

# THE SENSORIAL STIMULI'S IMPACT WHEN PURCHASING FEMININE PERFUMES: THE BRAND EQUITY'S CONSTRUCTION BY THE SENSES AND EMOTIONS

# O IMPACTO DOS ESTÍMULOS SENSORIAIS AO COMPRAR PERFUMES FEMININOS: A CONSTRUÇÃO DO BRAND EQUITY PELOS SENTIDOS E EMOÇÕES

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#### **Cid Goncalves Filho**

Universidade Fumec, Brasil. E-mail: cid@fumec.br

#### Juliana Hollerbach de Aquilar

Universidade Federal de Viçosa (UFV), Brasil.

E-mail: sctmafra@ufv.br

#### Hans Rudiger Kaufmann

University of Applied Management Studies in Mannheim, Alemanha.

E-mail: hans-ruediger.kaufmann@hdwm.org

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#### **ABSTRACT**

The perfume industry is a reference in promoting sensory experience consumption. Since 2010 Brazil is the largest market for perfumes in the world. With the objective of studying the impacts of sensory stimuli in the consumers' purchasing decisions, a survey with 482 respondents was carried out. The hypothetical model's results shows significant impacts of the brand's value and of the multisensorial product on the purchasing intention. The brand's value is impacted by the emotions created by stimuli. The model explains 77% of the purchasing intention and innovates when it integrates sensorial elements, brands, products and purchasing behavior.

**Keywords:** Senses: Product Design: Perceived value: Sensorial Marketing

## **RESUMO**

A indústria de perfumaria é uma referência na promoção do consumo de experiência sensorial. Desde 2010, o Brasil é o maior mercado de perfumes do mundo. Com o objetivo de estudar os impactos dos estímulos sensoriais nas decisões de compra dos consumidores, foi realizada uma pesquisa com 482 respondentes. Os resultados do modelo hipotético mostram impactos significativos do valor da marca e do produto multissensorial na intenção de compra. O valor da marca é afetado pelas emoções

criadas pelos estímulos. O modelo explica 77% da intenção de compra e inova ao integrar elementos sensoriais, marcas, produtos e comportamento de compra.

Palavras-chave: Sentidos; Design de Produtos; Valor percebido; Marketing Sensorial.

#### 1. Introduction

It has been recently observed emerging changes in the marketing phenology which includes a holistic interpretation of its phenomena. One of these fields is the consuming experience. The experience is the fundamental domain of the human sensorial processes, being the fundamental bases to explain consumption (ACHROL and KOTLER, 2012). Sensorial stimuli generated by products activate the sensorial memory and create an emotional bond between the product, the brand and the consumer (AGUILAR, 2009).

On the other hand, the perfumery and cosmetic industry is one of the sectors that stand out the most in Brazil. Brazil reached the condition of the largest perfume market in the world in 2010, surpassing the then largest consumerist market: the United States. In 2006, Brazil was in the third position, according to the Euromonitor data. This was due to the Real's valuation and the intense consumption of perfumes and cosmetics which are now concentrated on popular brands, that represent 93% of sales. The sector's leaders are Natura and Boticário, which together have 60% of the market (ABHIPEC, 2012).

Product developers seek to understand the more subjective aspects of how the studies about consumption anthropology (ROCHA, 2005), the cultural and symbolic aspects that are shown on the products' packaging, labels, advertisement, slogans and small ads, have influence on the perception of perfumes. According to the sensorial marketing concepts, it is also necessary to create a sensorial synergy with the attributes that are sought in a perfume. Also, due to the companies' high competitiveness and the intense search for novelties by the consumers, the products' life cycle are getting shorter and it is due to this fact that the concern in creating new products with the capability of giving a competitive advantage which can meet the consumers' emotional needs (OLIVEIRA, 2000).

Most of the product development researches are based on qualitative techniques and formal surveys, which many times have their focus on functional elements and do not treat with the adequate methodological form, the sensorial stimuli's impact on the consumers' attitudes and behavioral intentions. Few empirical studies have been carried out about the products' relative contributions and the experiences focused on the sensorial stimuli. And despite the huge interest on brand value, the focus of the conceptual development or of the empirical researches have been to explore brand equity and not its sources and development (BARWISE, 1993). In this sense, this study proposes to evaluate the sensorial stimuli's impact on products (perfumes: vision, sense of smell and touch), advancing along with the traditional paradigm that works with the utilitarian and the hedonic. Thus, this research innovates as it associates the hedonic-utilitarian paradigm with the intensity of perceptions of the senses of vision, smell and touch, and their impacts on the brand, products and purchasing intention evaluations.

#### 2. THEORETIC REFERENCE

## 2.1 The Utilitarian and Hedonic Dichotomy

Holbrook and Hirschman (1982), Babin, Darden and Griffin (1994), D'Angelo (2004) and Andersson and Engelberg (2006), analyze consumption through a dichotomy vision, in other words, other than identifying the rational and utilitarian point of view, they explain the consumption concept starting from a hedonic, emotional and the pleasure of purchasing's point of view, even though they often use different terminologies.

Chitturi et al. (2007) argue that there are two principles that determine the consumer's reference with relation to exchanges between the hedonic benefits and the utilitarian benefits. They are: (1) the principle of precedency, and (2) the principle of hedonic domination. The principle of precedency motivates the consumers to give more importance to the utilitarian benefits than to the hedonic benefits up to the minimum threshold functionality in order to fulfill the prevention targets. However, further than the functionalities' minimum limit, the principle of hedonic domination motivates the clients to give a greater weight to the hedonic benefits over the utilitarian benefits to meet the promotion's goals.

These authors define the positive emotions lived by the consumers when their promotion objectives are met during the product's consumption as being a promotion of positive emotions. The positive emotions experimented by the consumers when their prevention objectives are being fulfilled during the consumption of a product, are defined as positive prevention emotions (Chitturi et al., 2008).

## 2.2 Consumer Behavior and the Perceptive Process

The people's consumption behavior varies depending on, among other aspects, how they perceive the stimuli presented by the Market. Due to this factor, it is necessary to understand how this perception can be stimulated, starting by evaluating the individual's consumption behavior. The information processing by the consumer involves the existence of marketing stimuli, in which the objective is to inform or persuade the consumer to purchase something (BLACKWELL et al., 2005; SANTOS e BOTELHO, 2008). The perceptive process is one of the psychological factors (together with learning, motivation, believes and attitudes) by which a person selects, organizes and interprets the information that is received from the environment (KOTLER, 2000; CZINKOTA et al., 2001). It is possible to say that the purchasing process, in a general manner, is closely linked to the consumer's perception, not only with relation to himself, but also with relation to the product or service to be acquired. Thus, the perception is something totally subjective, selective and limited, that is, it can change during a period of time and from person to person (TREVISAN et al., 2003). Kotler (1998) and Schiffman and Kanuk (2000) argument that a long term memory structure is based on an associative information model, where the information is stored and connected by means of connections that oscillate according to its intensity. The activation of theses mechanisms tells us to what extension information it can really be recovered and in which situation. When activated, the internal information is possibly being codified by recuperating the long term memory (when a person thinks about a concept), or when an association is sufficiently strong to activate this mechanism. Another factor that is associated with remembering an event is related with the emotional intensity in which the information was projected to the memory. Data strongly linked to emotional intensity can easily appear spontaneously and manifest itself by language or behavior (SCHACTER, 1996; STERNBERG, 2000).

#### 2.3 Brand Value

The brand value is the incremental utility or the value added to a product by its brand, (FARQUHAR, HAN, and IJIRI 1991; KAMAKURA and RUSSELL 1993; PARK and SRINIVASAN 1994; RANGASWAMY, BURKE and OLIVA 1993). Consequently, the research has suggested that the brand value can be calculated by subtracting the product's physical attributes from the total utility of a brand (SIMON e SULLIVAN 1993). Despite the representative interest in the brand value, the conceptual development's focus or the empirical researches have been to explore the brand equity and not its sources and development (BARWISE, 1993). Shocker, Srivastava and Ruekert (1994 p. 157) indicate that it is necessary to have a "systemic vision" of the brand and products in order to be able to include intangible attributes created by the price, service, promotion and distribution decisions to create a brand value and affect directly the buyer's decision making. In this sense, this research aims to analyze the senses as attributes that have influence over the brand equity.

#### 2.4 Emotions linked to the Brand

Although the consumers interact with thousands of products and brands during their lives, they develop an intense emotional link with only a small subset of these objects (SCHOUTEN e MCALEXANDER, 1995). The possibility that these consumers can develop strong emotional links with the brands is associated with the attachment theory psychology, (BOWLBY, 1979) which suggests that the degree of an emotional link with an object foresees the interaction nature of the individual with the object. For example, individuals that are strongly linked to a person are more likely to commit themselves, invest and make sacrifices for this person (BOWLBY, 1980; HAZAN e SHAVER, 1994). Analogously speaking, the consumers that are linked to a brand can foresee their commitment with it and their disposition in doing financial sacrifices, in order to obtain it, such as loyalty and willingness to pay premium price.

## 2.5 Consumption Experience

According to Achrol and Kotler (2012), the study about consumption experience promises to change the theoretical tools of consumer behavior analysis about cognitive concepts, such as attitudes, information storage and recovery theories for the sensorial representation mechanisms of "reality" and your experience. The fundamental process in marketing is consumption, and the elementary concepts of consumption are satisfaction, value and utility. Holbrook (2006) points out that the ideal is that the consuming experience is, after all, the value for the consumer. And before this, the economist Laurence Abbott had already declared that: what people really desire are

not the products, but to satisfy experiences (...) since people want products because what they really want is the experience bringing services that they hope the products will produce (ABBOTT, 1995, P. 40).

Experiences are individual events that happen as the response to some sort of stimulation. They are the result of a direct observation and/or the participation in real, imaginary or virtual events (SCHMITT, 2002).

The experimental marketing skeleton consists of two characteristics: the strategic experimental models (SEM), the sense, feeling, thought, action and the identification, and the experience providers (ExsPro), which are the environmental space, the people, the product's presence, the counties, the communication, the electronic media and the visual and verbal identification (SCHMITT, 2002). The experience with the product – the item that was analyzed in this research for the collection of the structured questionnaire, will be shown below.

### 2.6 Product Experience

Product experiences happen when a consumer interacts with the products, for example, when the consumers search for products and examine and evaluate them (HOCH, 2002). The experience with a product can be direct, when there is a physical contact with the product, or indirect, when a product is presented virtually in an advertisement (HOCH and HA, 1986 KEMPF and SMITH, 1998).

Experiences can also happen when consumers consume and use products. In short, experiments occur in a variety of configurations. Most of the experiences happen directly when the consumers go shopping, purchase and consume products. Experiences can also occur indirectly, as for example, when consumers are exposed to publicity and communication marketing, including sites. Consuming experiences are multidimensional and include hedonic dimensions, such as feelings, fantasies and entertainment (HOLBROOK and HIRSCHMAN, 1982). A large part of the interpretative investigation about consumption experiences that were researched, analyzed the hedonic objectives that happened during and after consumption, for example, museums, rafting, baseball and skydiving (ARNOULD and PRICE 1993; CELSI, ROSE, and LEIGH, 1993; HOLT 1995; JOY and SHERRY, 2003). In this case, the experience with products that will be analyzed – perfumes, pre-arranged in hedonic or utilitarian attributes to evaluate the purchasing intention.

## 2.7 Sensorial Marketing

The marketing of senses' objective is to capture the attention of five senses, which cause aesthetic pleasure or excitement among consumers. To highlight products using the sensorial appeal, it is necessary to consider which of the stimuli is the most appropriate to create it. In order to motivate the clients, it is necessary to identify the process' principles. To prove value, it is necessary to comprehend the consequences of a sensorial appeal. When properly administrated, the marketing of senses creates powerful sensorial experiences that differentiate companies and products, motivates consumers and add value. To be able to manage the sensation, the marketing professionals have to pay a lot of attention in the attributes, styles and

primary themes, in order to create positive impressions in a client. One of the main sensation's principles (cognitive consistency/sensorial variety) shows the organizational challenge of blending control to assure consistency with flexibility, ensuring the variety (SCHIMITT, 2002).

As reported by Lindstrom (2007), the greater number of sensorial points being stimulated when building brands, greater will be the number of activated sensorial memories and greater the number of activated sensorial memories, stronger will be the adhesion to the brand. "The multisensorial appeal affects directly the product's quality perception and, consequently, the brand's value [...] Multisensorial brands can have higher prices than those from similar brands with less sensorial characteristics". Furthermore, the judgment begins with the combination of the senses of sight, touch, smell and hearing and/or taste data, which are then channeled to the sensorial registry (LANDWEHR, WENTZEL and HERRMANN, 2013).

In an experiment, Lindstrom (2007) reported that two pairs of identical sneakers were placed in two identical rooms, but separated. One of the rooms was perfumed with a floral essence, the other was not. Participants of the test analyzed the sneakers in each one of the rooms and later answered a questionnaire and most of them (84%) preferred the sneakers that were placed in the room with fragrance. Furthermore, the consumers calculated that the "perfumed" sneakers were US\$ 10.33 more expensive than the pair in the room without perfume.

In another study about neuromarketing – the comprehension of how the unconscious mind drives the human behavior, Lindstrom (2009) relates the sense of sight and smell (image-fragrance) and shows that, when presented separately, the research's volunteers found them just as pleasing to see as to smell, suggesting that the aroma and sight of a product seduce them equally. However, when presented simultaneously image-fragrance, in general, the participants considered the combinations to be more attractive than that of only the image or the fragrance when presented separately. These studies guided this research, which had as its object of study the products that were intimately related to the senses – perfumes, being this a test to evaluate the importance not only of the sight, but also of the sense of smell and touch, as also its order of significance.

Following, Chart 1 shows the sensorial importance in the environment's evaluation that was reported in the Brand Sense research by Lindstrom (2007); however the statistics show little difference when evaluating sense by sense. In the chart, it is possible to observe that the sight is more relevant, for it generally establishes the first contact, but the other senses are also extremely important to perceive the environment.

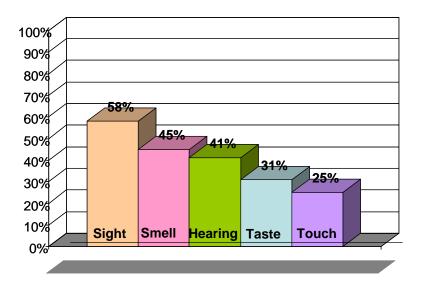


Chart 1 Sensorial Importance in evaluating the environment, Source: Lindstrom, 2007, p. 80.

Guided by Lindstrom's (2007) studies, the study has the objective of evaluating the impact of the sensorial stimuli of the sight, touch and smell of perfumes. The objective here is to identify the relationships and the degree of importance of the following constructs: multisensorial product, emotions aroused by the brand and brand equity before the purchasing intention, using previously validated scales. Using a structural model, this study presents the brand equity's construction points by senses, through the experience with the product.

#### 3. METHODOLOGY

In researches to evaluate an experience, the respondents are usually asked to think about of how a combination of products affects their judgment, attitudes, preferences, purchasing intention and memory (HOCH and DEIGHTON 1989; HOCH and HA 1986; HUFFMAN and HOUSTON, 1993).

A quantitative character, according to Malhotra (2006), has the advantage of quantifying and giving precision to the results. In this manner, a survey was carried out involving 492 questionnaires. The questionnaire was applied using a Likert-type scale ranging from 0 (strongly disagree) to 10 (totally agree). This type of scale has a more precise answer, which leads to a greater consistency of the data (SPECTOR, 1992).

For this survey, a structural questionnaire was elaborated, using scales that had already been validated of hedonic attributes and utilitarian attitudes, brand equity, emotions aroused by the brand and the characterization of the multisensorial product, with relation to the purchasing intention of perfumes.

To evaluate the senses of smell, touch and sight, the respondents experienced the perfumes using each sense singly (positive and negative stimuli, determined in discussion groups and experiments of the initial qualitative stage and the sales volume/real preference) and following, answered the questionnaire. This stage was applied in a laboratory environment, in an artificial context for the experiment in which

the researcher built the desired conditions, for it offers a higher level of control as it isolates the experiment in a carefully monitored environment. Beyond that, it has the tendency of producing the same results if it repeats the experiment with similar individuals, which produces a high internal validation (MALHOTRA, 2001). The products were shown with the brand, with the intention of evaluating the impact of the senses over the brands' evaluation and its influence on the purchasing intention.

#### 3.1 Scales

The positive or negative affection scale (PANAS) of Allen and Janiszewki (1989) was used to evaluate the sensorial stimuli of the senses of smell, sight and touch, evaluating the affection and the momentary mood according to the stimulus that was received. Brief and succinct and referred as the basis for several researchers, the scale of 4 items was increased with a new topic, with the intention of giving a more personal character when considering the stimulus that was received.

To evaluate the hedonic and utilitarian attitudes of the perfume consumers, the Batra and Ahtola's (1991) scale was used, being that these two dimensions are related, although distinct, being that one of them can be more relevant for certain types of products or makes than for others.

The Overall Brand Equity scale, proposed by Yoo, Donthu and Lee (2000), was used to measure the loyalty towards a brand, such as the general fidelity attitude towards a brand.

The emotion awakened by the brand – this scale is based on the emotion that reflects the attachments that the consumers' have towards brands. With the objective of evaluating the emotional bond between the consumer and a specific brand, having three dimensions, affection, passion and link, that are all related to a higher dimension order of emotional bond. In this manner, it is expected to be able to predict the relation with Thomson, MacInnis and Park's (2005) adapted brand equity.

Brakus, Schmitt and Zarantonello, (2009) developed a multisensorial scale in which the following four dimensions are evaluated: sensorial, affective, intellectual and behavioral. In six studies, the author demonstrated that the scale is reliable, valid and distinct from the measurements of other brands, including the evaluation of brands, the brand's involvement, the fixing of brand, the client's satisfaction and the brand's personality.

#### 3.2 The Research's Hypothetical Model

The research proposed model evaluates the impact of the senses of smell, touch and sight of perfumes awakened by the brand, the brand equity, the multisensorial product's characterization and the purchasing intention. It also evaluates the influence of the senses on the multisensorial product and the emotions that were awakened by the brand over the purchasing intention. This can be observed in Figure 1:

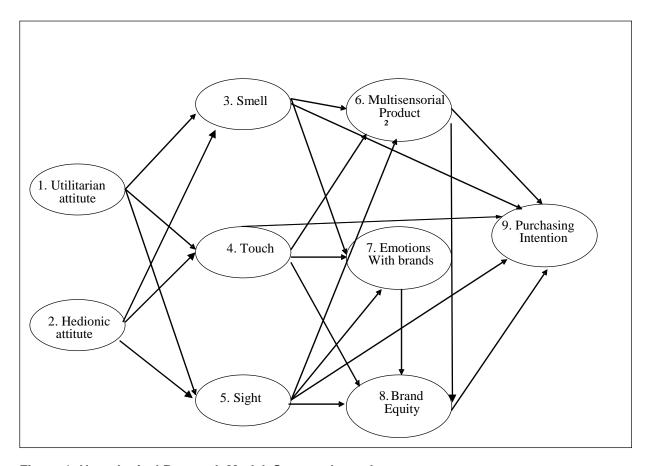


Figure 1: Hypothetical Research Model. Source: the authors.

## 4. Results

## 4.1 The Data's exploratory analysis - Sample Characterization

With respect to the 492 respondents' family income, it is possible to observe that there is a good distribution in the several extracts of income, with a higher frequency in the extremes. The extract with the highest percentage was "Above R\$ 9,000" with 37% of citations and the extract of "Up to R\$ 3,000" with 19%. The other extracts presented 4% and 9% of the citations. The sample consisted of students from the Minas Gerais University, being 94% single, and on average, the respondents are 22 years old with a standard deviation of 4 years.

## 4.2 Preliminary Analysis

The preliminary analysis contained analyzes of extreme values, univariate and multivariate outliers and linearity, in order to proceed with the following stages of the processes.

## 4.3 The Measurements' Validity and Trustworthiness

In the case of the constructs that were treated in the literature as unidimensional, the option was to carry out a AFE for each one of them, using the main component analysis as the method of extraction and as the Varimax was the method of rotation. The following criteria were considered in the evaluation of the factorial solutions:

Frame 01 – Criteria for the adequacy of the factorial and trustworthiness solution

Measurement	Acceptance Parameter
Kaiser-Meyer-Olkin (KMO)	> 0.500 (two variables) or >0.600 (three variables or mores)
Bartlett's Test of Sphericity (BTS)	Significant value less than 1%
Explained Variance (EV)	> 50%
Commonality (h²)	> 0.400
Factorial Load (FL)	> 0.400 (for only one factor)

Source: MINGOTI (2005); MALHOTRA (2006); HAIR et. al. (2009).

# 4.4 Structural Equation Model – The constructs' confirmatory factorial analysis and the testing of the proposed model

After the constructs dimensionality was defined, the analyses continued with the objective of achieving the AFC's constructs and test the proposed model. To do this, a Structural Equation Method (SEM) was used. This was essential to the test some of this research's Hypothesis, for it allows the researcher to work with constructs, test the simultaneous dependency, and take into account measurement errors (HAENLEIN, KAPLAN, 2004; MACKENZIE, 2001). For this purpose, two major parameter estimation methods can be used in the MEE: the first can be called CB-SEM and it is based on the covariance matrix; the second is denominated PLS-SEM and is based on variance (HAENLEIN, KAPLAN, 2004). The Generalized Least Square (GLS), which belongs to the CB-SEM, deals well with the data's lack of normality, if the sample is sufficiently large for the model to be tested.

# 4.5 Outer Model - Convergent validity, discriminant and trustworthy

In this topic the constructs Outer Model's results are presented, which includes the convergent validity, the discriminant validity and the trustworthiness of these constructs. As the research had a construct of the second order, the multisensorial product, the first order constructs' results will be shown first and then the results of the quoted second order constructs will be shown. In order to test the constructs' convergent validity, two criteria were used: the one proposed by Bagozzi, Li and Philips (1991) and the other proposed by Fornell and Lacker (1981), which was carried out with success in all the constructs and items. To verify the discriminant validity, Fornell and Lacker's (1981) criteria was adopted, which consists in comparing the high squared correlation of all the model's constructs pairs with the AVEs of the respective pairs. In this sense, in case the squared correlation is inferior to the AVE of the two compared constructs, it is possible to attest their validity. It was possible to attest the discriminant validity, since for all the pairs of constructs, the squared correlation between them is smaller than the AVE of both the constructs. The Cronbach Alphas presented values above 0.6, with the AVE and CC above 0.50, which attests the measurement's trustworthiness.

## 4.6 Inner Path Model - Nomological validity and model adjustment

In this research's topic the proposed model will be tested. For the test, it is important to verify the nomological validity and the model's adjustment by means of the Inner Path Model. FIG. 2 shows the Proposed Model's test by the research. The construct, multisensorial Product, was treated as been of the second reflective order, composed by four sub-dimensions: affective, behavioral, intellectual and sensorial. In the multisensorial Product's case, 59% of its variations were explained by the Smell, Touch and Sight. All of them presented a positive impact and were statistically significant at the level of 1% or 5%. The sense Smell had a higher magnitude load, of a 0.66 order. In its turn, Touch presented a lower magnitude load, of an order of 0.08.

The construct awakened Emotions by the brand presented a R<sup>2</sup> of 39%, which were explained also by the Smell, Touch and Sight. Smell presented an impact of 0.46 (sig. <1%), the Touch of 0.08 (sig. <5%) and the Sight of 0.30 (sig. <1%).

As for the Equity Brand, it presented a  $R^2$  of 49%, which was explained by the Smell, Touch and Sight, multisensorial Product and awakened Emotions by the brand. Of all of them, only the multisensorial Product presented a positive impact and statically significant at the level of 1% of the order of 0.61. Finally there was the purchasing Intention which had 77% of its variations explained by the Smell, Touch and Sight, multisensorial Product and Brand Equity. All the exogenous constructs, in this case, presented a statically significant impact, being that the one with higher magnitude was the multisensorial Product ( $\beta$  of 0.47, sig. <1%) and of lower magnitude was the Touch ( $\beta$  of -0.05, sig. <5%).

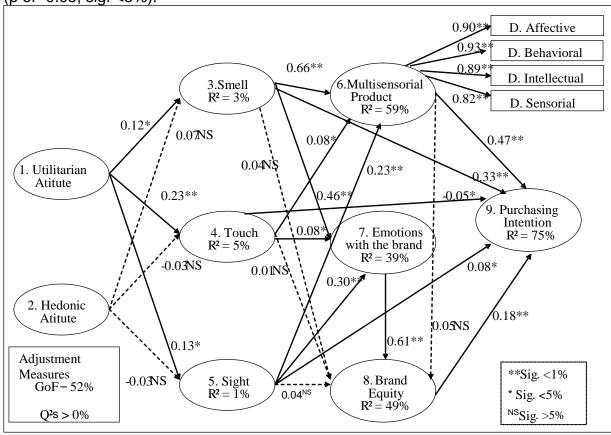


Figure 2 – Research's Proposed Model. Source: Data from the research. Subtitle: dotted arrows indicate that the exogenous construct did not show itself statistically significant on the 5% level in the endogenous construct.

As for the model's adjustment, all the endogenous constructs presented a Q<sup>2</sup> superior to 0% indicating that they were measured adequately. The GoF was of 52%. Although there is not and evaluation criteria, this value can be considered high, which means that the model has a good adjustment.

CHART 1 shows the results of the Proposed Model's weights in the form of a chart, as it was shown in FIG. 3:

Chart 1 – The Proposed Model's weights results.

Exogenous Construct	Endogenous Construct	Sample	Pop.	Desv.	Error	Value T	Sig.
1. Utilitarian Attitude	3. Smell	0.12	0.12	0.06	0.06	1.97	2.5%
2. Hedonic Attitude	$R^2 = 3\%$	0.07	0.06	0.05	0.05	1.28	10.0%
<ol> <li>Utilitarian Attitude</li> </ol>	4. Touch	0.23	0.24	0.06	0.06	3.96	0.0%
2. Hedonic Attitude	$R^2 = 5\%$	-0.03	-0.03	0.06	0.06	0.42	33.8%
<ol> <li>Utilitarian Attitude</li> </ol>	5. Sight	0.13	0.14	0.05	0.05	2.52	0.6%
2. Hedonic Attitude	$R^2 = 1\%$	-0.03	-0.03	0.06	0.06	0.51	30.6%
3. Smell	6 Multipopporial Draduct	0.66	0.66	0.02	0.02	27.93	0.0%
4. Touch	6. Multisensorial Product R <sup>2</sup> = 59%	0.08	0.08	0,03	0.03	2.35	1.0%
5. Sight		0.23	0.23	0.04	0.04	6.37	0.0%
3. Smell	7. Emotions	0.46	0.46	0.04	0.04	12.50	0.0%
4. Touch	7. Emotions $R^2 = 39\%$	0.08	80.0	0.04	0.04	1.99	2.4%
5. Sight	11 - 0070	0.30	0.30	0.04	0.04	7.37	0.0%
3. Smell		0.04	0.05	0.05	0.05	0.83	20.3%
4. Touch		0.01	0.01	0.04	0.04	0.32	37.3%
5. Sight	8. Brand Equity	0.04	0.04	0.04	0.04	1.04	15.0%
6. Multisensorial Product	R <sup>2</sup> = 49%	0.05	0.06	0.06	0.06	0.95	17.1%
7. Emotions		0.61	0.61	0.05	0.05	12.93	0.0%
3. Smell		0.33	0.33	0.04	0.04	9.28	0.0%
4. Touch		-0.05	-0.06	0.03	0.03	1.87	3.1%
5. Sight	9. Purchasing Intention	0.08	0.08	0.03	0.03	2,82	0.2%
6. Multisensorial Product	R <sup>2</sup> = 75%	0.47	0.47	0.04	0.04	12.55	0.0%
8. Brand Equity		0.18	0.18	0.03	0.03	5.97	0.0%

**Source**: Data from the research

#### 5. Conclusions

Researches about consumer experiences are recent and scarce, especially those that are the result of real stimuli, due to the difficulty and the cost of execution. On the other hand, it is important to point out the recent interest in understanding the relationship between sensorial stimuli, evaluation of brands and products, which have been the result of the more recent studies about neuromarketing. In this research, 492 respondents were exposed to individual stimuli in a laboratory, where they saw real products without brands, smelt them (without seeing or touching the product) and touched these products, which were in dark boxes without seeing or smelling them,

before answering the questionnaire (factorial experiment followed by the collection of data).

In the hypothetical model, the objective was to identify the impacts of the sensorial stimuli's intensity in the multissensorial evaluations of the product, in emotions with the brand as also with the brand's evaluation (brand equity for the consumer) and purchasing intention. Hypothetically the sensorial stimuli had the hypotheses tested about their impacts on the constructs' mediators (sensorial product, emotions with the brand and brand equity), as also on the purchasing intention, seeking, in this manner, to understand how this nomological chain behaves in practice in the consumer's mind.

It was possible to observe, according to the empirical findings, an intermediation between the sensorial stimuli and the brand's value, achieved by the emotions with the brand. In other words, the results suggest that the sensorial stimuli cause emotions, and those, in their turn, have an impact on the brand's value; demonstrating the emotions' role in generating brand equity (the impacts of the sensorial stimuli were no significant over the brand's value when mediated by the emotions with a brand). In the perfume's case, it was possible to verify that the smell and sight caused more positive emotions and, therefore, contribute indirectly to a better evaluation of the brands.

The results also suggest that the product's evaluation (Brakus, Schmitt and Zarantonello's (2009) multisensorial product scale) is affected by the integrated form of stimuli, especially by the smell and sight. The model explained 75% of the purchasing intention that, in a certain way, demonstrated important proprieties to understand the relationship between the sensorial stimuli, brands, products, emotions and purchasing intentions.

It is important to point out that in this study the consumers saw, smelt and touched the products and, possibly because of this, the multisensorial product's construct was determinant in their decision, followed by the brand equity. However, it was observed that the product itself did not have the impact on the brand value as hypothesized, but the emotions that were created by the experiment did, which suggests that, apparently, the consumer creates in his mind a concept independently of the product or brand, and that, in a certain form, manages to separate these concepts, or at least the impacts that they receive from their sensorial experiments.

It is believed that the proposed model and its results innovate and contribute for a better comprehension of the relationship between the sensorial elements, brands, products and purchasing intention of the consumers, generating subsidies for future studies and experiments, for it brings knowledge about the consumer's choice phenomenon, especially for products that involve sensorial impacts, such as the case of perfumes.

#### 7. References

AAKER, D.A. **Managing Brand Equity.** The Free Press, New York, NY, 1991. Shocker, Srivastava e Ruekert (1994 p. 157)

ABBOTT, L. Quality and competition. New York: Columbia Univ. Press, 1955.

ABHIPEC, Anuário de 2012 da Associação Brasileira da Indústria de Higiene Pessoal, Perfumaria e Cosméticos, 3a edição: 2012. Available in http://www.abihpec.org.br/wpcontent/uploads/2012/12/ABIHPEC\_2012\_internet.pdf. Access on: 20 fev 2013.

ACHROL, Ravi S. KOTLER, Philip. Frontiers of the marketing paradigm in the third millennium. **Journal Academy of Marketing Science**, p. 35–52, 2012.

ACHROL, Ravi S. KOTLER, Philip. Frontiers of the marketing paradigm in the third millennium. **Journal Academy of Marketing Science**, p. 35–52, 2012

AGUILAR, Juliana Hollerbach de. **Branding Sensorial**: Influência na percepção de valor da marca. Belo Horizonte: UFMG, 2009.

ALLEN, C.T.; JANISZEWSKI, C.A. Assessing the Role of Contingency Awareness in Attitudinal Conditioning with Implications for Advertising Research, Journal of Marketing Research, v. 26, p. 30-43, Feb. 1989.

ANDERSSON, P.; ENGELBERG, E. Affective and rational consumer choice modes: The role of intuition, analytical decision-making, and attitudes to money. **Working Paper in Business Administration**. n.13, 2006. Available in:<a href="http://swoba.hhs.se/hastba/papers/hastba2006">http://swoba.hhs.se/hastba/papers/hastba2006</a> 013.pdf>. Access on: 03 jun. 2011.

ARNOULD, Eric J.; PRICE Linda L. River Magic: Extraordinary Experience and the Extended Service, **Journal of Consumer Research**, v. 20, p. 24–45, June1993.

BABIN, B. J., DARDEN, W. R. & Griffin, M. Work and/or fun: Measuring hedonic and utilitarian shopping value. **Journal of Consumer Research**, v. 20, p. 644–656, 1994.

BAGOZZI, R. P.; YI, Y.; PHILLIPS, L. W. Assessing construct validity in organizational research. **Administrative Science**, Quarterly, v. 36, p. 421–458, 1991.

BARWISE, P. Brand equity: Snark or Boojum? **International Journal of Marketing Research** v. 10, p. 93-104, March, 1993.

BATRA, R.; AHTOLA, O. T. Measuring the hedonic and utilitarian sources of consumer attitudes. **Marketing Letters**, v. 2, p. 159–170, 1990.

BLACKWELL, Roger D.; MINIARD, Paul W.; ENGEL, James F. **Consumer behavior**. 9. ed. Orlando: Harcourt, 2001.

BOWLBY, J. Loss: Sadness and depression. New York: Basic Books, 1980.

BOWLBY, J. **The making and breaking of affectional bonds**. London: Tavistock, 1979.

BRAKUS, J. Jos'ko; SCHMITT, Bernd H.; ZARANTONELLO, Lia. Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty? **Journal of Marketing**, v. 73, p. 52–68, May 2009.

CELSI, Richard L.; ROSE, Randall L.; LEIGH, Thomas. An Exploration of High-Risk Leisure Consumption Through Sky-diving, **Journal of Consumer Research**, v. 20, p. 1–23, June 1993.

CHITTURI, R., Raghunathan, R. & Mahajan, V. Delight by design: The role of hedonic versus utilitarian benefits. **Journal of Marketing**, v. 72, p. 48–63, 2008.

CHITTURI, Ravindra; RAGHUNATHAN, Rajagopal; MAHAJAN Vijay. Form Versus Function:How the Intensities of Specific Emotions Evoked in Functional Versus Hedonic Trade-Offs Mediate Product Preferences. **Journal of Marketing Research**: v. 44, No. 4, p. 702-714, Nov. 2007.

CZINKOTA, Michael R.; et al.; **Marketing**: As Melhores Práticas. Porto Alegre: Bookman, 2001.

D'ANGELO, A. C. **Valores e significados do consumo de produtos de luxo**. 2004. Dissertação (Mestrado Acadêmico em Administração) — Universidade Federal do Rio Grande do Sul. Programa de Pós-Graduação em Administração. Escola de Administração, Porto Alegre, 2004. Available in:< http://hdl.handle.net/10183/4845>. Access in: 02 jun. 2011.

FARQUHAR, P. H.; HAN, J.Y.; IJIRI, Y. Recognizing and Measuring Brand Assets, **Marketing Science Institute**, Working Paper Series, Cambridge, MA, Report p. 91-119, 1991.

FORNELL, C., LARCKER, D. F. Evaluating Structural Equation Models With Unobservablevariables and Measurement Error. **Journal of Marketing Research**, v. 18, p. 39-50, Feb. 1981.

HAENLEIN, M., KAPLAN, A.M. A beginner's guide to partial least squares (PLS) analysis, **Understanding statistics**, v. 3(4), p. 283-297, 2004.

HAIR, J. F.; BLACK, W. C,; BABIN, B. J.; ANDERSON, R. E.; TATHAM, R. L. Análise **Multivariada de Dados**. Trad: Adonai Schlup Sant'Anna. Porto Alegre: Bookmam, 2009.

HAZAN, C.; SHAVER, P. R. Attachment as an organizational framework for research on close relationships. **Psychological Inquiry**, v. 5, p. 1–22, 1994.

HOCH, Stephen J. Product Experience Is Seductive, **Journal of Consumer Research**, v. 29 p. 448–54, Dec. 2002

HOCH, Stephen J.; DEIGHTON John. Managing What Consumers Learn from Experience, **Journal of Marketing**, 5v. 3, p. 1–20, April 1989.

HOCH, Stephen J.; HA, Young-Won. Consumer Learning: Advertising and the Ambiguity of Product Experience, **Journal of Consumer Research**, v. 13, p. 221–33, Sep. 1986.

HOLBROOK, M. B. Rosepekiceciveci: I can get it for you wholesale. In R. F. Lusch & S. L. Vargo (Eds.), **The service-dominant logic of marketing**: Dialog, debate and directions Armonk: M. E. Sharpe. p. 208–223, 2006.

HOLBROOK, Morris B.; HIRSCHMAN, Elizabeth C. The Experiential Aspects of Consumption: Consumer Fantasies, Feelings and Fun. **Journal of Consumer Research**, v. 9, p. 132-140, 1982.

HOLBROOK, Morris B.; HIRSCHMAN, Elizabeth C. The Experiential Aspects of Consumption: Consumer Fantasies, Feelings and Fun. **Journal of Consumer Research**, v. 9, p. 132-140, 1982.

HOLT, Douglas B How Consumers Consume: A Typology of Consumption Practices, **Journal of Consumer Research**, v. 22, p. 1–16, June 1995.

HUFFMAN, Cynthia; HOUSTON Michael J. Goal-Oriented Experiences and the Development of Knowledge, **Journal of Consumer Research**, v. 20, p. 190–207, Sep. 1993.

JOY, Annamma; SHERRY John F. Jr. Speaking of Art as Embodied Imagination: A Multisensory Approach to Understanding Aesthetic Experience, **Journal of Consumer Research**, v. 20, p. 259–82, Sep. 2003.

KAMAKURA, W. A.; RUSSELL, G. J. Measuring Brand Value With Scanner Data, **International Journal of Research in Marketing**, v. 10, p. 9-21, Mar. 1993.

KEMPF, Deanna S.; SMITH Robert E. Consumer Processing of Product Trial and the Influence of Prior Advertising: A Structural Modeling Approach, **Journal of Marketing Research**, v. 35, p. 325–38, Aug. 1998.

KOTLER, Philip. **Administração de Marketing**: a edição do novo milênio. São Paulo: Prentice Hall, 2000.

KOTLER, Phillip. **Administração de Marketing**: AnáLise, Planejamento, Implementação e Controle. São Paulo: Atlas, 1998.

LANDWEHR J.R, WENTZEL D., HERRMANN, A. Product Design for the Long Run: Consumer Responses to Typical and Atypical Designs at Different Stages of Exposure. **Journal of Marketing**, v. 77, no. 5, p. 92-107. Chicago: AMA, Sep. 2013.

LINDSTROM, Martin. **A Lógica do Consumo**: Verdades e mentiras sobre porque compramos. Tradução Marcello Lino, Rio de Janeiro: Nova Fronteira, 2009.

LINDSTROM, Martin. **Brand Sense**: a marca multissensorial. Tradução de Beatriz Affonso Neves, Porto Alegre: Bookman, 2007.

MACKENZIE, S. B. Opportinities for Improving Consumer research Through latent Variable Structural Equation Modeling. **Journal of Marketing Research**, 28, n. 1, p.159- 166, 2001.

MALHOTRA, N. K. **Pesquisa de marketing**: uma orientação aplicada. 4. ed. Porto Alegre: Bookman, 2006.

MINGOTI, S.. **Análise de Dados Através de Métodos de Estatística Multivariada**: Uma Abordagem Aplicada. Editora UFMG, 2005.

OLIVEIRA, C. A.; **Inovação do Produto e do Processo**, Belo Horizonte, Ed de Desenvolvimento Gerencial, 2000.

PARK, C. S.; SRINIVASAN, V. A Survey-Based Method for Measuring and Understanding Brand equity and Its Extendibility, **Journal of Marketing Research**, v. 31, p. 271-288, May 1994.

RANGASWAMY, A.; BURKE, R.; OLIVA, T.A. Brand equity and the Extendibility of Brand Names, **International of Research in Marketing**, v. 10 (1), p. 61-75, 1993.

ROCHA, Everardo. Totetismo e mercado: notas para uma antropologia do consumo. In: **Encontro Anual da Associação Nacional de Programas de Pós-Graduação em Administração**, 2005. Anais em CD-ROM do XXIV ENANPAD.

SANTOS, J. H. F.; BOTELHO, D. Analise Comparativa de Preços: estudo de variáveis influentes na percepção de vantagem de compra. In: ENCONTRO DA ASSOCIACAO DE POS-GRADUACAO E PESQUISA EM ADMINISTRACAO, 31, 2007, Rio de Janeiro. Anais do XXXI ENANPAD. Rio de Janeiro: ANPAD, 2007. 1 CD.

SCHACTER, Daniel L. **Searching for memory**: the brain, the mind, and the past. New York: BasicBooks, 1996.

SCHIFFMAN, Leon G.; KANUK, Leslie Lazar. Comportamento do consumidor. 6. ed. Rio de Janeiro: LTC, 2000.

SCHMITT, Bernd. Marketing Experimental. São Paulo: Nobel, 2002.

SCHOUTEN, J. W.; MCALEXANDER, J. H. Subcultures of consumption: An ethnography of the new bikers. **Journal of Consumer Research**, v. 22, p. 43–61, 1995.

SIMON C. J., SULLIVAN M. W. The measurement and determinants of brand equity: a financial approach, **Marketing Science**, v. 12 (1), p. 28-52, 1993.

SPECTOR, P.E. **Summated Rating Scale Construction**. Newbury Park, CA: Sage, 1995

STERNBERG, Robert J. **Psicologia cognitiva**. Porto Alegre: Artes Médicas Sul, 2000.

THOMSON, Matthew; MACINNIS, Deborah J.; PARK, C. Whan. The Ties That Bind: Measuring the Strength of Consumers' Emotional Attachments to Brands. **Journal Of Consumer Psychology**, v. 15(1), p. 77–91, 2005.

TREVISAN, Raquel; SAMPAIO Cláudio H.; PERIN, Marcelo G. **Estratégia de lançamento de Novos Produtos na Indústria Automobilística**: o Caso do Volkswagen Novo Pólo. In SLADE, 2003, Lima, Peru. Anais ... Lima: SLADE, 2003.

YOO, B.; DONTHU, N.; LEE, S. An examination of selected marketing mix elements and brand equity, **Journal of the Academy of Marketing Science**, v. 28, p. 195-211, April 2000.

YOO, B.; DONTHU, N. Developing and validating a multidimensional consumer-based brand equity scale. **Journal of Business Research** v. 52(1), p.1-14, 2001.