

THE INFLUENCE OF BRAND TYPES ON THE CHOICE AND PRICE OF A T-SHIRT

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ABSTRACT

Apparel brands communicate social identity and associate the person who wears them with a group. With that in mind, many brands were created, some exploring their relationship with fashion, whereas others sought to associate with a cause. In order to find out more about the influence of brands, this study sought to analyze the impact of the different types of brands (social, generic and manufacturer) on the choice and price of a T-shirt. A quantitative study was conducted with an accidental sample consisting of 248 people with high level of education. Based on a conjoint analysis, we came up with a model that ranked three attributes according to the importance on the choice of a T-shirt and the most relevant aspects in each attribute. We also analyzed the relationship of the three brand types with the price of a T-shirt. The study revealed that quality in this segment is more important than the brand itself, and that different brands can add value to a product at varying levels, depending on the consumer segment.

Keywords: Manufacturer Brand. Social Brand. Generic Brand. T-shirts.

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INTRODUCTION

With the proliferation of the products available in the markets and with the economic base of the countries moving from the production system to consumption, there has been a shift from material rationality to the plane of desire and, therefore, to the field of subjectivity (ELLWOOD, 2004). Now, it is the intangible that moves consumption; thus, the product's concept and brand are more responsible for its choice than quality itself (KAPFERER, 2004b).

Two factors that contributed to this movement are mentioned by Ellwood (2004). One of them is the fragmentation of the personal and social identities of the human being, which encourages self-identity construction through the consumption of brands, that is, people are what they buy; thus, consumers are largely seeking an imaginary, intangible and symbolic content in the products they consume.

The other factor is globalization, which, according to Kapferer (2004b, p.69), "leads to the dissemination of models and symbols (therefore, brands) across borders and cultures through the free circulation of images" and, thus, complements Ellwood (2004), makes consumers perceive themselves only as a small part of a whole, in addition to the need for the values expressed by the brands they consume to guide themselves in this connected world.

In this context, brands have played a prominent role in the purchase and sale relationships, no longer acting as the facilitators of commercial transactions but becoming powerful signs of representation of being, behavior, social and economic positioning (PEREZ, 2004; MORT et al., 2007; CALDWELL; COSHALL, 2002).

"Consumers began to increasingly value brands, seen as an indicator of guarantee and quality and whose image began to be used in the preparation of segmented strategies" (GRANATO; PEREIRA, 2011, p. 14).

According to Mowen and Minor (2003), with a broader role, brands began to act as a facilitator in the decision making involving the purchase of complex products (that is, with characteristics of difficult evaluation), and also, according to Keller (2002), they became influencers of perceived quality, fair price and fidelity; in other words, they became an item with a huge power to change the perceived value of a product.

This change is evident in the clothing segment, because for being an apparent consumer product, clothing brands act as an instrument that communicates social identity and associates the person who consumes them with a group (CARROLL, 2009).

Belk (1988) *apud* Altaf et al. (2013) emphasizes that products are excellent sources of information about the people who consume them.

Thus, consumers have a better perception of products that carry a well-known brand, and the price is impacted by it, but the same does not occur with quality (D'ASTOUS; SAINT-LOUIS, 2005).

According to Keller (1993) *apud* Velter et al. (2009), attributes are characteristics that duly describe a product, which a consumer evaluates at the time of purchase.

In the purchase decision, a product's attribute is the main stimulus that influences consumers, who evaluate the product according to their own values, beliefs or past experiences (PETER and OLSON, 1996 *apud* VELTER et al., 2009).

According to Szybilo and Jacoby (1974) *apud* Velter et al. (2009), for a purchase to occur, consumers, in general, make a comparative evaluation and judgment of products and brands. This process of evaluation involves the judgment of clues associated with the products. The clues

would be understood as the various items of suggestive information about the product, which are identified, evaluated and interpreted to make up an evaluation.

The information available in relation to the products should generate consumers responses (attitudes and behavior).

In this context, considering the attributes brand type, price and quality, in the clothing segment, the following problem situation emerges: what is the influence of brand types on the choice and price of a T-shirt?

The purpose of this paper is to study the influence of brand types (social, generic and manufacturer) on the choice and price of a T-shirt.

To achieve this goal, we proceed with the study of:

The importance of the brand when choosing a T-shirt;

Preference towards T-shirts of social, generic and manufacturer brand;

Relationship of the three types of brand with the price assigned to the T-shirt.

This study is justified considering the extent of the dissemination of brands, leading to the importance of implementing their correct management, especially in the clothing segment, as observed by (D'ASTOUS; SAINT-LOUIS, 2005), so that companies are able to survive in an environment where new brands emerge every day and generic brand products gain space through low prices, making it fundamental to study consumer preference in this scenario.

Furthermore, the decision to use T-shirts was based on the fact that this product is a common item for both genders and is accessible to almost all social classes, whose brand, according to Ellwood (2004), has a huge value for being a communication channel of the values and personality of the user.

THEORETICAL FRAMEWORK

This section is divided into four parts. The first part focuses on the concept and types of brand. The second part shows the relationship between brand and price, and then the relationship between brand and perceived quality. The final part addresses the symbolic consumption of T-shirt brands.

Brand types

In the twentieth century, expanding their role in the companies, brands leave behind their bureaucratic purpose and take on the responsibility of differentiating products while reducing the importance of price in the buying decision, by influencing the perception of the products' value, thus incorporating the idea that they are an asset that have the potential to generate value for the shareholders. Brands became a sign capable of having multiple meanings for the consumers, transferring to them the possession of the brand image, which used to belong to the producer (ELLWOOD, 2004).

During the evolutionary movement of brands, some brand types were created and, currently, they coexist in the market. Given their wide variety, to enable the study of brand types, they were categorized into three large sets of brands: generic brands, manufacturer brands and social brands.

Generic brands have a low identity, devoid of intangible values and with little or no differentiation (resulting in lower packaging, dissemination and monitoring costs), and are positioned in

the market as low-priced products and of equal or slightly inferior quality (but fair in relation to the price paid) compared to other strong brands (KAPFERER, 2004a, 2004b). According to Kotler and Keller (2006), if the brand has no advantage in relation to its competitors, it can be classified as a commodity or a generic version of the product.

Manufacturer brands are basically the top of mind or reference brands, characterized for having their assets built based on their technological know-how and market needs; these are brands with tradition and recognition among the experts of the product or service in question and among consumers. Usually, they have celebrities or experts endorsing them to confirm statements of authority or performance and thereby propose a relationship of trust with the consumers by conveying the idea that they make the good choice for them, hence why they are their good choice (ELLWOOD, 2004; KAPFERER, 2004a).

In addition, these brands have a strong identity and, consequently, high differentiation. They stand out for the investment of large amounts of money in communication and the use of dedicated teams for the management of the brand in order to ensure their high value and all the benefits they can bring. This strong brand identity tends to enhance the intensity of consumer bond, giving it emotional depth and making it less replaceable (KAPFERER, 2004a).

The relationship between the manufacturer brand and the consumer can be characterized as a special implicit contract because, according to Kapferer (2004a, p. 44),

a strong brand has, in addition to an efficient product and service, a true brand imaginary, a symbology, its consumption is as much of the product as of the symbol. We consume its identity in all its facets: 1) the brand physique, its product, its performance, its associated services; 2) its personality, whether or not carried by a brand icon that stimulates its symbolic potential; 3) its values [...]; 4) the proposed relationship.

According to Ellwood (2004, p. 260), manufacturer brands “are a wide range of brands that satisfy the psychological and sociological needs of customers for a personal identity or status and for a group identity or affiliation.”

The group of social brands or ethical brands is a segment of manufacturer brands; thus, it shares the same characteristics of the previous group, except for the fact that, instead of positioning as highly technological and prestigious, they have their assets based on the concept of social and financial responsibility, of sustainable production, being highly involved with nature and society.

According to Leitch and Davenport (2007), social and environmental causes may act as a channel for the expression of self-identity and gather their supporters into communities that stand out from each other. However, consumer loyalty may be to the social brand rather than to a particular organization, since multiple organizations may be associated to develop that brand (LEITCH; DAVENPORT, 2007).

Social brand can be defined as the process of formulation and implementation of brand concept, which is characterized by the contribution to a certain effort that generates social profit (social, environmental and/or humanitarian benefits), which, in turn, leads consumers to engage in a transaction that generates revenue for the company (GILLIGAN; GOLDEN, 2009).

Social brands usually base their appeals on one or more of the following areas: environment, community, well-being, diversity, human rights, responsible and fair financial performance and corporate governance (BLOMQUIST; POSNER, 2004; BRONN; VRIONI, 2001; POLONSKY; JEVONS, 2006).

These brands rely on the same beliefs of manufacturer brands; however, the companies that adopt them have at least one non-economic objective related to social welfare and, in order to achieve it, they use their resources and/or one of their partners because they believe consumers are willing to pay more for brands that respect the social and environmental system. According to Ellwood (2004), using contemporary ideological issues, as well as the social and environmental ones, as an essence of the personality of a brand, may attract a growing group of consumers who have similar convictions.

Social brands affect the perception of consumers and influence their attitudes towards the products they use, as well as improve their evaluation of the products and companies that have these brands (HOEFFLER; KELLER, 2002; LAFFERTY et al., 2004; PRACEJUS et al., 2004). However, to be successful, the social brand must overcome the initial skepticism of consumers, imparting a real altruistic motivation.

The relationship between brand and price

The offer and the communication of companies were built based on brands that inherit, over time, intangible values, meanings and representations that differentiate them and lead customers to be dependent on them and, therefore, have a poor sensitivity in relation to price, which makes them pay more in comparison to direct competitors and the fair price of the offer, which goes beyond the mere performance of the product functionalities (CRAVENS; PIERCY, 2007; KAPFERER, 2004a; LAMBIN, 2000).

The brand is an added value of the invisible, intangible, of what hides underneath the tangible benefits. Usually, it is through this added value that the buyer is willing to pay, which is why the financial value of a brand is sometimes assessed by measuring the price difference that the consumer is willing to pay to buy the product of that brand in comparison with an identical product but unbranded or of an unknown brand (KAPFERER, 2004a).

A strong brand generates greater returns in profitability for the company due to the possibility of charging a differentiated price, which is usually 20 to 25% higher than the fair price (FURRIER, 2008b; KOTLER; KELLER, 2006; SERRALVO; FURRIER, 2005). Differentiated price is the most explicit economic benefit of a brand and has a significant correlation with financial performance in the company's long-term prospects (FURRIER, 2008b). It represents the possibility for the company to receive a higher net margin for a product. Reinforcing this point, Aaker (1996, p. 321) states that

the [differentiated] price may be the best individual measure available of the brand equity because it directly captures consumer loyalty in a relevant manner. If they are loyal, they must logically be willing to pay a [...] [differentiated] price; if they no longer wish to pay anymore, the level of loyalty is low.

No brand loyalty is unconditional, and price is an indicator of the potential benefits of a brand (ELLWOOD, 2004; FURRIER, 2008b). Thus, it is essential to have a price policy in line with what the brand offers. At the same time a consolidated brand position allows charging differentiated prices, when the price is too high in relation to the quality and the benefits perceived by the consumer, it generates frustration (FURRIER, 2008b). An underestimated price, in turn, leads to the depreciation of the brand compared to similar ones, which is difficult to be circumvented later, because it creates a downward cycle in which the reduction of the profit leads to lower investments in communication and product quality, which increasingly reduces sales and, consequently, profit (ELLWOOD, 2004).

The relationship between brand and perceived quality

According to D'Emidio (2009, pp. 19-20), "perceived quality is the consumer's knowledge of the overall quality or superiority of an intended product or service compared to alternative ones."

Not always the quality delivered by a company is the same as one the consumer claims to have received. If a company delivers a higher quality than the perceived quality, it means that it is investing its resources unsuccessfully, wasting them. However, when the quality delivered is lower than the perceived quality, this leads us to believe that the company used its resources so well that it generated a leveraged result, that is, higher than it would be under normal conditions.

Perceived quality is enhanced by strong brands, as people begin to understand that it is not only the tangible items (such as product performance, durability, shape and finish) that the brand is delivering, but also emotional and intangible aspects that increase the quality, although they cannot be physically assessed. Another reason for this leveraged perception is the fact that the consumer interprets the high investment in marketing and high price as indicators of the product quality (AAKER, 1996).

This relationship between strong brand and high quality most commonly occurs in the purchase of complex products and services (such as anti-aging creams, medical surgeries, haircuts) that have items that are difficult to evaluate. Since consumers rarely have all the information they need to make a rational and objective judgment about quality – and even if they have such information, they may not have the time and motivation to process them – they trust one or two clues that are associated with quality (MOWEN; MINOR, 2003).

Brands may be one of these indications of quality and, therefore, satisfied consumers can easily opt for the product again (KOTLER; KELLER, 2006).

Emphasizing the importance of this brand-generated benefit, Aaker (1996, pp. 17-19) states that "perceived quality is usually at the heart of what customers are buying, and in this sense, it is a basic measure of the impact of a brand identity."

The symbolic consumption of T-shirt brands

With the strengthening of the symbolic aspect of brands, individuals have seen brands as a reflection and part of themselves, capable of generating social acceptance. Thus, they try to consume products that do not necessarily express what they really are, but how they would like to be in reality or to be seen, in order to increase social belonging through the association with a group and to mark their position in the society (CARROLL, 2009).

The impact of the brand image may, however, be moderated by the product type and may be less apparent in product categories that are not seen as self-promotion vehicles (CARROLL, 2009). Several studies have shown the use of clothing as a code, a language that allows a message to be created and (selectively) understood. Thus, they end up being a means of communication of the social identity, status and values exposed by a group (CARROL, 2009; PHAU; LENG, 2008). Therefore, on T-shirts, the brand and its meanings have a huge value, as observed by Ellwood (2004, pp. 204-205), reporting that

the sociological approval of the brand comes from the satisfaction obtained by customers from the association and the recognition of the group [...]. Designer clothing are clearly

used to allow for the inclusion into a specific social group or may exclude people from a group. What clothes say about those who wear them was largely translated into the motto “you are what you wear”; your group mates recognize you as someone in the same category and interact with you based on the fact that you have something in common. Wearing clothes of a particular brand represents a statement of values that can be interpreted by others. [...] This type of brand approval is based on the recognition and understanding of a group identity, to meet the needs of socialization. It is doubtful to suggest that a simple label can define our character, but studies suggest that most people partly rely on this kind of symbolism. [...] Consumers can communicate true or desired identities to their group.

METHODOLOGICAL ASPECTS

A quantitative and exploratory research was conducted using primary data. The population of interest corresponded to Brazilians aged above 18 years old of both genders. The choice of people aged 18 or more was due to the fact that it is a group that is already part of the economically active population and therefore has purchasing power to purchase goods and services. According to Furrier (2008a), there are indications that people with low level of education have a lower degree of brand awareness due to lower education. Therefore, we decided to focus only on people with higher levels of education.

We used accidental sample, and data collection was performed through an internet approach. The plan to obtain the answers consisted in making the questionnaire available on a specialized website called QuestionPro, and disseminating it by sending its link, by e-mail, for people known to answer it and for the offices of some postgraduate courses to send to their students, so that they could participate. The institutions contacted were chosen by convenience, which are distributed throughout all regions of Brazil. This survey took place in March and July 2011 and resulted in a sample of 248 people.

The questionnaire consisted of eight closed questions about the respondents' characteristics and their opinions and preferences regarding the purchase of T-shirts.

The first four questions of the questionnaire were related to characteristics of the respondent, asking information such as gender, age, level of education and family income (optional). The other questions were about purchase preferences.

Question 5 asked the respondents to order, according to their preference, 12 different products, which combined the three brand types studied with three different levels of price and quality, which are important factors in the evaluation of purchase alternatives (KELLER, 2002; KOTLER; KELLER, 2006; PEREZ, 2004; AAKER, 1996; AAKER; JOACHIMSTHALER, 2007; KAPFERER, 2003, 2004a, 2004b). The products were presented to the respondents in a random order, in order to avoid the bias resulting from the sequence of exposure of the objects.

A white short-sleeved T-shirt without prints, a T-shirt with the symbol of a famous social cause printed on the front side and a third T-shirt with the logo of an apparel brand, which has many commercials on TV, printed on the front side, were the descriptions that represented, respectively, the generic, social and manufacturer brands.

The price and quality levels used were low, average and high, avoiding numerical measures, because as the population of interest was heterogeneous in several characteristics, a measure of this kind could have a different interpretation for each person.

The sixth question evaluated the price differentiation of the three types of brand, described as in question five, but now it was defined that the quality of the products was average. This question asked the person about the price of the three types of T-shirt.

Finally, the last two questions were prepared to survey data in relation to the preference profile of the respondents in relation to T-shirts. Question seven asked the respondents to indicate their preference among three types of T-shirt, the cheapest, the one advertised on TV and the one produced by a company involved with social and/or environmental causes. Question eight showed four characteristics of T-shirts (quality, price, brand and involvement with socio-environmental cause), shown in random order, and asked the person to order them according to their importance in the decision to buy a T-shirt.

By means of a pre-test conducted with 5 individuals, we assessed the adequacy of the content of the collection instrument and the completion time, which was, on average, 11 minutes.

The analysis of the results was conducted based on descriptive statistics and the conjoint analysis and t-test techniques for related samples.

Conjoint analysis is a multivariate analysis technique of the structure of preferences, which makes it possible to understand the decision process of consumers with regard to products and brands (HAIR et al., 2006). The measure of preference calculated by this technique is utility, which is the value related to the judgment of preference of an individual, measuring the level of happiness or satisfaction the individual feels with a choice (HAIR et al., 2006; MANKIW, 2001).

The conjoint analysis is a dependency technique, having as dependent variable the preference and as independent variables the combinations of levels of factors (attributes). The conjoint analysis resembles the analysis of experiments. However, there are differences between these approaches. In the experiments, the researcher, based on a large number of observations, directly controls one or more independent variables to determine the effect on the dependent variable and also inhibits the effect of possible exogenous variables so that they do not interfere in the results. On the other hand, the conjoint analysis assumes that any group of objects (in this case, T-shirts) is assessed as a collection of attributes, being applied in surveys of information related to a single individual or a group of individuals, seeking to detect consumer reactions and evaluate pre-determined combinations of attributes representing products or services.

The conjoint analysis was based on the data generated in question five. The products were assembled using the orthogonal design option of the statistical program Statistical Package for Social Sciences (SPSS) 9.0, nine of which are planned stimuli used to calculate the utilities, and three of them are holdout stimuli, that is, cases judged by the respondents, but not used to estimate the utilities, used only to confirm their internal validity (Table 1).

Question five is in line with the theoretical assumptions of the conjoint analysis that the buyer perceives a product as a set of attributes that intervene at a certain level and differentiate offers, and that the buyer makes sacrifices on some attributes to benefit others (LAMBIN 2000). It also meets the following requirements of this technique:

they are determining attributes of choice rather than just important attributes; 2) they are independent or non-redundant attributes, that is, they are not systematically correlated, the presence of one does not imply the presence of the other; 3) they describe the product as completely as possible, which implies that the judgment must be able to rely on the set of attributes or at least on the most important attributes; 4) they are attributes that can be manipulated by the company that can act on the level of intervention of the attributes (LAMBIN, 2000, p.164).

Table 1: Stimuli used in the conjoint analysis

	Brand Type	Price	Quality	Type of Stimulus
T-shirts	Manufacturer	Low	High	Planned
	Manufacturer	High	Average	Planned
	Generic	High	High	Planned
	Generic	Average	Average	Planned
	Generic	Low	Low	Planned
	Social	Average	High	Planned
	Social	High	Low	Planned
	Manufacturer	Average	Low	Planned
	Social	Low	Average	Planned
	Manufacturer	High	High	Holdout
	Social	Average	Average	Holdout
	Generic	High	Low	Holdout

Description of the T-shirt according to its brand: Generic: No prints; Social: Has the symbol of a famous social cause printed on the front side; Manufacturer: Has the symbol of a clothing brand, which has many commercials on TV, printed on the front side.

In order to process the conjoint analysis, we used a syntax of the SPSS 9.0 software, in which the classifications of the twelve T-shirts are the input data, designated as rank. As for the relationship of factor levels, no assumption was made regarding the preference for brand types. In relation to the variable quality, it was assumed that higher levels are the preferred ones; the opposite to that adopted for the factor price, where lower levels should be expected as the preferred ones.

Finally, although it has conceptual requirements, the conjoint analysis has low statistical requirements, without the need to perform normality, homoscedasticity, linearity and independence of variables tests.

The t-test for related samples is a parametric technique to evaluate the statistical significance of the difference between the means of two samples dependent on one variable, for example, respondents' reviews of two products (COOPER; SCHINDLER, 2003; HAIR et al., 2006).

This technique is applied to the difference-scores, which can be obtained from the two values of each subject submitted to the two conditions, and it establishes as null hypothesis the fact that there is no difference between the means of the two situations analyzed (ANDERSON et al., 2008; COOPER; SCHINDLER, 2003; SIEGEL; CASTELLAN, 2006).

The t-test assumes that the difference-scores are extracted from a normal distribution, which implies that the variables are measured at least on an interval scale; however, when the number of observations analyzed is greater than 30, their distribution is approximated to normal, even if they do not have this characteristic (ANDERSON et al., 2008; COOPER; SCHINDLER, 2003; SIEGEL; CASTELLAN, 2006).

In this study, the t-test was processed with the prices assigned to each type of T-shirt presented in question six, in order to statistically measure whether one type of brand can take advantage of a differential price in relation to the others.

As the prices of the three types of T-shirt were assigned by all respondents, these data

meet the requirement of the dependency technique, or relationship, of the samples analyzed. And since the number of responses evaluated is greater than 30, the need for their normal distribution is disregarded, and thus another requirement of the t-test is met. Finally, the statistical program SPSS 9.0 was used to perform this test, and the error level was set at 1.67%, because since we performed, separately, three mean comparisons for each group assessed, Bonferroni's inequality approach was used to adjust the error level, which, according to Hair et al. (2006), consists of dividing the proposed significance value (alpha), which in this study is 5%, by the number of statistical tests performed, that is, three, resulting in a more demanding level of significance. Table 2 lists the analyses proposed in this study with the statistical and variable tools used to perform them.

Table 2: List of proposed analyses with the statistical techniques and study variables

Proposed Analysis	Statistical Technique	Study Variables
Importance of the brand when choosing a T-shirt	Conjoint analysis	Order of preference opinions of the twelve T-shirts presented
Preference towards T-shirts of social, generic and manufacturer brand		
Relationship of the three types of brand with the price assigned to the T-shirt	T-test for related samples	Value mentioned for each of the three T-shirts evaluated; gender: preference declared for a type of brand

ANALYSIS OF RESULTS

The results of this study are presented below. The first part summarizes the profile of the sample, followed by an analysis of the importance and preference of the attributes studied of a T-shirt for the sample and, finally, the study of the price differential attributed to the brand types by the respondents.

Profile of the sample

The sample used in this study includes 248 people. There is a balance between genders: 126 women (51% of the sample) and 122 men (49% of respondents), giving them almost the same weight in the results.

In relation to the age distribution, 80% of the sample (198 people) are aged between 18 and 35 years old, and 53% are aged between 18 and 26 years old (131 respondents). The most representative ages were 19 and 26 years old (23 and 22 cases, respectively), both with approximately 9% of the sample, and the maximum value found was 65 years old.

With respect to the level of education, due to the target population and the sample procedure, 99% of the sample is concentrated in the postgraduate, complete and incomplete higher education levels (109, 46 and 90 people, respectively).

With regard to monthly family income, there is a concentration of almost 70% of the

sample (171 cases) in respondents with monthly family income greater than or equal to R\$5,000 (higher among men: 76%), which derives from the data collection method, since people with higher level of education usually have higher family income (FURRIER, 2008).

In relation to the preference for brand types, the cheapest T-shirt (generic) is the one preferred (38%), followed by social (33%) and manufacturer brand (29%).

The cheapest shirt, associated with the generic brand, competes in the market for the best value for money. And, among the male respondents, this preference is even higher, 43%, versus the second most preferred brand type among men, the manufacturer brand, which accounted for 33% of respondents in that group.

The T-shirt whose sale is directly or indirectly involved with a social and/or environmental cause indicated a significant acceptance by the sample, 33%, which is very close to the preference of 37% cited by Produtos (2008). It was also found that out of the 81 people who chose the social brand, 51 were women. By analyzing the female respondents only, the preference for the social brand T-shirt increases to 40%, which is followed by the generic brand, which accounts for 31% of women's preference. These figures show that the social brand has a greater acceptance among the female audience, similar to what was found in the study conducted by Letshal, which indicated, according to Magalhães (2011), that 51% of women care more about helping others.

As for the importance for the purchase decision, out of four attributes of T-shirts, it was found that quality is by far the first factor in terms of importance (68% of the sample), and price is the second most important attribute (58%). Brand and its involvement with a socio-environmental cause are the least important factors.

The preference for brand types together with the order of attributes shows that a brand must first charge a price considered fair and convey the perception of quality in order to be considered by the consumer, to only then stand out over its competitors and be chosen for its meanings and involvement with social and/or environmental causes. And, there is a group of respondents that is still underdeveloped in terms of consumption of the meanings of the brand, preferring products that bring tangible benefits, especially low price.

Analysis of the importance of attributes in the purchase preference

In this survey, the respondents only provided information about the preference for twelve stimuli (combinations of levels of brand types, prices and quality of T-shirts). The assumption of the conjoint analysis is that the preference for a combination of levels (total utility) can be broken down into the specific preferences of each level (partial utilities). This technique generated, iteratively, the importance of factor levels (not declared by the respondents) in order to maximize the correlation between the preference ranking (dependent variable) collected and the preference ranking reconstructed based on the estimates of the partial utilities. The statistical test applied in this analysis corresponds to the measure of significance of the correlation between the two rankings: the declared and estimated preferences.

The conjoint analysis of the purchase preference opinions of the sample in relation to the twelve T-shirts tested provided a model adjusted to the data, with a Kendall rank correlation of 0.817, but with low internal validity, with Kendall correlation for the holdout set of 0.333. In addition, we obtained five cases with two reversals – answers contrary to the relationship of the levels assumed for a factor – and 42 with only one reversal.

In order to improve the quality of the preference model generated for the sample, a few

cases were removed, evaluating, in each exclusion, the possible improvement of the quality indicators of the model prior to the subsequent exclusion. In order to improve the quality indicators of the model, it was necessary to make 64 exclusions, 47 of which were cases that had reversals and the other 17 had no reversals but had the holdout correlation module lower than or equal to 0.333 and the modeling correlation below 0.7. The order of exclusion of these 17 cases was from the lowest Kendall correlation module of the model to the closest to 0.7. Out of these 64 exclusions, 31 corresponded to women and 33 to men, only 1 case had no complete or incomplete higher education or post-graduate degree, 41 people had income equal to or greater than R\$5,000 and the average age was 30 years old and 80% of cases were younger than 40 years old.

The purchase preference model generated after the exclusions indicated better adjustment to the data – Kendall rank correlation 0.833 – and internal validity, with Kendall correlation of 0.816; thus, this is the final model adopted.

According to the sample studied, the quality of a T-shirt is the most important attribute (average importance of 43.3%), followed by brand type (32.7%) and price (24%). This order generated by the conjoint analysis is different from the one that was verified when the respondents were asked to order, according to the level of importance during the purchase of a T-shirt, these three attributes plus the involvement with a social and/or environmental cause, and in this case, although quality was still mentioned as the main attribute, price had obtained greater importance in relation to the brand. Therefore, although it was not declared by the sample, brand is unconsciously more important in relation to the price in its preference for different T-shirts.

The greater importance of the brand in relation to price, according to the sample's preference, reveals a good level of development of the respondents in terms of awareness in the consumption of brand meanings and opposes the idea that people choose products for the price, always the cheapest, regardless of the brand. In addition, if quality is the most important attribute, it is concluded that a brand must first present tangible benefits and then differentiate it through its meanings. The interesting thing is that the brand is allowed to reinforce the perception of quality and this again emphasizes the importance of the brand in the sample.

In relation to the types of brand, it was found that the generic brand is the preferred one (utility of 0.2283). Social and manufacturer brands have, respectively, -0.0417 and -0.1866 utility; thus, the sample shows a certain aversion to these types of brand, the latter of which has a negative impact on the preference almost as strong as the positive influence of the generic brand. This order of preference for brand types is consistent with the respondents' statement during data collection, when 38% of the respondents said they preferred the generic brand, 33% the social brand and 29% the manufacturer brand.

The greater preference for the generic brand shows that the respondents are concerned about not transmitting their values and ideas, which would occur with the manufacturer or social brand, which would communicate the associated meanings. And the greater choice for generic brands reduces the possibility of creating loyalty to them, as they have little or no differentiation, and are only associated with good relation between quality and price.

Considering the three levels of quality, the preference structure indicated a higher utility at the high level, intermediate value at medium level and lower value at the low level, which is the movement assumed for the factor, since in a commercial relation, it is expected that a person would prefer the greatest possible number of benefits (including quality) for each unit of resources given in return. This result converges with the study conducted by Pennanen and Luomala (2004) *apud* Afsar (2014) which reinforce the trend of the consumers' preference for products with a high level of quality.

As for the price factor, the preference for T-shirts with lower prices was clear, which is consistent with the greater inclination of the sample towards generic brands and with the assumption for this factor in the execution of the conjoint analysis, which established that people prefer products with the lowest price than similar ones at higher prices.

Based on the linear adjustments of each factor in relation to the preference for T-shirts, inherent in the conjoint analysis, we have, by the coefficients (quality: 1.8351 versus price: 1.0362), great impact of quality, being 77% higher than that of the price factor.

Thus, for the respondents, the brand first needs to reinforce the perception of quality, to only then act as an element of differentiation, and the price should act as a tiebreaker in the event of non-differentiation between brands. This result converges with the statement of Steenkamp et al. (2003) that brands should focus on creating and communicating quality rather than benefits in terms of status and prestige. And, the type of T-shirt preferred by the sample is that of the generic brand, which does not have any apparent signs, with high quality and low price, these last two characteristics being consistent with the type of brand preferred, since the generic brands compete by offering products with the best quality at a certain price.

Price differential assigned to brand types

An important method to measure the appreciation for a brand is the additional price that consumers would be willing to pay to continue buying it (D'EMIDIO, 2009). For this analysis, the opinions of the 248 respondents were used. During the data collection, they were asked to write down the amount they would pay for a white short-sleeved, medium-quality T-shirt of each type of brand studied. Based on this information, the t-test for the related samples was run in order to check, at the error level of 1.67%, whether the average price of each type of T-shirt is statistically different.

Table 3: Measures of dispersion and position of the T-shirt prices assigned by the sample

Brand Type	Minimum	Maximum	Median	Mean	Standard Deviation
Generic	1.00	100.00	20.00	23.67	11.79
Social	0.00	90.00	26.50	29.53	14.95
Manufacturer	1.50	100.00	35.00	37.20	18.89

As shown in Table 3, the maximum and minimum values of the three brands are very close, whereas the highest price is seen in the generic and manufacturer brands (R\$100.00, both) and the lowest price is seen in the social brand (R\$0.00, that is, the person would only accept the T-shirt if it was free). The standard deviation is high, representing approximately 50% of the average price for each type of brand. We tried to reduce this variability by excluding some possible outliers. However, since there was little reduction in dispersion, we decided to conserve all cases and assume that this high variance in the responses reflects the diversity of the participants' opinions.

In relation to the t-test for related samples performed with the average prices of the three brand types (Table 4), the null hypothesis is rejected at the error level of 1.67%, that is, there is statistical evidence that the three means are different. Thus, it is possible to state that, according to the sample, T-shirts with the manufacturer brand, on average, are the most valuable, followed by the social and generic brands, suggesting that the investment in the development of

a brand's asset allows the manufacturer and social brand to charge, on average, differentiated prices compared to the generic brand (57% and 25% more, respectively), and for working with many advertisements and being associated with fashion and sometimes with luxury, the manufacturer brand is able to take advantage of a greater differential than the social brand.

Table 4: T-test of the average values of the T-shirts prices assigned by the sample

Related brands	T	Sig. (two-tailed)
Generic/Social	-8.498	0.000
Generic/Manufacturer	-13.044	0.000
Social/Manufacturer	-8.523	0.000

Table 5: Measures of dispersion and position of the T-shirt prices assigned by the sample according to gender

Gender	Brand Type	Minimum	Maximum	Median	Mean	Standard Deviation
Male (122 cases)	Generic	1.00	100.00	20.00	23.01	12.55
	Social	7.50	90.00	25.00	28.62	14.65
	Manufacturer	1.50	100.00	35.00	37.28	19.48
Female (126 cases)	Generic	5.00	50.00	20.00	24.31	11.01
	Social	0.00	75.00	30.00	30.43	15.23
	Manufacturer	7.00	90.00	35.00	37.13	18.37

By evaluating the average prices of brand types by gender (Table 5), men assign the highest maximum prices for the three types of T-shirts, and also the lowest minimum prices for the generic and manufacturer brands, leaving women with the lowest price for the social brand. However, in terms of mean and median, women indicate higher values than men for the generic and social brands, that is, although they do not assign extreme prices, the values mentioned by them are on average at a higher level than those considered by men, and this is evidenced by the standard deviation related to the mean, which is higher for male respondents (ranging from 51% of the social brand mean to 54% for the generic brand) than for the female respondents (ranging from 45.3% of the generic brand mean to 50% for the social brand). It is interesting to note that the highest difference between the mean values and median prices between men and women resides in the social brand, with the first group assigning a lower price than the latter.

According to Table 6, at the error level of 1.67%, the null hypothesis of the t-test for related samples of the average prices of the three brand types is rejected. Therefore, there are statistical indications that they are different for both men and women. Thus, it can be stated that for both genders, T-shirts with the manufacturer brand are, on average, the most valuable, followed by the social and generic ones, suggesting, similarly to the total sample, that the investment in the development of a brand's asset allows the manufacturer and social brands to charge, on average, differentiated prices in relation to the generic brand (62% and 24% more, respectively, for men, and 53% and 25%, respectively, for women).

It is also noted that men assign, on average, lower prices than women, indicating a higher level of demand in relation to the price factor of the brands, and consider a higher price differential for the manufacturer brand in relation to the social brand when compared to women.

Table 6: T-test of the average prices of T-shirts assigned by the sample according to gender

Gender	Related brands	T	Sig. (two-tailed)
Male (122 cases)	Generic/Social	-5.502	0.000
	Generic/Manufacturer	-8.750	0.000
	Social/Manufacturer	-6.206	0.000
Female (126 cases)	Generic/Social	-6.254	0.000
	Generic/Manufacturer	-9.873	0.000
	Social/Manufacturer	-5.865	0.000

In the analysis of the average prices of brand types by preference, Table 7 shows that those who prefer the generic and manufacturer brand assigns the highest maximum prices for the T-shirts with the respective brand types; but this does not occur for the social brand, to which the maximum price is assigned by the group that prefers the generic brand. For the three clusters, the manufacturer brand indicates the highest minimum price compared to the other two.

Table 7: Measures of dispersion and position of the T-shirt prices assigned by the sample according to the declared preference in relation to brand type

Preference	Brand Type	Minimum	Maximum	Median	Mean	Standard Deviation
Generic (94 cases)	Generic	1.00	100.00	20.00	23.68	12.60
	Social	10.00	90.00	25.00	27.95	13.05
	Manufacturer	1.50	80.00	35.00	34.08	16.24
Manufacturer (73 cases)	Generic	5.00	55.00	20.00	22.82	11.37
	Social	0.00	80.00	25.00	27.06	15.39
	Manufacturer	7.00	100.00	40.00	42.79	20.30
Social (81 cases)	Generic	5.00	50.00	20.00	24.43	11.26
	Social	5.00	75.00	30.00	33.60	15.91
	Manufacturer	7.00	100.00	30.00	35.80	19.55

In terms of mean and median, the manufacturer and generic brands always indicate the highest and lowest values, respectively, regardless of the group of respondents. Different than expected, only the social and manufacturer brands indicate the highest mean and median values among the respondents who prefer the respective brand types, which needs to occur with the generic brand as well. And, in relation to the standard deviation, it can be seen that it is high (coefficient of variation, which is the standard deviation in relation to the mean, between 46% and 57% inclusive). However, it is assumed that this high variance in the responses reflects the diversity of the participants' opinions.

According to Table 8, the null hypothesis of the t-test for related samples of the average prices of the three brand types is rejected, except in the comparison between the social and manufacturer brand for the group that prefers the social brand, because, in this case, the significance of the test (13.8%) was higher than the rejection threshold, defined as 1.67%.

Thus, for those who prefer the generic and manufacturer brands, there are statistical indications that the average prices of the three brands are different. For them, T-shirts with the manufacturer brand are, on average, the most valuable, followed by the social and generic ones,

suggesting, again, that the investment in the development of a brand's asset allows the manufacturer and social brands to charge, on average, differentiated prices in relation to the generic brand (44% and 18% more, respectively, for those who prefer the generic brand, and 88% and 19%, in the same order, for those who prefer the manufacturer brand).

Table 8: T-test of the average T-shirt prices assigned by the sample according to the declared preference in relation to brand type

Preference	Related brands	T	Sig. (two-tailed)
Generic (94 cases)	Generic/Social	-4.054	0.000
	Generic/Manufacturer	-7.024	0.000
	Social/Manufacturer	-4.731	0.000
Manufacturer (73 cases)	Generic/Social	-3.143	0.002
	Generic/Manufacturer	-10.132	0.000
	Social/Manufacturer	-9.775	0.000
Social (81 cases)	Generic/Social	-7.977	0.000
	Generic/Manufacturer	-6.166	0.000
	Social/Manufacturer	-1.498	0.138

It should be noted that for the group that prefers the manufacturer brand, the difference in the average price between the T-shirt that has the manufacturer brand and the social brand is higher, largely due to the higher price assigned to the manufacturer brand and, partly to the lower appreciation of this group for the social brand, considering the lowest minimum price and the average price in relation to the other groups of respondents, which is consistent with Ellwood's (2004) observation that the respondents who prefer this type of brand wish to please themselves without feeling guilty, and thus associate the social brand with groups with undesirable lifestyles.

For those who prefer the social brand, there are statistical indications that the average price of the generic brand is different from the others, but the same does not occur between the social and manufacturer brands. Therefore, T-shirts with manufacturer and social brand have statistically equal price differential, on average, when compared to generic ones, suggesting that the investment in the development of the assets of any of these two types of brand can statistically add the same value differential for a product in relation to a generic version. The additional average price of the manufacturer and social brand is, in this same order, 47% and 38% higher than the generic brand, which is the group in which the social brand indicates the highest perception of value.

Therefore, the investment in a brand's assets generates greater gains for a company through the possibility of charging a differentiated price in relation to a generic version of the product, and the manufacturer brands are those that take advantage of a higher value perception.

CONCLUSIONS

The large proliferation of brands currently in place and the increasing challenge to manage them motivated this study whose purpose was to study the influence of different brand types (social, generic and manufacturer brands), price levels and perceived quality, on the preference to purchase a product.

The sample consisted of 248 respondents and was characterized by an almost equal division between genders, an age group between 18 and 35 years old, high level of education and monthly family income, declared preference for cheaper T-shirts and for the quality and price as the attributes mentioned as the most important in the decision to purchase this product.

The preferred type of T-shirt is that of generic brand, which has no apparent signs, with high quality and low price, whereas quality, followed by brand and then price, are the most important attributes when choosing a T-shirt.

The results achieved through the preference model of the sample suggest that the brand maintains a considerable importance in the consumer's decision; however, these consumers are still concerned with choosing T-shirts whose brand is a guarantee of tangible benefits, such as quality, and, if possible, does not explicitly express its values and ideals through printed logos, that is, this type of consumer is not concerned with the meanings of a brand, which makes it harder to be loyal.

We also evaluated the ability of the three types of brand to charge a differentiated price to a T-shirt. According to the answer of the 248 participants, T-shirts with the manufacturer's brand are, on average, the most valuable, followed by the social and generic brands, thus suggesting that investing in the development of the brand's assets enables the manufacturer and social brands to charge, on average, differentiated prices in relation to the generic brand (57% and 25% more, respectively), and for working with many advertisements and being associated with fashion and sometimes with luxury, the manufacturer brand is able to take advantage of a greater differential than the social brand.

These results vary in magnitude when one analyzes the respondents' opinions according to the gender or the declared preference for the type of brand, but the understanding remains the same. It is interesting to note that for people who have declared that they like the social brand, the differentiated price of the manufacturer and social brand is statistically the same, that is, this is the group that values brands that have a "spiritual" dimension as much as those that are recognized by the advertisements and for being associated with fashion.

This study provided an exploratory and comparative analysis on the influence of social, generic and manufacturer brands on the opinion regarding the preference to buy a T-shirt, adding new inputs to the field of study of brands and for its management practice.

The conjoint analysis technique adopted allowed the assessment of the influence of attributes (brand, price and quality) and their respective levels (manufacturer, generic, social; low, average, high; low, average, high) in the decision to choose by type of T-shirt.

In strategic terms, the results makes it possible to:
know the structure of preference of each individual;
define the optimal combination of characteristics of the product studied;
identify segments of consumers with different levels of importance declared to each attribute and respective level;
detect marketing actions aimed at the market potential inherent to each combination of

characteristics of the product focused on this study.

Although this study has been conducted with the highest possible academic rigor, the results presented here should be read with some reservations. First, the observations presented in this study are limited in terms of time and space, therefore, we considered the opinion of a sample of the Brazilian population aged above 18 years old and at the highest levels of education, which was collected only once in March and July 2011. Thus, it is not possible to extrapolate this data to periods too distant from the data collection, since it is not possible to guarantee that the respondents' opinion is consistent over time and to groups of people different from those surveyed.

Since we did not extract a sample with a random selection of participants, the results cannot be generalized for the whole research universe and, therefore, they are characterized as exploratory information.

Also, to achieve the proposed objective, in the conjoint analysis of the opinions on T-shirts, only the brand and two aspects that can be influenced by it (quality and price) were used as study variables. Other characteristics that may be important in the evaluation of T-shirts (for example: color, material and cut) were not considered and, if they were, perhaps they could have led to different results than those presented. Finally, for being an exploratory study focused on T-shirts, the results presented here are limited to this object only, and extrapolating it to other products is not recommended.

REFERENCES

- AAKER, D. A. **Building strong brands**. New York: The Free Press, 1996.
- AAKER, D. A.; JOACHIMSTHALER, E. **Como construir marcas líderes**. Porto Alegre: Bookman, 2007.
- AFSAR B. Effect of perceived price, brand image, perceived quality and trust on consumer's buying preferences. **Journal of Economics and Business Research**, v. 20, n. 1, p. 7-20, 2014.
- ALTA F. J. G.; TROCCHI I. R.; MOREIRA M. B. Você é o que você veste? A associação da autoidentidade do gay masculino ao vestuário de luxo. **Rev. Adm. UFSM**, v. 6, n. 4, p. 760-782, 2013.
- ANDERSON, D. R.; SWEENEY, D. J.; WILLIAMS, T. A. **Estatística aplicada à administração e economia**. 2. ed. São Paulo: Cengage Learning, 2008.
- BLOMQUIST, K. H.; POSNER, S. Three strategies for integrating CSR with brand marketing. **Market Leader**. [S.l.], 2004. Available at: <www.warc.com/marketleader>. Accessed May 1, 2008.
- BRONN, P. S.; VRIONI, A. B. Corporate social responsibility and cause-related marketing: an overview. **International Journal of Advertising**, v. 20, n. 2, p. 207-221, 2001.
- CALDWELL, N.; COSHALL, J. Measuring brand associations for museums and galleries using repertory grid analysis. **Management Decision**, v. 40, n. 4, p. 383-392, 2002.
- CARROLL, A. Brand communications in fashion categories using celebrity endorsement. **Journal of Brand Management**, v. 17, n. 2, p. 146-158, 2009.
- COOPER, D. R.; SCHINDLER, P. S. **Métodos de pesquisa em administração**. 7. ed. Porto Alegre: Bookman, 2003.
- CRAVENS, D. W.; PIERCY, N. F. **Marketing estratégico**. 8. ed. São Paulo: McGraw-Hill, 2007.

D'ASTOUS, A.; SAINT-LOUIS, O. National versus store brand effects on consumer evaluation of a garment. **Journal of Fashion Marketing and Management**, v. 9, n. 3, p. 306-317, 2005.

D'EMIDIO, M. **O valor de marca: uma abordagem de equações estruturais**. 2009. 115 p. Tese (Doutorado em Administração) – Programa de Pós-Graduação em Administração, Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo, 2009.

ELLWOOD, I. **O livro essencial das marcas: tudo o que você precisa saber, em mais de 100 técnicas para aumentar o valor das marcas**. São Paulo: Clio Editora, 2004.

FURRIER, M. T. Patrimônio de marca. In: F. A. SERRALVO (Org.). **Gestão de marcas no contexto brasileiro**. São Paulo: Saraiva, 2008a.

_____. Posicionamento e reposicionamento de marcas. In: F. A. SERRALVO (Org.). **Gestão de marcas no contexto brasileiro**. São Paulo: Saraiva, 2008b.

GILLIGAN, C.; GOLDEN, L. Re-branding social good: social profit as a new conceptual framework. **Academy of Marketing Studies Journal**, v. 13, n. 2, p. 97-117, 2009.

GRANATO, L. A. C.; PEREIRA, P. F. P. Ainda existem consumidores fieis? **Rev. Adm. UFSM**, v. 4, n. 1, p. 9-18, 2011.

HAIR, J. F. JR.; BLACK W. C.; BABIN B. J.; ANDERSON R. E.; TATHAM R. L. **Multivariate data analysis**. 6th ed. Upper Saddle River: Prentice Hall, 2006.

HOEFFLER, S.; KELLER, K. L. Building brand equity through corporate societal marketing. **Journal of Public Policy & Marketing**, v. 21, n. 1, p. 78-89, 2002.

KAPFERER, J. N. **As marcas, capital da empresa: criar e desenvolver marcas fortes**. 3. ed. Porto Alegre: Bookman, 2003.

_____. **Marcas à prova de prática: aprendendo com os erros**. 2. ed. Porto Alegre: Bookman, 2004a.

_____. **O que vai mudar as marcas**. Porto Alegre: Bookman, 2004b.

KELLER, K. L. **Strategic Brand Management**. Upper Saddle River: Prentice Hall, 2002.

KOTLER, P.; KELLER, K. L. **Administração de marketing**. 12. ed. São Paulo: Pearson Prentice Hall, 2006.

LAFFERTY, B. A.; GOLDSMITH, R.E.; HULT, G. T. M. The impact of the alliance on the partners: a look at cause-brand alliances. **Psychology & Marketing**, v. 21, n. 7, p. 509-531, 2004.

LAMBIN, J. J. **Marketing estratégico**. Lisboa: McGraw-Hill, 2000.

LEITCH, S. R.; DAVENPORT, S. Corporate brands and social brands: co-branding GM-free and UK supermarkets. **International Studies of Management and Organizations**, v. 37, n. 4, p. 45-63, 2007.

MAGALHÃES, G. F. Mais de 60% das pessoas preferem marcas que ajudam a ajudar os outros. [S.l.], 2011. Available at: <www.infomoney.com.br>. Accessed June 15, 2011.

MANKIW, N. G. **Introdução à economia: princípios de micro e macroeconomia**. 2. ed. Rio de

Janeiro: Campus, 2001.

MORT, G. S.; WEERAWARDENA, J.; WILLIAMSON, B. Branding in the non-profit context: the case of Surf Life Saving Australia. **Australasian Marketing Journal**, v. 15, n. 2, p. 108-119, 2007.

MOWEN, J. C.; MINOR, M. S. **Comportamento do consumidor**. 1. ed. São Paulo: Prentice Hall, 2003.

PEREZ, C. **Signos da marca: expressividade e sensorialidade**. São Paulo: Pioneira Thomson, 2004.

PHAU, I.; LENG, Y. S. Attitudes toward domestic and foreign luxury brand apparel. **Journal of Fashion Marketing and Management**, v. 12, n. 1, p. 68-89, 2008.

POLONSKY, M. J.; JEVONS, C. Understanding issue complexity when building a socially responsible brand. **European Business Review**, v. 18, n. 5, p. 340-349, 2006.

PRACEJUS, J. W.; OLSEN, G. D.; BROWN, N. R. On the prevalence and impact of vague quantifiers in the advertising of cause-related marketing (CRM). **Journal of Advertising**, v. 32, n. 6, p. 19-28, 2004.

SERRALVO, F. A.; FURRIER, M. T. Tipologías del posicionamento de marcas, un estudio conceptual en Brasil y en España. **Revista Galega de Economía**, v. 14, n. 1-2, p. 1-15, 2005.

SIEGEL, S.; CASTELLAN JR., N. J. **Estatística não-paramétrica para ciências do comportamento**. 2. ed. Porto Alegre: Artmed, 2006.

STEENKAMP, J. B. E. M.; BATRA, R.; ALDDEN, D. L. How perceived brand globalness creates brand value. **Journal of International Business Studies**, v. 34, n. 1, p. 53-65, 2003.

VELTER, A. N.; BATTISTELLA L. F.; GROHMANN M. Z.; CASTRO A. E.; COSTA V. F.; HERMANN R. E. Atitudes dos consumidores a partir da teoria das pistas e da consciência ambiental: contribuições ao estudo do Green marketing. **Rev. Adm. UFSM**, v. 2, n. 3, p. 399-416, 2009.