}	Infrastructural services (ζ_4) \rightarrow Attractiveness (ζ_5)	-0.035 ^{n.s.}
+ γ_{11}	Tenant mix (ζ_1) \rightarrow Managerial satisfaction (η_1)	0.209**
+ γ_{12}	Atmosphere (ζ_2) \rightarrow Managerial satisfaction (η_1)	0.156 ^{n.s.}
+ γ_{13}	Orientation (ζ_3) \rightarrow Managerial satisfaction (η_1)	0.062 ^{n.s.}
+ γ_{14}	Infrastructural services (ζ_4) \rightarrow Managerial satisfaction (η_1)	-0.086 ^{n.s.}
+ γ_{15}	Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1)	0.507***
+ γ_{25}	Attractiveness (ζ_5) \rightarrow Managerial loyalty (η_2)	0.115 ^{n.s.}
+ β_{21}	Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)	0.729***
Indirect effects		Coefficients
Tenant mix (ζ_1) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1)		0.202**
Atmosphere (ζ_2) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1)		0.238**
Orientation (ζ_3) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1)		0.079 ^{n.s.}
Infrastructural services (ζ_4) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1)		-0.017 ^{n.s.}
Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)		0.365**
Tenant mix (ζ_1) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)		0.343***
Atmosphere (ζ_2) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)		0.342***
Orientation (ζ_3) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)		0.118 ^{n.s.}
Infrastructural. services (ζ_4) \rightarrow Attractiveness (ζ_5) \rightarrow Managerial satisfaction (η_1) \rightarrow Managerial loyalty (η_2)		-0.078 ^{n.s.}
Effects of control variables		Coefficients
Size of the shopping centre (c_1) \rightarrow Attractiveness (ζ_5)		-0.009 ^{n.s.}
Size of the store (c_2) \rightarrow Attractiveness (ζ_5)		-0.009 ^{n.s.}
Self-perceived role (c_3) \rightarrow Attractiveness (ζ_5)		0.008 ^{n.s.}
Industry affiliation (c_4) \rightarrow Attractiveness (ζ_5)		0.013 ^{n.s.}
Size of the shopping centre (c_1) \rightarrow Managerial satisfaction (η_1)		-0.008 ^{n.s.}
Size of the store (c_2) \rightarrow Managerial satisfaction (η_1)		0.050 ^{n.s.}
Self-perceived role (c_3) \rightarrow Managerial satisfaction (η_1)		-0.053 ^{n.s.}
Industry affiliation (c_4) \rightarrow Managerial satisfaction (η_1)		-0.046 ^{n.s.}
Size of the shopping centre (c_1) \rightarrow Managerial loyalty (η_2)		0.076 ^{n.s.}
Size of the store (c_2) \rightarrow Managerial loyalty (η_2)		-.039 ^{n.s.}
Self-perceived role (c_3) \rightarrow Managerial loyalty (η_2)		.013 ^{n.s.}
Industry affiliation (c_4) \rightarrow Managerial loyalty (η_2)		-.046 ^{n.s.}

Caption: Standardised coefficient displayed; n.s., not significant ($p>0.05$); \dagger , $p<0.1$; **, $p<0.01$; ***, $p<0.001$;