MARKET SEGMENTATION AND DIMENSIONS OF STORE EQUITY: A STUDY IN RETAIL CONSTRUCTION

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ABSTRACT

This study has its bases on the concept of store equity developed by Hartman and Spiro (2005) and in the empirical model of Teixeira, Oliveira and Pires (2006), which identifies four dimensions: loyalty, memory, quality and image. The objective was to apply and test the dimensions of the model in four distinct retail brands of the building and construction segment of São Paulo, compare their store equity and segment the consumers. In each store (160 total), forty interviews were conducted. By exploratory factor analysis, it was possible to observe five dimensions related to the store equity construct: loyalty, store image, customer satisfaction, and customer care and service conformity. Through cluster analysis, respondents were classified into three different groups of consumers according to the five dimensions identified and received the categories of Unprepared, Demanding and Accustomed. Theoretical and managerial implications reinforce the possibility of applying the store equity as a customer segmentation variable in the construction retail segment.

Keywords: Brand Equity; Store Equity; Retail; Building and Construction.

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RESUMO

O presente estudo baseia-se no conceito de store equity (HARTMAN; SPIRO, 2005) dividido em quatro dimensões: lealdade, lembrança, qualidade percebida e imagem (TEIXEIRA; OLIVEIRA; PIRES, 2006). O objetivo do trabalho foi aplicar o modelo em quatro marcas varejistas distintas da construção civil do município de São Paulo, identificar as dimensões, perfis de consumidores e comparar o store equity entre elas. Foram realizadas 40 entrevistas em cada loja (160 no total) e geradas, pela análise fatorial exploratória, cinco dimensões ligadas ao constructo store equity, sendo: lealdade, imagem da loja, satisfação do consumidor, atendimento e conformidade em serviços. Por meio de análise de cluster, os respondentes foram classificados em 3 grupos distintos de consumidores segundo as 5 dimensões identificadas e foram enquadrados em segmentos: os Despreparados, os Exigentes e os Acostumados. Implicações teóricas e gerenciais reforçam a possibilidade de aplicação do store equity como variável de segmentação de clientes do varejo de construção civil.
__Palavras-chave:__ Brand Equity; Store Equity; Varejo; Construção Civil.

1 INTRODUCTION

Brands play an important role in the purchasing process, by determining consumption and composing the equity of a company. The American Marketing Association (AMA) (2012) defines it as "a name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers", it is considered an intangible asset and has been the target of management initiatives by companies, aiming to ensure market competitiveness. Caputo, Macedo and Nogueira (2008) consider it a bond of trust, whose strength lies in the associations that the client makes regarding the material and immaterial benefits provided. Besides the product brand, consumers value the role of the retailer's brand. For this reason, it is necessary to identify the values attributed by consumers regarding a brand, resulting in the concept of store equity. A high store equity means that consumers have high remembrance of the store, maintaining a positive image of it, attributing high quality to the company and maintaining loyalty to it (KIM; KIM, 2004).

According to Yoo, Danthu and Lee (2000) the brand name creates and adds value to the product, both for the customer and for the organization, that would not be different with the brands of retail stores in the building and construction segment. The value-added attributed to the brand is the brand equity. Different from the term, but tied to it, the concept of store equity, defined by Hartman and Spiro (2005), emerged as the differential effect of store knowledge by the consumer to store marketing responses.

Hartman and Spiro (2005) recaptured store's image based on the concept of customer-based store equity, which would be the foundation of marketing initiatives based on customer perception of their store knowledge. The study worked deeply on the conceptualization of the term, without, however, presenting an empirical validation of the research results.

Based on the conceptual study on store equity of Hartman and Spiro (2005), Teixeira, Oliveira and Pires (2006) elaborated a model for the application to the reality of the concept of store equity. Their study propose the test of this model in which the loyalty to the store, the perceived quality, remembrance and image of the store contribute to the formation of the store equity in consumer's mind of a retail store in Belo Horizonte. For the authors, the concept of store equity is the value-added perceived by costumers and the benefits these consumers receive from the store.

It is relevant to understand the dynamics of consumer behavior once it generates competitive advantage in the market. The concept of store equity has been widely discussed in the literature and studies such as that of Teixeira, Oliveira and Pires (2006; 2007) have adapted and validated the scale for the Brazilian context. However, there are no studies comparing the value

of the store equity for different retailers of the same segment, which in the case was that of building materials.

The objectives of the present study were to verify the dimensions of the store equity established by Teixeira, Oliveira and Pires (2006), having its bases in the conceptual work of Hartman and Spiro (2005) and the model of Oliveira and Pires (2006). Also, to draw a comparison of the store equity among retail stores of the building and construction segment and identify different consumer profiles from the store equity dimensions found. The selection of this sector can be justified due to its importance, portrayed in the potential of the segment that grew 153% between 2007 and 2013, being above the nominal increase of Gross Domestic Product (GDP), according to IBOPE Research published on ANAMACO (National Association of Construction Material Retailers) on September 20, 2013.

From the application of 160 questionnaires built on the store equity model developed by Teixeira, the data collection took place in four large retailers of construction in the city of São Paulo. In order to avoid exposure of the trademarks of the mentioned stores, in this study, they have an alphabetical classification from A to D.

The article has five main topics, Introduction being the first. The following is a literature review that builds the theoretical foundations that support this study. The methodology of the research takes place in the third topic. The analysis and results of the discussions are in the fourth topic, followed by the study's findings in its final remarks.

2 LITERATURE REVIEW
2.1 The Dimensions of Store equity

There are four dimensions or constructs associated to store equity, according to the model of Teixeira, Oliveira and Pires (2006): loyalty to the store, store remembrance, perceived quality and store image. All of these constructs improve the comprehension of the elements that lead a consumer to easily identify a store and assign more value to it over another. The retail sector of building and construction can use these concepts to understand, identify and satisfy its customers in order to create a bond of loyalty to their store and brand. Jones and Sasser (1995) define loyalty as "the feeling of attachment or affection towards the people of a company, its products and its services." According to Lessig (1973), it is possible to characterize the loyalty of a customer to a store by the number of purchases made in a particular store as a percentage of that customer's total purchases. Rust *et al*. (2001) consider loyalty a powerful precedent for organizational performance. For Reynolds *et al*. (1974), consumer loyalty is when a person continues, over time, to exhibit similar behavior in situations previously experienced. Sirdeshmukh and Singh (2002) reinforce the topic by stating that it is possible to recognize the sense of loyalty in a behavior that evidences the intention to build a relationship with the service provider and extend it in a long term. Enis and Paul (1970), point out that the main determinants of loyalty to the store are: a) conditions of the environment; b) socioeconomic characteristics; c) psychological attributes; d) company's marketing.

Thus, it is possible to say that store loyalty means the repetitive behavior of shopping in a particular store. In this perspective, for Wong and Sohal (2001), loyalty arises as customers repeatedly buy products or services and have a positive attitude toward a store. According to Schröder *et al*. (2001), the concept of store loyalty is the conscious behavior of a consumer's shopping in a store, determined by time, generated by commitment to it, that is, a desire to maintain a relationship with it. Bloemer and Ruyter (1998) understand that the commitment to the store is the link of an individual with their store of choice.

Osman (1993) states that it is possible to define the degree of loyalty to a store from different variables. Such as: a) the percentage of purchases of a specific category of products in a given store; b) frequency of visit to a particular store in relation to others in a same period of time; c) index of importance among stores; consumer propensity to shop at that store in the future; store recommendation for friends.

According to Huddleston, Whipple and Van Auken (2004), loyalty and repeat buying behavior are not equivalent, and may or may not generate commitment, the pillar of loyalty. For Miranda *et al*. (2005), customers generally treat their primary stores as safe choices in order to reduce the risk of frustration with purchases. However, if there is a promise to acquire more value, consumers are always willing to exchange their option for the first store.

Regarding store remembrance, Keller (1993) identifies it as the ability of the consumer to recognize the store name through associations in its memory that make up the store's image. The intensity of store remembrance reflects on the ability to identify it under different conditions. Still, according to Keller (1993), store remembrance includes store recognition or the ability to recognize it because of an earlier exposure.

Hartman and Spiro (2005) believe that store remembrance plays an important role in the decision-making process, since it is possible for consumers to remember a particular store when they think of a category of products or retail stores.

Porter and Claycomb (1997) assert that if buyers do not retain complete information about stores, they cannot make meaningful inferences before constructing their perceptions about them. In this way, the store's recognition and its perceptions about its quality influence the purchase decision making and the impressions about it.

According to Macdonald and Sharp (2003), remembering the brand or store is essential for communication with customers, as it precedes all levels of the buying process. The concept of the act of remembering a specific brand relies on the characteristic of the consumer recognizing a relative mark of the brand and making associations in its memory. Such activation of memory depends on the intensity of the connection between the information received and the memory (YE; VAN RAAIJ, 2004).

Another factor that influences the construction of the store equity is perceived quality; according to Churchill and Sprenant (1982), it is possible to understand and measure quality as declarations of trust or attribute performance. Perceived judgments of consumers provide the understanding of the quality of services, through a process of evaluation that establishes the comparison between the previous expectations with the service and the perception after receiving it (GRÖNROOS, 1984).

According to Parasuraman *et al*. (1988), quality relates to superiority or excellence, so perceived quality is the judgment of the consumer on the total excellence or superiority of the products or services offered by the company. For Anderson and Sullivan (1993) perceived quality is a factor strongly linked to consumer satisfaction.

Dabholkar *et al*. (1996) suggest that the quality of service in a retail company presents a hierarchical structure and indicates the existence of three factors that contribute to the quality perceived by consumers. These are: a) Physical aspects: physical facilities and the convenience of the store; b) Trust: keeping promises to consumers and the availability of the products at the time of purchase; c) Personal interaction: consumer relationship and employees.

Gagliano and Hathcote (1994) classified the services offered by retail companies as "store services": a) the variety of goods available to the consumer; b) quality; c) trust in the service provided by the shopkeeper; (d) sales services, such as installment sales, home deliveries,

technical assistance, and the demonstration and testing of products at the point of sale.

Mangold *et al.* (1993) state that the quality of service of a retail company is a result of the combination of several attributes linked to the skill and commitment of the store manager, that is, quality of service is a consequence of proper administration. In the study, the authors identified some dimensions that relate to the quality of retail services: a) Personal interaction of employees with consumers; b) marketing policy; c) physical organization of the store; d) promises of sales campaign; (e) solving consumer problems; f) convenience.

In retail, stores differ regarding the quality of the goods they offer. This characteristic is an important factor in the construction of store image and consumer behavior. By purchasing a high quality merchandise, the consumer expects a high level of aggregated services to the sale of the product. However, low-quality items usually have a low price, leading the consumer to establish the connection that the offered services also have a low quality (HOMBURG *et al.*, 2002).

The image of the store, an element that also assists in the structuring of the store equity, has its initial studies undertaken by Martineau (1958), who was the researcher to develop the concept of store image in his article The Personality of Retail. In this study, the author defined the term as the way in which the consumer defines the store in its mind, considered partially by the functional qualities and partly by their psychological attributes.

Lindquist (1974) developed a concept in which he shows that the term is very broad, since it states the store image as the entire impression that consumers have about a store. From this perspective, a store consists of cognitive elements, consumer perceptions of functional qualities of the store, as well as affective elements and feelings towards it.

According to Kasulis and Lusch (1981), stores exhibit a "personality" for consumers through their design, employees, merchandising strategies, and other factors. It is possible to perceive this personality through the functional characteristics of the store, as well as the psychological properties. Store functionality includes factors such as location and size, which can have an objective measurement.

Martineau (1958) establishes as elements of personality of the store its layout and architecture, symbols and colors, advertising, personal sales, etc. Zimmer and Golden (1988) describe the store's image as an overall impression of the store, consisting of attributes such as convenience, merchandising, value, price, sales effort and store services, enjoyment and post-purchase satisfaction of consumers.

Bloemer and Ruyter (1998) state that a store's image is a complex set of consumer perceptions about a store, based on different attributes. Martenson (2007) understand that this image is the perception and impression of the consumer on a store.

According to Tavares (1998), the image of a company, in which one can consider its brand, stems from the positive, neutral or negative impressions that its public establishes from the relationship with it and its contexts of action. According to Steenkamp and Wedel (1991), constructing and managing a positive image is a key aspect for retailers to maintain their market position, since it interferes in the development of integrated marketing strategies.

Chowdhury, Reardon, and Srivastava (1998) argue that building a strong store image, in line with the needs of the market segment, implicates in increased sales and profits.

Stern *et al.* (2001) differentiate three perspectives on the store's image:

a. Functional qualities - based on tangible store attributes, through which is possible to compare the store to others;
b. Psychological orientation - the projection of an image takes place into the consumer's consciousness. It comes from cognitive or emotional constructs, related to the

feelings of the consumers; in these feelings are inserted a sense of the brand of the store, capacity of evocation of value and interest;

c. Complex orientation - this perspective has its structures on the premise that a store's image is a dynamic and complex interaction that includes the sum of functional and psychological attributes. The perspective suggests that individuals do not form static images of a store but end up forming mental images of the store through stimuli.

2.2 Understanding Store Equity

The origin of the term brand equity emerged in the 1980s in a scenario of brand acquisitions and mergers. According to Yoo, Donthu and Lee (2000) the brand name can add value, both for the client and the organization. From this perspective, the construction of strong brands has become the central objective of companies. Marketing experts point out the importance that the brand has for a company and, according to Tauber (1988), its value is greater than its company assets, being more important to the consumer than the tangible assets that the organization may possess.

According to Keller (1993), two factors justify the study on the brand equity theme. The first is the financial/accounting, from the importance of determining brand value for the dynamics of buying and selling a company; the second factor relates to the search for information about the behavior of consumers to help increase the productivity of marketing of companies, which is a more strategic factor.

The theoretical framework on brand equity is extensive, generating a variety of concepts and forms of measurement. Thus, for Mackay (2001), there is no consensus on the term and most appropriate type of technique to measure the value of a brand. Depending on the approach, the company's value can increase or decrease, for the consumer and the distribution channels (TAVARES, 1998).

Hartman and Spiro (2005) sought to develop the concept of store image to introduce the term store equity, in order to better understanding how the identification process of a customer with a store or company would work. According to the study, it was necessary to conduct many marketing surveys in order to understand the motivations that lead consumers to keep in memory the image of a particular store.

For Martineau (1958), one of the earliest scholars on imagery, one the possible definitions to it is the way in which the store is represented in the consumer's mind, considering in parts its functional qualities and psychological attributes.

James, Durand and Dreves (1976) say that the store image does not correspond only to the addition of the various perceptions of attributes, but should include the important function and interaction between these attributes. According to Keaveney and Hunt (1992) the development of the image of the store comes by comparing a new information to one already present in memory, thus, in the image of a store, there is not only an image of a particular store, but also the images and associations with other establishments, present in the consumer's memory.

According to Hartman and Spiro (2005), the store image is a necessary construct, but not enough to understand the performance of the store and consumer behavior. For this reason, it is possible to consider the attribute store equity a differential of consumer knowledge to marketing initiatives.

Consumers can present a positive or negative perception about any store, subjectively classified in a generic scheme in their mind (HARTMAN; SPIRO, 2005).

The second component of the definition of store equity is knowledge of the store, which according to Hartman and Spiro (2005) links to the knowledge of the store name. The name present in the consumer memory generates a series of links and associations.

The theoretical basis for the conceptualization of store knowledge is that memory is an associative network in nodes and its links that form the pattern of consumer memory (Keller, 1993).

Along with the concept of brand equity Keller (1993), in which knowledge covers the memory and image, store equity depend on the memory and store image. When a network of information related to the store's knowledge triggers the memory, it is possible to identify its memory and image, according to Hartman and Spiro (2005). According to the authors, the knowledge of the store may be the most important item for the construction of the concept of store equity. The authors also argue that, regardless of the tendency of researchers to conceptualize the store image, as Keller (1993), and manage to set it as the associations present in the consumer's memory, image is only one dimension of knowledge store that contributes for the store equity. Store remembrance also composes it, which can be defined as the ability of the consumer to recognize and remember the name of the store through the activations in its memory associations, forming a picture of consumer-based store.

The third and final component refers to the responses of consumers to the strategies and marketing tactics of organizations. In theory, consumers may perceive a distinguishing factor in a store and prefer it to the detriment of its closest competitors. But also, the consumer may not notice any differential effect when comparing certain store to others of the same product category if the image the person has in his mind is of the product category or brand rather than the store (HARTMAN; SPIRO, 2005).

3 METHODOLOGY

As the study of Hartman and Spiro (2005) remained in the theoretical field, Teixeira, Oliveira and Pires (2006; 2007), observing the gap, elaborated a model for empirical application of the concept of store equity.

Store equity is the value-added that stores present to buyers and the benefits that these buyers receive from that store. They represent thus, a condition in which buyers are familiar to the store and are able to comparatively graduate this store based on what they remember of their experience with the store and associate it with (Teixeira; Oliveira; Pires, 2006; 2007).

The scale tested by Teixeira, Oliveira and Pires (2006, 2007) identified four dimensions for valuation and measurement of the store equity: store image, store remembrance, perceived quality and store loyalty. By summarizing each dimension, it is possible to emphasize that:

   a. Store image is the set of perceptions of the consumers of functional and psychological character about the store (TEIXEIRA; OLIVEIRA; PIRES, 2006; 2007);
   b. Store remembrance is the ability of the consumer to recognize the name of the store by present associations in its memory that form the image of the store (Keller, 1993);
   c. Perceived Quality is the consumer's judgment about the overall excellence or superiority of goods and services offered by the store, including, their physical attributes and experience, perceived by the consumer (TEIXEIRA; OLIVEIRA; PIRES, 2006; 2007);
   d. Loyalty to the store is the repeat shopping behavior of consumers in a certain place, with a positive evaluation of the perceived quality of the store (TEIXEIRA; OLIVEIRA; PIRES, 2006; 2007).

The survey was the method adopted for the research, and the study approach is quantitative descriptive. The survey employs the use of a structured questionnaire applied to a sample of a population and intended to ask respondents about specific information, using structured data collection, through a formal questionnaire with questions with predetermined order (MALHOTRA, 2001).

From structured questionnaires and personal interviews, it was possible to obtain consumer data from the four retailers of the building and construction segment selected for the study, in order to establish a comparison between them and to detect whether or not there is a differentiation between stores in the same segment regarding the responses related to their store equity.

To prevent exposure of brands, the selected stores had a classification from A to D. Store A has 31 stores spread throughout Brazil, of which 29% are located in the State of São Paulo. It has 6,900 employees, with an average store area of 8000 m². Store B integrates the brand that represents 58 units, with a total distribution center of 2000 m². These units are located throughout the State of São Paulo, with 3,000 direct employees and 1,600 indirect employees. Store C has 37 units spread in the states in the South and Southeast. Finally, the group that owns store D currently has 45 stores in the Southeast.

The questions of the questionnaire applied in these stores sought to identify the importance of certain attributes valued by consumers according to the four constructs present in the store equity model used. An eleven point Likert scale, with 0 as "totally disagree" and 10 as "strongly agree" was the base of the questions.

The research population consisted of consumers from the age of 18 or over who attend and purchase products in these four major retailers of construction in the city of São Paulo.

The composition of the sample was of 160 interviewees, 40 per store. The sample had an equal division between men and women. The data collection period was between March and April of 2014. The sampling technique used was the convenience sampling approach, which according to Malhotra (2006) is the technique used when the choice of sampling is a responsibility of the interviewer, and so the respondents are eligible because they are in the right place at the right time.

The approach of interviewees occurred according to the systematic sampling technique. From an initial point, the proportion of selection was for one person for each element of order k. In practice, every three consumers that walked by the store, one was approached (TRIOLA, 1999).

Univariate and multivariate statistical analysis techniques explored difference variables of schooling, income, age, gender and store.

Univariate statistics include descriptive statistical methods that allow the analysis of each variable alone and methods of inference statistics for a certain variable, measured by one or more independent samples (REIS, 1997).

The multivariate analysis techniques suited the objectives of this research, in order to evaluate the characteristics of the responses of similar store equity issues and grouping the respondents with a similar behavior. The use of factor analysis was important to identify issues of the same dimensions. The factorial analysis addresses the problem of analyzing the correlations between an extensive number of variables, defining a set of common latent dimensions, called factors (HAIR JR *et al.*, 2005).

Regarding the group of respondents, the cluster approach supported the analysis. In this approach, a construction of a statistical variable of grouping takes place by the set of variables that represent the objects used to compare the characteristics of the groupings. As the clustering statistical variable only includes the variables used to compare objects, it ends up determining the nature of the object (HAIR JR *et al.*, 2005).

4 ANALYSIS AND DISCUSSION OF RESULTS

First, it is important to present a characterization of the sample in terms of its frequencies by gender, age group, income and the elements valued by consumers per store. The use of factorial and cluster analysis techniques was relevant in order to present a grouped view of the answers and the interviewees of the sample that have the same profile of value attribution to specific elements in relation to the store. The purpose of the analysis was to verify the size of the store equity established by Teixeira, Oliveira and Pires (2006), to draw a comparison of the store equity among retail stores of the construction industry and to identify different consumer profiles from the size of store equity found.

4.1 Characterization of Respondents

From 160 respondents, most (76.0%) had made their last purchase in the store less than a month ago. The age range of respondents was 8.8% from 18 to 29 years; 31.9% from 29 to 39 years; 27.5% from 39 to 49; 20% from 49 to 59; and above 59, the percentage was 11.9%. Regarding the educational level, 8.8% had primary education; 25.6%, high school; and 65.6% higher education. The schooling variable reflects the income levels obtained in the sample, with the majority of individuals declaring income between R$ 2,251.00 and R $ 4,500.00, representing 30% and above R$ 4,501.00, 45%.

Table 1 illustrates the hypothesis of difference between stores. It is noticeable that the most significant responses have a direct relation to loyalty factors to the store, showing that because customers detect a positive differential effect in the store in relation to competition, they shop more frequently at the store. Other interesting points to emphasize are the aspects related to the well-being in staying in the store and the offer of an adequate variety, points that within the chosen sample stood out as differentials.

Table 1 – Differences among stores

Questions	Sig,
L04 - Most of my purchases of this product are carried out in this store than in other retail stores	0,000**
L05 - I consider the store as the first choice for my purchases	0,000**
A01 - When I think of a store that has this product, I remember this one	0,000**
I08 - In general, I have a positive impression on the store	0,003**
A03 - I can identify the store among other stores in the same business line	0,003**
L03 - I regularly shop at the store * Store	0,003**
L07 - In general, I can say I am a frequent customer of the store	0,004**
I02 - The location and size of the store please me	0,006**
I03 - I feel good and comfortable inside the store	0,008**
I07 - Store advertising is clear and sufficient to promote the store	0,012*
L02 - Whenever people ask me for reference on a construction shop I indicate the store	0,014*
L06 - I will choose the store for my next purchase	0,014*
I04 - The store environment is pleasant	0,016*
I01 - The store is well organized and always clean	0,027*
Q09 - In general, the quality of the store's products and services meet my expectations	0,027*
A02 - I remember all the products and services offered by the store	0,030*

I06 - The store has an adequate assortment of goods	0,032*
A06 - In general I have a clear and distinct idea of the store	0,074
Q02 - The store always complies with the "promises" that are offered to me	0,074
A05 - I have an opinion about the store	0,128
Q03 - I have always been well taken care of in the store	0,195
Q05 - Products and services offered by the store have better quality than other stores of the same business line	0,199
L01- I always recommend the store to others	0,315
Q01 - I trust the quality of the products and services offered by the store	0,315
I05 - The prices of the products found in the store are good for me	0,353
Q04 - Products and services offered by the store meet all my needs and expectations	0,355
A04 - I know what "this store" means	0,422
Q06 - The service of the store is superior to that of other stores in the same business line	0,441
Q08 - I easily find all the products I need inside the store	0,751
Q07 - Store sellers are accessible people	0,789

*Significant at 5% **Significant at 1%.

Font: Research data

Considering the mean and standard deviation of the Likert scale on store equity questions, the questions used were the ones that obtained the highest average. Respondents valued the image intensely, because of the first five; four had a direct relation to image and only one with quality. As it follows, the questions and their respective mean (M) and standard deviation (SD): I02 - The location and size of the store please me, M = 8.62 and SD = 1.659; I01 - The store is well organized and always clean, M = 8.61 and SD = 1.682; I03 - I feel good and comfortable inside the store, M = 8.52 and SD = 1.770; I04 - The store environment is pleasant, M = 8.27 and SD = 1.902; and Q01 - I trust the quality of the products and services offered by the store, M = 8.04 and DP = 2.023.

The differences verified by gender in relation to the responses on store equity, considering the five responses with the highest mean and standard deviation, were that women tended to value aspects related to the image construct, since of the five, four were questions that addressed the image of the store and only one was linked to quality. The questions with higher averages and their standard deviation, are respectively: I02- The location and size of the store please me, 8.70 and 1.504; I01- The store is well organized and always clean, 8.59 and 1.620; I03- I feel good and comfortable inside the store, 8.45 and 1.806; I04- The store environment is pleasant, 8.28 and 1.949; and Q0 - I trust the quality of the products and services offered by the store, 8.59 and 1.620. The female segment of the responses showed that women attribute to organizational aspects and hygiene, comfort and well-being and reliability in the store, a high degree of value in the relationship with the stores. When it comes to the male segment, it is possible to observe the same trend in the female segment, with a higher value attributed to the image and store aspects, and the highest average items were: I01- The store is well organized and always clean, 8.64 and 1.752; I03- I feel good and comfortable inside the store, 8.59 and 1.752; I02- The location and size of the store please me, 8.54 and 1.807; I04- The store environment is pleasant, 8.26 and 1.867; and Q01- I rely on the quality of the products and services offered by the store, 7.95 and 2.098.

In terms of age, it was noticeable that the group of people from 18 to 29 years old value aspects of store and image remembrance, and the two questions that had the highest average were: A01- When I think of a store that has this product, I remember this one, with average 8.79 and 1.477 of standard deviation and I03 - I feel good and comfortable inside the store, 8.57 and

1.604. Individuals from 29 to 39 years old have greater identification with characteristics related to the store image, such as proximity to the store and comfort in shopping, I02- The location and size of the store please me, 8.45 of average and a deviation of 1.792; and I03- I feel good and comfortable inside the store, 8.35 and 1.842. The age range from 39 to 49 tends to give greater value to the organization, cleaning and closeness of the store, I01- The store is well organized and always clean, 8.80 of average and 1.424 of standard deviation and I02- The location and size store please me 8.73 and 1.783. People between the ages of 49 and 59 follow the same trend as the previous age group, with the same questions having the highest averages. The age group above 59 considers perceived quality in the store and image a high value.

Income was bounded up to R$ 450.00 to higher levels of R$ 4,501.00, divided into 5 intervals. In all income ranges the most valued characteristics are those related to the store image. Respondents attribute greater value to shopping comfort, cleanliness and organization of the store and proximity to the point of sale for the reasons of purchase, and the three questions with higher averages were: I01- The store is well organized and always clean, I02- The location and size of the store please me and I03- I feel good and comfortable inside the store.

Regarding the level of education, people with elementary education predominantly value elements related to store image, the first five features with higher value that appeared were: a) organization and cleanliness; b) comfort inside the store; c) pleasant shopping environment; d) proximity and size of the point of sale; and (e) an adequate assortment of goods. Respondents who attended high school, in addition to the characteristics valued by the group with elementary education, besides the adequate assortment of goods, consider the qualities attached to the store, that is the satisfaction created by the services and products they offer in order to meet their expectations and consumption needs; people with higher education, consider characteristics related to the image of the store very important, and stand out in the question about knowledge of the meaning of the store, that is, have information about the store.

4.2 Adapting the Store Equity Dimensions

In the model of Teixeira, Oliveira and Pires (2006), 4 dimensions of store equity analysis were detected: loyalty to the store, store image, perceived quality and store remembrance. However, the results of the present study pointed to the fact that the respondents did not perceive quality in a single dimension; therefore, it was split into two. These two dimensions within quality are entitled to consumer satisfaction and customer care and proper services.

From a factorial approach, it was possible to verify that the Measure of Sampling Adequacy (MSA) has two possibilities of performance: a global one, calculated by the Kaiser-Mayer-Olkin (KMO) test; and an individual one, in which is possible to measure the adequacy of the sample size for each indicator. The MSA is contained within the interval [0; 1], and the closer to 1, the better the sample adequacy. Hair Jr. *et al*. (2005) suggest the values of the acceptance ranges considering MSA values: [0.80; 1,00], excellent; [0.70; 0.80); in average; [0.60; 0.70), mediocre; [0.50; 0.60), very bad; and [0.00; 0.50), unacceptable. Our sample has an excellent level of adequacy since it fits the first interval, presenting a value of 0.916, for the Kaiser-Meyer-Olkin test. Table 2 lists the loads related to each question.

Table 2 - Rotated Component Matrix Dimensions

Questions	Load
Loyalty	
L05 - I consider the store as the first choice for my purchases	0.832
L07 - In general, I can say I am a frequent customer of the store	0.823
L04 - Most of my purchases of this product are carried out in this store than in other retail stores	0.819
L03 - I regularly shop at the store * Store	0.752
L02 - Whenever people ask me for reference on a construction shop I indicate the store	0.703
L06 - I will choose the store for my next purchase	0.659
L01 - I always recommend the store to others	0.635
A01 - When I think of a store that has this product, I remember this one	0.634
I05 - The prices of the products found in the store are good for me	0.603
Q02 - The store always complies with the "promises" that are offered to me	0.493
Store image	
I03 - I feel good and comfortable inside the store	0.745
I02 - The location and size of the store please me	0.724
I04 - The store environment is pleasant	0.671
I01 - The store is well organized and always clean	0.570
I08 - In general, I have a positive impression on the store	0.542
I07 - Store advertising is clear and sufficient to promote the store	0.536
Consumer satisfaction	
Q08 - I easily find all the products I need inside the store	0.763
Q09 - In general, the quality of the store's products and services meet my expectations	0.674
Q01 - I trust the quality of the products and services offered by the store	0.629
Q04 - Products and services offered by the store meet all my needs and expectations	0.545
I06 - The store has an adequate assortment of goods	0.48
Customer care and proper services	
Q07 - Store sellers are accessible people	0.801
Q03 - I have always been well taken care of in the store	0.794
Q06 - The service of the store is superior to that of other stores in the same business line	0.792
Store remembrance	
A05 - I have an opinion about the store	0.733
A06 - In general I have a clear and distinct idea of the store	0.698
A04 - I know what "this store" means	0.682
A02 - I remember all the products and services offered by the store	0.606
A03 - I can identify the store among other stores in the same business line	0.512

Font: Research data. Extraction Method: Principal Component Analysis. Rotation method: Varimax with Kaiser Normalization.

Through the factorial analysis, it was possible to group the similar answers of the questions of store equity in five dimensions: loyalty, store attributes, satisfaction, service and knowledge.

Dimensions of Table 2 show that loyalty has a direct link to characteristics as remembrance, once the sample of respondents considered the store in which they were as their first option for shopping for specific or general products. In addition, it is possible to observe a frequency factor in the store as a highlight, since most people considered themselves frequent customers of the store. The questions with greatest factor load were: L05- I consider the store as the first choice for my purchases, 0.832; L07- In general, I can say I am a frequent customer of the store, 0.823; and L04- Most of my purchases of this product are carried out in this store than in other retail stores, 0.819.

Regarding the store attributes, aspects such as well-being in the store environment and elements of location and size of the retail of construction materials were the most evident. Three questions had the highest loads: I03- I feel good and comfortable inside the store, 0.745; I02- The location and size of the store please me, 0.724; and I04- The store environment is pleasant, 0.671.

In the aspects approached in the satisfaction dimension related to the store, it is possible to verify that people value the fact that they easily find what they are looking for within the shop, as well as the quality characteristics of the products and services, and their credibility was a highlight. The questions with higher loads: Q08- I easily find all the products I need inside the store, 0.763; Q09- In general, the quality of the store's products and services meet my expectations, 0.674; and Q01- I trust the quality of the products and services offered by the store, 0.629.

Regarding the customer care and services dimension, the most valued factor was the cordiality and the knowledge of the sellers regarding the product and its new trends. The question with the highest load was Q07- Store sellers are accessible people, 0.801.

Finally, in relation to the knowledge dimension, respondents have a formed opinion of the store and easily recognize it among other stores of the sector. Still, they consider themselves holders of great knowledge regarding the products and services offered by the store. The question with the highest load was A05- I have an opinion about the store, 0.733.

Table 3 shows that the most explanatory component of the sample variance is loyalty, since it accounts for 21.04% of the variance of the answers on store equity. On the other hand, the attributes of the store, satisfaction, service, customer care and knowledge also explain the variance, but in a smaller proportion than the first component.

Table 3 – Explained variance

	Rotation of the Sum of Square Loads		
Components	**Total**	**% Variance**	**Accumulated %**
Loyalty	6.312	21.040	21.040
Store image	3.454	11.513	32.553
Customer satisfaction	3.296	10.988	43.540
Customer care and proper services	3.236	10.785	54.326
Store remembrance	3.093	10.311	64.636

Font: Research data. Extraction Method: Principal Component Analysis

4.3 Grouping customers by Store Equity

Through factor analysis, it was possible to group the respondents into three groups, using the cluster approach: a) the unprepared; b) the demanding; and c) accustomed. The names were entitled crossing similar responses to certain groups of people with the dimensions of loyalty, store image, customer satisfaction, customer care and adequate services and store remembrance, as in Table 4.

Table 4 – Cluster initial centers

	Clusters		
	Unprepared	**Demanding**	**Accustomed**
Loyalty	-2.43293	0.79774	-0.59168
Store image	-0.78465	-0.30832	-2.92461

Satisfaction	3.08487	2.11345	-0.65342
Customer care and proper services	-0.12986	-4.06748	0.69759
Knowledge	-2.45092	0.80223	2.02326

Font: Research data.

The Unprepared are the group of people who rarely go to the stores, showing low loyalty. They also have little knowledge of the products and services offered by them and do not have a fully-built image in their minds, and because of lack of information, they are highly satisfied with any marketing initiative of the store. The Demanding show great knowledge of the mixes of products and services offered by the store and, because they know the quality offered, they are loyal agents. However, they have a high degree of exigency when it comes to services, which makes them criticize the store and, in many cases, they create a deconstruction of their image in relation to the place. The Accustomed ones appear to be a group that, despite having a low satisfaction and presenting great knowledge on the store, makes their purchases only due to some aspects as, for example, customer care, and not by loyalty to the brand or the store.

The data in Table 5 show that the most representative group in store A are the Accustomed accounting for 50% of the total interviewed within this store and covering 26% of the cluster. Store B showed a great percentage of the Unprepared group, 47.5%, representing 44.2%. From the sample, store C has the largest number of people in the Accustomed group, 57.5%, representing 29.9% of the total. The most representative group in store D is the Accustomed, with a percentage of 55% and within the total 28.6%. It is noticeable that stores A and C present an expressive value of the demanding group, 32.5% and 30% respectively.

Table 5 – Cluster Distribution

Stores		Unprepared	Demanding	Accustomed
A	Respondents	7	13	20
	% within Store	17.5%	32.5%	50.0%
	% within Cluster	16.3%	32.5%	26.0%
B	Respondents	19	9	12
	% within Store	47.5%	22.5%	30.0%
	% within Cluster	44.2%	22.5%	15.6%
C	Respondents	5	12	23
	% within Store	12.5%	30.0%	57.5%
	% within Cluster	11.6%	30.0%	29.9%
D	Respondents	12	6	22
	% within Store	30.0%	15.0%	55.0%
	% within Cluster	27.9%	15.0%	28.6%
Total	**Respondents**	**43**	**40**	**77**
	% Total	**26.9%**	**25.0%**	**48.1%**

Font: Research data.

From the cluster analysis, the Accustomed group is the one with the largest number of respondents, that is, 77. The cluster of Unprepared feels little influence from strategies based on store equity. The store that presents the largest participation within the cluster is store B, with 44.2% of respondents; store D presents 27.9% of the total, and stores A and C are very close with 16.3% and 11.6%, representing 7 and 5 respondents respectively. The Demanding cluster shows great appreciation for aspects related to quality services and customer care and high value attribution to aspects of satisfaction. Stores A and C stood out with respectively 32.5% and 30% of respondents.

The cluster analysis by gender showed that the cluster of Accustomed presents 48.1% men and 51.9% women. In the cluster of the Unprepared there are predominance of men 62.8% against 37.2% of women. And the Demanding cluster has a predominance of women 60.0% against 40.0% of men.

Regarding the age group, in the Accustomed group, 7.8% of people are between 18 and 29 years old; 27.3% from 30 to 39; and 29.9% from 40 to 49; 24.7% from 50 to 59; and 10.4% over 59 years old. The Unprepared group shows a predominance of people from 29 to 39 years old, a total of 39.5%. Within the Demanding, two age groups stand out, from 29 to 39 with 32.5% and 39 to 49 with 27.5%.

5 FINAL CONSIDERATIONS

The results showed the existence of different perceptions of store equity among the four studied shops, based on the five dimensions: loyalty, customer satisfaction, customer care and appropriate services, store remembrance and store image. It is important to highlight that the study contributed with the identification of an additional dimension in relation to the model of Teixeira, Oliveira and Pires (2006). Based on respondents' answers, the perceived quality dimension needed a division, receiving by the present study, the titles consumer satisfaction and customer care and appropriate services.

Although there were limitations on sample size, no difference signals on the characteristics of the respondents as to schooling, gender, age and income were significant.

The model used in this study had its bases on the work of Hartman and Spiro (2005) on Customer-Based Store Equity and the empirical model of Teixeira, Oliveira and Pires (2006). From the dimensions of store equity found, 3 distinct groups of consumers were classified: the Unprepared, the Demanding and the Accustomed. It is worth mentioning the impossibility of generalizing the results, since they come from a sample of 160 people, 40 per store.

Data revealed that the most representative group in stores A, C and D was the Accustomed, while in store B was the Unprepared. The Unprepared Cluster feels little influence from strategies based on store equity, while the Demanding group appreciate aspects related to customer care, quality services and high value attribution to satisfaction aspects. The Accommodated group is the one who, despite having low satisfaction with the store, continues to shop there due to the offered facilities, for example, customer care.

As managerial implications, the study suggests that even in nearby stores and with the mix of similar products, a segmentation strategy may be feasible. The results showed that the segmentation strategies of these stores should not only focus on the customer profile, but also the different needs regarding their perception of store equity found in clusters. The five dimensions found and the separation of quality in two sub-dimensions allow the targeting of marketing strategies to build the store equity in this segment. Finally, the suggestion is that these findings go through validation in other studies with a larger sample or have an application in stores from other segments.

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Contribution	[Author 1]	[Author 2]	[Author 3]	[Author 4]
1. Definition of research problem	√	√	√	√
2. Development of hypotheses or research questions (empirical studies)	√	√	√	√
3. Development of theoretical propositions (theoretical work)	√	√	√	√
4. Theoretical foundation / Literature review	√	√	√	√
5. Definition of methodological procedures	√	√	√	
6. Data collection	√			
7. Statistical analysis	√	√		
8. Analysis and interpretation of data	√	√	√	
9. Critical revision of the manuscript	√	√		
10. Manuscript writing	√	√		
11. Other (please specify)	√	√		