



**KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF ECONOMICS AND BUSINESS**

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**THE IMPACT OF THE SENSORY MARKETING ON THE CONSUMER
INTERNAL RESPONSE**

MASTER'S THESIS

Supervisor Assoc. Prof., Dr. Laimona Šliburytė

KAUNAS 2016

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International Business 621N12004

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The Impact of the Sensory Marketing on the Consumer Internal Response

DECLARATION OF ACADEMIC INTEGRITY

24th April 2016

Kaunas

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Le Ny, J. (2016). The Impact of the Sensory Marketing on the Consumer Internal Response. Master's Final Thesis in International Business. Study Programme 621N12004/ Supervisor: Assoc. prof., Dr. L. Šliburytė. Department of Strategic Management, the School of Economics and Business, Kaunas University of Technology.

Social Sciences: 03 S Management and Administration.

Key words: sensory marketing, atmosphere at the point of sale, consumer internal response, emotional reactions, cognitive reactions.

Kaunas, 2016, 93 p.

SUMMARY

The relevance: This Master's paper theme of International Business is relevant because the link between the study of the stimulation of the senses and the sensory marketing are quite new themes comparing with the traditional marketing (not more than 20 years old). Indeed, the sensory marketing process is used to cope to the rise of the Internet phenomenon and the opening of the worldwide competition, and tries to generate a new and unique experience for the customer by influencing his internal response. The sensory marketing aims to stimulate the senses of the individuals by the atmosphere of the point of sale.

The subject matter of the thesis: the impact of the sensory marketing through the atmosphere (of the point of sale) on the consumer internal response.

The research object: the research object relates to the concept and the impact of the atmosphere of the point of sale in the sensory marketing process on the consumer internal response.

The research aim: to explore how sensory marketing through the atmosphere (of the point of sale) impacts on the internal consumer response both on theoretical and empirical levels.

The research objectives:

1. To reveal problematic aspects of research of sensory marketing;
2. To analyse the sensory marketing process and its use as an effective tool of internal consumer response;
3. To analyse the role of the atmosphere in the sensory marketing;
4. To disclose the internal response in the consumer decision-making process;
5. To present theoretical insights of the impact of sensory marketing through the atmosphere on the internal response of the customer;
6. To compose the theoretical framework of the impact of the sensory marketing through the atmosphere on the internal response of the customer and verify it by conducting empirical research;

7. To formulate research conclusions providing recommendations about the areas of the further research.

The main results of the thesis: The thesis has shown the impact of the sensory marketing, through the atmosphere, on the consumer internal response. Therefore, it has been demonstrated that the atmosphere had a role of creating a new experience for the customer to motivate him to purchase. The sensory marketing, and more specifically the atmosphere at the point of sale, influences the behaviour of the customer by stimulating the cognitive and emotional reactions via the atmospheric factors. The theoretical research was conducted by employing systematic comparative analysis of scientific literature. The data collected in the empirical part using a quantitative research method (questionnaire) has been gathered through 327 respondents, characterised by their international student status. During the analysis, a description and a discussion of the findings have been made around the pleasure felt (emotional reactions) and the quality perceived (cognitive reactions) by the respondents through the atmosphere of the restaurants in Lithuania. The different atmospheric factors influence the pleasure that the respondents experienced inside the restaurants and the perception of the quality of it and even arouse some affective, behavioural and cognitive reactions in the customer's mind. Therefore, the two hypotheses (both H1 and H2) have been confirmed, and the consumers feel more pleasure in the point of sales when their senses are stimulated by the atmospheric factors, as well as the consumers perceive a better quality of the point of sales when the atmospheric factors stimulate their senses. However, according to the analysis of the findings, it is clear that the respondents are more aware of the pleasure they experience inside the restaurants while facing to the stimuli of the atmosphere, than the perception of the quality.

Length of the thesis: 93 pages including the annexes.

Number of tables: 36 Tables.

Number of figures: 7 figures.

Keywords: sensory marketing, atmosphere at the point of sale, consumer internal response, emotional reactions, cognitive reactions.

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INTRODUCTION

The relevance: "Today's economic landscape is being shaped by two powerful forces: technology and globalisation" (Kotler, 1999: 1). The globalisation area and the rude competition which leads it, force the companies to think in another way than the traditional business and marketing process. The marketing allows to recognise products and differentiates the brands, to sell merchandises and to create needs, but above all, it allows the customer to take a purchasing decision. The American Marketing Association defines the marketing as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large"¹. The marketing, then, is one of the strongest basement of the business process management, because, thanks to it, the customer will organise his purchasing behaviour and his loyalty based on the what he have experienced at the point of sale. It is more than a selling tool, it is a strategic and relationship one. The opening of the borders and the opening of the markets have changed all the way of selling products and have forced the companies to improve their strategies according to the trends, the cultures and the technologies. The multiplication of the distribution channels and the increase of the competition linked to the growth of the internationalisation of the distribution channels have made the atmosphere and the environment of the point of sale an asset which can lead to a competitive advantage for the companies. Through the mass marketing of Ford to the digital marketing and the sensory marketing, almost one hundred years passed. Kotler is considered as the father of the sensory marketing: In 1973, he demonstrated that the product characteristics such as the price or the portfolio are not enough to induce a purchasing action. According to him, it is necessary to promote the atmosphere at the selling points by dealing with the senses of the potential consumers. Yoo, Park and MacInnis (1998: 254), defined the atmosphere as the "design, space, layout, lighting, colour, and music". For Rieunier and Daucé (2002), it consists of elements linked to the physical environment (lighting, smell, etc.), as well as the social environment (gender of the sellers and customers, management of the customers, age, etc.). The main reason for the brands to develop the sensory marketing is to be differentiated on the actual or targeted market. For a long time, the brands have worked mainly on the visual sense, through the colour codes, the design, or the logos (Dosquet, 2015). Therefore, the sensory marketing has been used to offer a unique experience to the customer. Rieunier and Daucé (2002) defined it as the fact to use the factors of the atmosphere of the point of sale in order to arouse affective, cognitive and behavioural reactions of the customers encouraging the purchase acts. These authors defined the factors composing the atmosphere of the selling points as the tactile factors (the materials, the temperature, etc.), the gustatory factors, the olfactory factors (the ambient scents, the scent of the products, etc.), the visual factors (the colours, the lights, the design, etc.), the hearing factors (the mu-

¹ Source: www.ama.org

sic in the background, the ambient sounds), and the social factors (the category of customers, the category of sellers, etc.). The sensory marketing is a part of the marketing which wants to be closer to the customer by appealing to the unconsciousness of the human being, which means the feelings, the memory, the perception and the emotions, which are personal parts of each human. The sensory marketing wants to be a marketing tool which influences the mood and the behaviour of the customers. Each individual reacts in different ways to the stimuli of the atmosphere at the point of sale, and then, perceives it in different ways. This is a real challenge for the companies to gather all consumers in one entity with one sound, one touch, etc. However, several studies have shown the positive influence of the sensory stimuli on the mood and on the consumer behaviour, such as Schiffman et al. (1995), and later Villemure et al. (2003) who proved by an experiment, that a pleasant fragrance improve the mood and even can calm some symptoms such as unpleasant physical conditions. Through the time, the role of the customer in the business and marketing process has changed: he passed from an individual almost without opinion, to the part of the business process, with feelings, heart, brain and emotions. He can feel and perceive. This is the gap between the perception and the sensation that makes the strength of the sensory marketing. Understanding the action from perception to mood is the proof that the mood affects the cognition and the emotion of the customers.

The research problem: how does the sensory marketing through the atmosphere (of the point of sale) impact the internal response of customer?

The subject matter of the thesis: the impact of the sensory marketing through the atmosphere (of the point of sale) on the consumer internal response.

The research aim: to explore how sensory marketing through the atmosphere (of the point of sale) impacts on the internal consumer response both on theoretical and empirical levels.

The research objectives:

1. To reveal problematic aspects of research of sensory marketing;
2. To analyse the sensory marketing process and its using as an effective tool of internal consumer response;
3. To analyse the role of the atmosphere in the sensory marketing;
4. To disclose the internal response in the consumer decision-making process;
5. To present theoretical insights of the impact of sensory marketing through the atmosphere on the internal response of the customer;
6. To compose the theoretical framework of the impact of the sensory marketing through the atmosphere on the internal response of the customer and verify it by conducting empirical research;

7. To formulate research conclusions providing recommendations about the areas of the further research.

Research methods: The theoretical research was conducted by employing systematic comparative analysis of scientific literature. The empirical research methodology has been made through the quantitative method (questionnaire) highlighting and analysing the internal response of international students in Lithuania facing the atmosphere of the restaurants. The questionnaire has gathered the answers of 327 international students in Lithuania to collect data, to analyse and to discuss two hypotheses: H1: the consumers feel more pleasure when their senses are stimulated by the atmospheric factors. H2: the consumers perceive a better quality of the point of sales when their senses are stimulated by the atmospheric factors.

1. THE ROLE OF THE SENSORY MARKETING: A PROBLEM ANALYSIS

The segmentation of the products and the segmentation of the customers started at the beginning of the XXth century, but the marketing as Philippe Kotler described in 1973, it means the concretisation of the marketing concepts with researchers, started in the post-war of the 50's, with Neil Borden and the "Marketing Mix" term (the 50's) or Jerome McCarthy and the 4Ps (the 60's).

First of all, during the XIXth century, the improvement of the transport means makes the exchanges easier and the urbanisation promotes the closeness consumption. The demand of the local market increased and was overtaken, and the opportunities became huge for businessmen. Thanks to the industrial revolution, the world passed from small and local divided productions to a system of mass standardised production. The Fordism became one of the key processes of this period of consumption. Henry Ford wrote in his autobiography: "any customer can have a car painted any colour that he wants so long as it is black" (Ford, 1922: 72). According to Kotler in his book "*Marketing 3.0*" (2010), This period should correspond to the Marketing 1.0, where the product was in the centre of the market, where the standardisation was the basis of the production and allowed to have fewer production costs.

After this mass production came the mass marketing, characterised by a unique offer that a company tries to sell to the most important number of people thanks to a promoting and distributing system. This system is based on the cycle of the scale economy: the more a company sells, the more it will produce. The more it will produce, the less the production cost will be. The less the production cost is, the less the final price will be and the more the demand will increase.

With the arrival of new competitors and to cope with the changes of the customer needs, which are increasing and becoming more and more diversified, the marketing of segmentation has been developed. The companies chose which segments are better to serve in order to better allocate the resources (Dibb, 1998). For most businesses, it is hard, or even impracticable to satisfy the needs of all the customers on a market. Therefore, if the company is focused on a specific segment, its competitive advantage can be increased. For McBurnie and Clutterbuck (1987), the segmentation represented the basement of a successful marketing strategy.

The scale economies realised by the "leaders" of the sectors forced the new entrants to better adapt their product to the needs of the Market. For example, the Ford company succeed at the beginning of the XXth century with its scale economy such as the final prices were unbeatable. General Motor has then decided to interest in people who wanted to pay more for a car which was better adapted to their social status and their needs. Each brand of car of General Motors (Chevrolet, Cadillac, etc.) aims a specific segment of consumers going from the modest family to the rich single person. The market-

ing is not just a tool of distribution and communication anymore. It becomes something more complex, with an important strategic thinking with market surveys and competitors surveys, to catch the best section of the population with the best adapted products. Kotler, in his book “*Marketing 3.0*” (2010) defined this step as the Marketing 2.0: the companies have understood that the consumers are different in their needs and their desires. The marketers segment the population and look for improving the quality of the products for specific targets. The consumer is not really active in the production of the product but he can choose a lot of alternatives.

When the market became too much competitive, the hyper-segmentation succeeded to the simple segmentation. The companies aim only one category of individual. It is the case for example for the shampoo market: one product is divided into several ranges such as the shampoo for dried hair, or shampoo for long hair, etc.

Today, the role of the customers has changed. He is not treated any more like a simple consumer, but like a fully-fledged individual with emotions, thoughts, perceptions, like a smart person. Consumers look for companies which take care of the environment, the social improvements and the economy. With the social networks, the consumers can advise other consumers and play an important role in the production and the strategy of the product. To quote a new time Kotler (2010), he calls this era the “Marketing 3.0”. Because of the global economy and the global crisis, the consumer is more aware of the social, environmental and economic changes. It is a collaborative marketing.

When did the Sensory Marketing appear? First, despite the huge potential of the human senses, they were, during a long time, almost ignored by the Marketing field. The sensory marketing can be defined as the “marketing that engages the consumers' senses and affects their perception, judgement and behaviour” (Krishna, 2012: 333). The difference between the traditional marketing and the sensory marketing stands in the fact that, for the traditional marketing, the company is looking for the rationalisation and the analyse of the products, consumers and other competitors in the market (Schmitt, 1999). While the sensory marketing aims to integrate the perceptions of the human being in the business process through the five senses (visual, auditory, olfactory, gustative, and tactile). The marketers consider the customer both as a rational and an emotional human being who seeks to find pleasure and satisfaction in the purchasing experience.

The beginning of the concept of the sensory marketing was integrated 40 years ago by Kotler. In 1973, Kotler noticed that the brands had to be positioned in another way than only with the price or the substitutes of products. He has determined that the environment of the selling points and the ambience inside it could induce a better percentage of purchase intention. He is considered as the pioneer of the

sensory marketing for having including the environment in the business process. Following Kotler (1973), Holbrook and Hirschman (1982) proposed the first experiential perspective concerning the role of the emotional dimension of the consumer in the selling point. This emotional dimension represents an alternative to the information process of the product and can influence the purchasing decision making by adding the role of the aesthetic, the sensory dimension of the satisfaction of the product, the importance of communication or the emotions involved during and after the purchase. In 1992, Bitner also worked on the ambience of the point of sale which generates feelings on the customer. The services proposed in a selling point can help the segmentation, the positioning of a business, and differentiate a company from its competitors to create a competitive advantage. However, it is only around the year 2000 that the sensory marketing has become famous.

The sensory marketing was considered as a new marketing tool from the time that the smell was integrated into the process. Though before, the other senses were used in the marketing field:

In the 50's, and before, the marketing was mainly based on the visual and the touch effects. The consumers were looking for the aestheticism of the products. To distinguish themselves, the companies brought a huge attention to the packaging of the products (shape, colour, etc.) and the logos of the brands. These two aspects gave to the consumer a desire of purchasing or not. When the consumer has the ability to touch the products, it gives him a feeling of confident or not (for example, the consumer likes to touch a fruit before buying it, to know if it is ripe). To attract clients, the valorisation of the products and the showcases are important.

In the 60's, the sound effects appeared in point of sale with the aim of giving a musical pleasure to the clients and to orient them in the shop (the announcements of the promotions of the products in a supermarket). As Tom (1990) noticed, the role of the music in the purchasing process has been shown as effective in the business process. The music affects the quantity of purchase and the time that the consumer spends at the selling point. Several studies like Smith and Curnow in 1966 or Milliman in 1982 and 1986, have proved that the music, the volume and the tempo can literally change the behaviour, the amount of purchasing and the way of evaluation of a consumer in a shop or a restaurant (Milliman, 1986). Slower tempos and lower volumes of music tend to make the customer spending more money than a faster and higher one. Several years later, Gorn (1982) proved that the choice of the music can totally change the behaviour of the customer such as changing the preference for a particular product. The use of the music in the television commercial ads is almost as old as the television itself. According to a survey from Heartbeats International (a Sweden music-branding agency) in 2011, the licensing revenue from the music (in the advertisings, television, movies, radio, etc.) reached \$2.5 billion in the whole world. The concept of the influence of the music and the ambience on the consumer

behaviour is directly derived from the definition and the influence of the atmosphere at the selling points described by Kotler in 1973. He also proved that sometimes, in a selling point, the atmosphere can be more important than the product itself: for example, in Abercrombie and Fitch's shops, the loud music makes the young consumers feeling comfortable, and it is all the ambience which attracts people (music, models, etc.). Linsen, in 1975, discovered that the customers, in a shop with music, feel privileged from the brand, because it means that the company takes care about their feelings. The relationship between customers and companies passed from a professional relationship to a more personal one, because the companies touched directly to the emotion of the customers. This is no longer a marketing outside the individual, but even a marketing that wants to be inside the individual, touching his deep self and his emotions, in order to change his way of perceiving and feeling the business environment.

In the 90's, the smell has become a marketing tool. Marketers understood at this moment that the smell can motivate the consumer to purchase because this smell would trigger an emotion or would appeal to the memory. To quote the Russian-American author Vladimir Nabokov (1970), "Nothing revives the past so completely as a smell that was once associated with it"². From the introduction of the smell sensations in the marketing field, marketers have spoken about sensory marketing. Although Maillet (2014) positioned the industrial design (the beginning of the XXth century) as the first contribution to the sensory marketing field.

According to Krishna (2012), since the beginning of the marketing, the marketers have been closer and closer to the consumers through the time. The marketing field started with a remote communication towards the consumer: the marketers just wanted to sell the products, without the opinions of the clients. When Internet was democratised to the general public, the consumers have had a more important place in the selling process: they were able to advise other consumers by sharing their own experiences. According to the French newspaper *Le Point*³ (2014), two-thirds of people take a decision according to the advice of people they trust (family, friends, colleagues, etc.). The consumer is not only the final link in the chain, but he is also the beginning of it, the one which would hold all business strategy of the company by sharing the opinions and his advices. Today, the communication has become multidimensional, with several communication channels, including the subconscious channel of the consumer.

The development of the sensory marketing has been promoted first by the growth of the competition in the market: indeed, the internationalisation of the markets with the globalisation have affected the strategy of the companies, and the sensory marketing has become a new way of differentiation for

² Vladimir Nabokov (1970), *Mary*

³ source: www.lepoint.fr

the brands. By using this technique, the brands search to generate a brand identity and a loyalty of the consumers on the long-term. Secondly, the development of the e-business affected the traditional business process in such a way that the traditional companies, at least the physical shops, needed to find, to improve and develop a way that Internet did not have and could never have. And what is the best way to touch the subconscious of the clients, to touch their memory, their feelings and their emotions than to use the five senses of the human being?

According to Hawkins, Mothersbaugh and Mookerjee (2011), the field of consumer behaviour can be defined as “the study of individuals, groups or organizations and the processes they use to select, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impact that these processes have on the consumer and society” (Hawkins et al., 2011: 5). It means that the consumer behaviour involves a response, positive or negative, thanks to the emotional, mental and behavioural area towards the goods and services and their marketing associated. The consumer behaviour links the sociology, the psychology and the culture. In other terms, the behaviour is influenced by the culture, which is influenced by the psychological factors, which is also influenced and influences the groups of persons (Petrof, 1993). The sensory marketing has the goal to touch the unconsciousness of the consumer in order to occur an emotional response, and by consequence to change his behaviour. Engel, Blackwell and Kollat have developed in 1968, the famous concept of consumer buying decision process. The consumer behaviour can be summarized into five steps: the need recognition (without needs, there is no future purchase), the information search (research to solve the problem of need), the alternative evaluation (the consumer collects the information about different products and alternatives), the purchase decision, and the post-purchase behaviour (the satisfaction of the product or service will decide if the consumer wants to try the experience of purchasing again or not). The sensory marketing tends to be involved during the fourth and the fifth steps of this cycle. The music and the atmosphere should tend to distract the consumer during his experience of purchasing and will change literally his behaviour. It is interesting to see how this particular side of the sensory marketing can influence on the emotion and the unconsciousness of the consumer until changing his way of evaluating the products and his satisfaction.

The main question about the consumer behaviour is: why this store sells better than another one with the same products? Because of the experience that the store can offer to the customers. The consumers are ready to pay to live a pleasant experience. The sensory marketing can be defined, according to Rieunier and Jallais (2013) as the fact to use the ambient factors which surround the selling point (such as the music, the scent, the colour, the touching and tasting sensations) in order to stimulate, in the consumer's mind, a favourable reaction toward the purchasing act. This idea meets the one of Lu-

nardo (2009) who assured that the studies about the sensory marketing have highlighted the positive influence of the atmosphere on the consumer behaviour. Indeed, the environmental psychology is the study of the attitudes, the perceptions, representations and accompanying behaviour linked with the physical and social context in which the individual or group of individuals evolves (Moch and Moser, 1997). This field has shown, since the beginning of the last century, that the environment, the atmosphere surrounding the individual, can create an impact on his mood and his relaxation (affective reactions), on his thoughts (cognitive reactions), and on his physical attitudes (behavioural reactions), with experiments such as the theory of the hierarchy of the needs of Maslow (1943, 1970): The author distinguished several categories of needs: the physiological needs (to eat, to dress up, to sleep, to drink, etc.), the safety needs (physical and moral protections of the individual), the belonging needs (the need to be integrated in a group), the esteem needs (respect of the individual himself, of the other groups, etc.), and the self-actualization needs (the search of the best of oneself). According to Maslow (1943, 1970), the motivations of the employees vary according to the culture and the social classes. When the physiological needs are fulfilled, the superior needs, which are by nature unlimited, can form a permanent source of motivation.

According to these researchers, it has been shown that the atmosphere surrounding the individuals has a real impact on the individuals, and especially on the consumer behaviour. The purpose of the sensory marketing at a selling point is then to work on the way of adaptation of the customer and to work on the way he reacts to the physical environment of a store (Rieunier and Jallais, 2013). Since the 50's, the companies used the sensory marketing in order to study the perception of the product by the customers. On the other hand, it is only since the 90's that the selling point analyses the impact of the atmosphere on the customer behaviour. Marketers are using more and more the richness of the sensory ranges in the business process, to propose to the customers original experiences of consumption: the visual sensations, the hearing sensations, the touching sensations, the smelling sensations and the tasting sensations (the hearing and visual sensations are largely used, while the olfactory, tasting and touching ones start to be aroused). The sensory marketing is used a lot to translate the positioning of the brands and to seduce and attract the customers. If the basis of the sensory marketing result directly from the traditional marketing, the studies go further in the understanding of the effects on the consumer behaviour, thanks to, especially, the improvement in the technologies (neuromarketing) and the understanding of the effects of the collaboration between the different senses (for example the light and the music).

In fact, according to Giboreau and Body (2007), in front of the evolution of the Markets, the traditional marketing is not enough anymore. The consumption has integrated the affective aspect in the

business process, and the consumer is now looking for sensory, emotional and cognitive stimulations. This is why the atmosphere at the selling points, using the sensory marketing, and trying to catch the attention of the customer in order to influence and stimulate his purchasing behaviour, has become an important and an effective tool.

Question: how does the sensory marketing through the atmosphere (of the point of sale) impact the internal response of customer?

2. THE IMPACT OF THE SENSORY MARKETING ON THE CONSUMER INTERNAL RESPONSE: THEORETICAL SOLUTIONS

it has been seen previously that the marketing has evolved since its creation, taking different shapes, becoming closer and closer to the customer, by personalising the product to his needs, until going to use his feelings to change literally his behaviour. Is this influence positive or negative? Is the customer satisfied after living such an experience? But more important, does it really change the behaviour or does it just get close to the primary needs of Maslow (1943, 1970)? And how?

2.1. The sensory marketing: from the sense of the marketing to the marketing of the senses

The economic context of these days encourages the companies to invest in the sensory marketing. Indeed, the globalisation, the opening of the borders, and the increase of the digital stores compete with the traditional business and marketing processes. According to a survey of the FEVAD⁴ (2012), the French federation of e-commerce and distance selling, 37.7 billion of Euros were spent online in 2011, which represents an increase of 22 percent comparing to 2010. The e-commerce represented 5 percent of the total sales in France, and 18 percent of the English trade turnover in 2012 (office for national statistics⁵, 2013). It is then in a particular context that companies must work the layout of their point of sale, real vector of image and sensory experience, in order to offer the best customer' satisfaction.

During a long time, the human senses have been ignored, or at least considered as a different field than the marketing. This is through the five senses that each human perceives his environment. The knowledge about the senses of the human being might make the marketing strategy of a company more successful, and the sensory experience of the customer more personalised to his own person. The sensory marketing, more than just bringing a service, also brings a personalised experience to the customer.

The link between the brand and the customer is important to build a strong brand (Rodrigues et al., 2011). The consumer not only looks for purchasing the products and services alone, but he looks for buying an emotional experience around what he buys (Ratneshwar and Mick, 2005).

⁴ Source: www.fevad.com

⁵ Source: www.ons.gov.uk

The sensory marketing is then a marketing tool, using the senses of the consumer, which means the tactile, visual, auditory, olfactory and gustatory senses (Rieunier, 2006). The olfactory sense (smell) and the auditory sense (sound) are newer than the taste and the touch, which are both part of the traditional marketing. The sensory marketing appeared with the appearance of the smell and the sound in the marketing process. The principle of the sensory marketing is based on the value of one or more of the five senses of the human being (the sight, the hearing, the taste, the touch and the smell), which would allow the companies to encourage the purchasing process while meeting the consumer expectations.

2.1.1. The role of the senses in the sensory marketing process

The sight, according to A. Winter and R. Winter (2003) is the most powerful of the senses of the human being. Indeed, these authors assure that the cooperation between the brain and the eyes is better than any machine ever created. For example, the transmission between the vision and the brain takes 45 milliseconds, while the transmission between the nose and the brain takes 400 milliseconds (Robinson, 1968). Sight is also the most seductive sense over the others. It is the oldest and the most stimulated sense used in traditional marketing (Lindström, 2005). Sight, thus, appears to be the sense the most important according to the fact that 80 percent of the information that the humans get are transmitted by this sense, and more than 80 percent of the commercial and shopping communications are delivered through this sense (Jayakrishnan, 2013).

In a store, there are different factors that could affect the customer behaviour through the sight. These factors can be determinant to attract the consumer, to create brand loyalty, a visual identity and an atmosphere: the layout, the shape of the products, the light, the decoration, the colours, etc. The light and the colours appeal to an emotion and a feeling. Thus, the sensory memory can have a great role in the brand reorganisation if the colours and the light are used in a relevant and efficient way. The colours connote a certain meaning and can communicate information to the customer beyond the aesthetic of the products (Amsteus et al., 2015). However, Wolfe et al. (2006) stood on the fact that all the vision is about lights because the colours are only distributions and divisions of different wavelengths which are analysed by the proper visual system of each human.

The visual effect of the marketing is complex: indeed, the reaction and the judgement of consumers cannot be precisely predictable. However, companies use the visual effects, and especially the colours of the products according to their positioning, their image and their goal. Thus, McDonald's in France has changed the red colour of the stores to a green colour, with a fewer meaning about the discount and more about the eco-branding. For natural cosmetics stores, like Yves-Rocher, the stimulation of the eyes can improve the brand image and the quality (the green colour of some creams shows

the well-being features and the natural ingredients of the products). The colours are important, especially because it reflects the identity of the company, but also its values.

Food is the topic the most relevant in the mind of individuals to speak about the life experience. Indeed, Krishna and Elder (2009) noticed the fact that, when people are coming back from holidays, usually they share about what they have eaten, what was the difference in the cultural food, etc. Food and taste perceptions and sensations have an important place in the lives of human beings, whether on a physical and survival approach (although this is one of the physiological needs of the basement of the pyramid of Maslow (1943,1970)), or social and even emotional approach. Usually, eating and drinking are associated with a positive experience, happiness and positive memories, which points out that the taste aspect does not have to be neglected by the marketers, since the fact that this sense is a path for a stronger connection between the customer and the brand (Gobé, 2001). Furthermore, according to Gobé (2001), offering food, taste or drink in a store to the customer increases the perceived value and the benefit for the customer, and creates a pleasant atmosphere around the brand. The flavours (the taste) represent 31 percent of the association with the brand building (Lindström, 2005). The food industry is a sector of strong competition, where an intuitive expression of good taste can provide to the brand a significant competitive advantage and can influence the consumer behaviour and convince him to purchase.

The sense of the taste is closely linked to other senses, and especially with the smell. Indeed, according to Lindström (2005), it is almost impossible to taste something without smelling it. For example, when an individual is exposed to a Mcdonald's meal, customers tend to like or dislike both at the same time the smell and the food of the restaurant, but almost never dislike one while liking the other (Lindström, 2005). The odour of a product is an important driver and catcher of perception of the taste of the product, and, combined with the taste, stimulates the memory of the past experiences. Moreover, even the interaction between the vision and the taste can have an influence on the perception of the taste: for example, the results of the research of Krishna and Elder (2009) showed that the colour has an impact on the taste that an individual perceives. From this statement, a restaurant in Paris, called "Dans Le Noir" (In the Darkness), proposed the concept to eat in a total darkness to feel an unusual experience and claims to re-evaluate the perception of the taste and the smell while living this experience.

The brand knowledge plays also an important role in the perception of the taste of the consumers: an experiment about the perception of the taste of two brands (Coca-Cola and Pepsi), has been realised in 2004 by "The Human Neuroimaging Lab and The Centre For Theoretical Neuroscience", and led by the American doctor Read Montague, neurologist and professor in Baylor College in Houston

(Texas, USA). The experiment reported surprising results about the reactions of the tested subjects: 67 persons have passed the scanner test while realising the research in four times:

- the determination of the preferences of the 67 volunteers before the experiment
- a blind test tasting with two glasses: one of Coca-Cola, one of Pepsi
- a tasting while knowing the drink content of one of the two glasses (Coca-Cola)
- a tasting while knowing the drink content of one of the two glasses (Pepsi)

The research highlighted the brand influence on the consumer's reaction by underlining the brand influence on the explicit appreciation of the product by the consumers. Without knowing what they were drinking, over half of the subjects have chosen Pepsi as the better taste. However, when the researchers said them which sample was the Coca-Cola glass, three - fourths of them have chosen Coca-Cola as better than Pepsi, and their brain activity changed too (McClure et al., 2004). In other words, this research has shown that customers, in certain cases, do not buy the taste itself, but the image, the emotion and the memory linked to the brand.

The skin is interesting because it is the largest organ of the human being. It is our warning and warming body system, as well as a huge tool for communicating (the body language represents 55 percent of the communication⁶). Touch sense associated with the brand building represents around 25 percent of share (Lindström, 2005). According to Gobé (2001), less a company benefits to a brand recognition, more the customer tends to find information and to investigate the product by touching it. Actually, touching the product is a way of finding out and ensuring the quality when the visual sense is not enough to judge it (for example, a customer will judge the conditions of a fruit by touching it). The touching sense is then important when the consumer has to judge an unfamiliar brand or product: the weight, the material, the quality, etc. The texture of a product influences the emotions, and therefore the sensations and the perceptions of the product (Schmitt and Simonson, 1997). According to Lindström (2005), the emotion resulting from a product is closely linked with the perception that the customer has toward this product's quality. The feeling of a product, such as the weight can have more importance than the visual of the product in the purchasing decision: for example, because more and more high technologies are carried daily by the customers, they try to find the lightest ones (cell phones). The temperature, the weight, the shape and the material are impacting positively the touch experience of the customer, and thus enhance the customer loyalty, when it is used in an efficient way (Rodrigues et al. 2011). To go further, Hultén (2013), in his research, argued that the combination of the visual and auditory stimuli would catch the shopper attention, and would induce a stimulation of

⁶ source: www.rightattitudes.com

the touch behaviour. In other words, if a customer would approach a product, probably, he would touch it (Hultén, 2013). Therefore, there is a strong correlation between the fact of approaching and the fact of touching: the customer will not touch the product if his attention is not caught.

The touch is an interesting sense because it covers not only the hands but also all the body. It can perceive the temperature (and then the atmosphere), feel the texture of the product, the weight, the quality, etc. In other words, the touch, compared with other senses, can bring much more information at the same time because the receptors of the skins are sensitive to several ambient factors.

The sound, for a long time, has been recognised as an important factor or driver of positive consequences on the mood, preferences of the good, service or point of sale, and consumer behaviour (Alpert, Alpert and Matz, 2005). It represents 41 percent of share related to the brand building (Lindström 2005) and can be used as an efficient tool to communicate with the unconscious needs of the customers. The sounds are not necessarily related to the product, the advertisement, the discount or the service, but can be linked to the environment of the store itself, to push the customer to consume by creating a pleasant atmosphere (ambient sounds). In the same time, A. Winter and R. Winter (2003), assured that, probably, hearing is the sense the most used after the vision to gather information (A. Winter, R. Winter, 2003).

The sound is a feature which speaks a lot about the product itself: for example, the sound of a Harley Davidson relates to the quality of the product, and to the fact that the product is unique and powerful. Hui, Dube and Chebat (1997), in their study of music in a retail environment, demonstrated that the music in a point of sale leads to positive emotions in the customers, and the understanding of music can cause a positive approach to the store, which can result in an increase of the traffic in the store. Other studies go further by showing that the music can be effective in the fact to increase the sales (Matilla and Wirtz, 2001) and to influence on the purchase intentions (Baker et al., 2002). Vida (2008), in a research about consumer hearing, determined that the perception of the music has a positive result on the consumers' experiences, and, therefore on the evaluation of the store and the brand image. The goods appear desirable, their quality is perceived as better, and, finally, the consumer spends much more time and money in the store.

The most difficult point in the adding of the sound aspect in the sensory marketing is that individuals do not have control on the auditory stimuli they perceive, even if they can manage the stimuli they are attending to. This unintended perception of the sound can make the adequacy between the store and the sound stimuli problematic for the brands (Elder et al., 2010). Elder et al. (2010) also highlighted another problem of the auditory effect in the sensory marketing: when the selling point is a large department store or a supermarket, for example, the concordance between the different products

and the music can be difficult to realise: if the same music is played in all the store, then, there is not any concordance between the different products and the music. On the other hand, if different music is played according to the different products, thus there will not be any concordance between the different music theme, and there is a risk that the customer receives too much information in a too short period of time. Another issue which can be raised is the possible confound between the music familiarity and the pleasure that the music can occur. Indeed, Elder et al. (2010) highlighted the hypothesis that the effect that the music occurs on the mood can be partially explained by the music familiarity rather than the pleasantness.

As Lindström described, "you can close your eyes, cover your ears, refrain from touch, and reject taste, but the smell is an essential element of the air we breathe" (Lindström, 2005 : 31). The smell is certainly one of the most important sense (with the sight), especially according to the fact that 75 percent of the emotions of the human being are generated by this sense, and, then, has a strong impact on the sensory memory of individuals (Lindström, 2005). The fact that the smell is closely linked to the memory of the individual makes it as an efficient tool to create a link between the brand and the customers.

Already last century, Laird (1932) investigated the influence of the scented hosiery on the women's perception quality. He found out a positive bond between the quality perceived by the individual, and the use of scent. In other words, he discovered that the smell sense can influence the perception of the external environment of the individual. The smell can be used by the brand to influence the choices of customers, to convince them, in their unconscious, to buy a product instead of another one. Actually, the odour of a brand, as a strategic tool, the quality of it and the efficiency, are assets for the company for making a connection between the customer and the brand, and to strengthen the brand identity (Schmitt and Simonson, 1997).

The most difficult point with the smell sense is that, instead of being an objective tool, it is a subjective one: a smell which can be positive for one person, can be negative for another one. From this point, Fox (2009) claimed that the emotional reaction in front of a certain smell depends on the receiver, the target of this smell, because it touches to the sensory memory of individuals based on their past experiences. Use smell as a strategic and marketing tool appears to be a powerful attention catcher. Lindström (2005) highlighted the point that it is important to consider all the opportunities when a brand uses the smell as a strategic tool because the desired reaction can vary from an individual to another individual, and from one culture to another culture. Fox (2009), supported Lindström's opinion by assuring that the smell is linked in a close way to the culture and the society. The perception of smell, then, might be linked in part to the cultural differences of individuals. It shows the importance

for a brand to adapt the smell of the products and the environment of the selling point to the segmented targets and to find a congruent way to adapt the smell in order to reach intended reactions, evocations or associations.

According to Rieunier and Daucé (2002), the ambient scent is linked to the smell of the environment of the selling point. It is not directly related to a brand but it is more related to the atmosphere of the point of sale (scents of the point of sale, of the products, the materials, the persons, etc.) in order to influence the mood of consumers and to influence their purchasing behaviour. Kotler (1973) believed as well that ambient smell has the potential to change the mood of the customer into a positive one and then to increase the product evaluation from the customer. Therefore, the smell has the potential to possibly increase the sales revenues (Kotler, 1973). The stimuli of the smell, to be efficient, as to follow the context in which it is diffused (congruence): A sports shoe store which diffuses the smell of fresh bread at the point of sale cannot be efficient because there are not any congruence between the sport shoes and the bread.

2.1.2. The sensory marketing as an effective tool of consumer internal response

The goal of the sensory marketing is to seduce the customer, while increasing his well-being, in order to influence his behaviour in a positive way concerning one product, or service, or a selling point (Rieunier and Daucé, 2002). As the world is more and more dematerialised (fewer mortar stores and more digital ones), the companies and the distributors are more and more aware of the senses, which were almost ignored in the selling point in the past (Rieunier and Daucé, 2002). The perception of the significance of the senses in the marketing and the business in general has a valuable advantage in the market today. The sensory marketing is an effective tool which can provide, to the companies, an opportunity to increase the product profitability (Valenti and Riviere, 2008). The food industry has already used partially the potential of the sensory marketing: many restaurants, pubs or even bakeries try to exalt and to stimulate the different senses by artificial systems (the artificial smell of fresh bread for example). According to Lindström (2005), considering the senses of the human being can ensure a customer's experience in the store and can stimulate the imagination, improve the products and keep the customers through the loyalty. Creating a sensory brand starts from providing a personalised stimulus which can be linked to the brand.

What Lindström (2010) called "smashing" the brand (see figure 1) is one of the key element of his studies. It is the ability of a brand to be recognised from a customer without its logo. The goal is to create each element of the brand strong enough in order to be unmistakable (the image of the brand is

maintained) and to reach a stronger level in the familiarity and the loyalty between the brand and the customer.

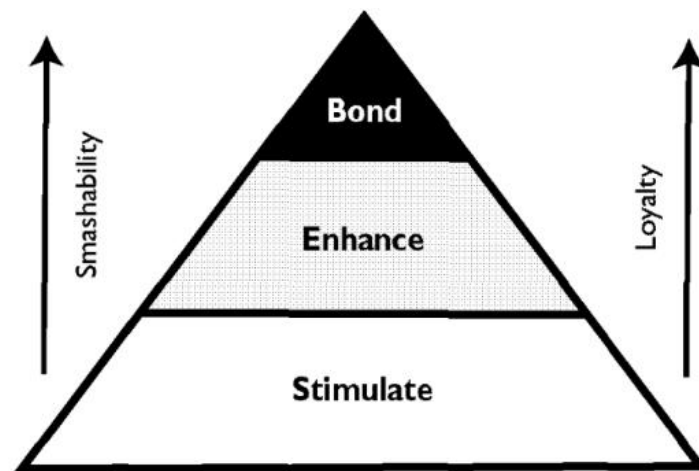


Figure 1: The sensory brand pyramid (Martin Lindström, 2010: 104)

When the customers are influenced by stimuli, the brand loyalty increases and the relationship between the brand and the customer is improved. Simultaneously, the "smashability" increases. Basically, the more the consumer would receive stimulation from the store and the brand, the higher would be the "smashability" toward the brand, and the stronger would be the link, the relationship between the brand and the customer. Lindström (2010) defined the sensory branding as a tool that can bring four different elements to the brand/store:

- Emotional engagement: the stimulus of the senses must be unique and personalised, specific to the brand, and must not be punctual, but it must last in the time
- To have an optimised and narrowed gap between consumer perception and product reality
- To have a concrete brand extension strategy according to the positioning strategy
- To create a trademark for every sensory stimulus. The customer can attach it to the brand and it can appear as a brand signature: for example the shape of the Coca-Cola's bottles, or the jingle of supermarket' stores.

Moreover, what Lindström's basic point (2005, 2010) said is that a brand which uses the multiple senses will be more successful than the ones which would focus on only a few senses (one or two). It can be a part of the advertising of the brand, such as a colour (for example the red of Coca-Cola, or the blue of Pepsi), a logo, a slogan, etc. or it can be a part of the product itself, such as the shape of the product (Lamborghini cars' shapes), a smell (perfumes) or a taste of the product (Nutella).

Across the time, the marketers have provided the senses in their strategy: the 50's, where the product (the colour, the design) had the most important place (it means the visual effect). After what, the music appeared: the major part of the points of sales provides, today, music in the background. The Journal of Product and Brand Management published an experiment led by Lindström (2005). In this experiment, 60 researchers initiated a study (quantitative and qualitative) in 13 countries during 18 months, in order to determine the role of the human senses in the brand selection by the customers. This study figured out that 99 percent of the marketing and communication advertisings are focused on the sight (what we see) and on the sound (what we hear) (Lindström, 2005). The progress of the technologies and the progress of the scientific studies allowed in the 70's to change the savour of the products in order to satisfy the customer (Valenti and Riviere, 2008). The use of the smell as a marketing tool is the latest technique "invented" as a marketing strategy to reach the customers (90's).

Today, the marketers have understood the place of the senses in the marketing process and the customer buying process. The more senses a brand appeal to, the stronger would be the message, and the stronger would be the internal response (positive or negative). Several researchers such as Rieunier and Daucé (2002) and Krishna (2010, 2012), based on the studies of Kotler (1973), have focused on a specific branch of the sensory marketing: the atmosphere of the point of sale. Indeed, the studies about the sensory marketing come mainly from the idea that it exists a link between the purchasing behaviour and the atmosphere that emanates from the point of sale.

2.2. The role of the atmosphere in the sensory marketing

The sensory marketing forms a positioning tool, but also a tool which serves a strong relational strategy based on the desire from the brand to create a strong link with the consumer. In this point of view, the atmosphere of the selling points is an emotional and cognitive vector which is able to create a unique consumption experience from the traffic store.

Speaking about the etymology, "atmosphere" comes from the Greek words "*atmos*", which means "steam" and "*sphaira*" which means sphere, area. Thus, the atmosphere is the environment, the air which surrounds the sphere. If we shift this idea to the store environment or any other point of sale, the sphere represents the product, the service, with its intrinsic characteristic, for example the price, the food, etc. (Rieunier and Daucé, 2002). The atmosphere is made of all the intangible elements which surround the sphere. In other words, the atmosphere consists of elements linked to the physical environment (it can be the music, the smell, the colours, the light, etc.) and social environment (gender of

the sellers and customers, management of the customers, age of the sellers, of the customers, etc.) (Rieunier and Daucé, 2002).

Kotler (1973) had evoked the fact that a brand needs to be positioned differently than only with the price. He started to explain, followed by several other studies in the future, the influence that can have the physical environment of the point of sale on the behaviour and the purchase intent. Kotler defined the atmosphere as "the creation of a consumption environment that produces specific emotional effects on the person, like pleasure or excitation that can increase his possibility of buying" (Kotler, 1973: 49). Kotler (1973) considered the atmosphere as one of the most (or even the most) contrivances of differentiation between retailers.

Later, the studies have shown, in a more accurate way, the concept of the components of "atmosphere". Thus, Yoo, Park and MacInnis (1998), defined the atmosphere as the "design, space, layout, lighting, colour, and music" (Yoo, Park and MacInnis, 1998: 254). Other researchers widened the concept of atmosphere: Eroglu and Machleit (1993) described the elements of the atmosphere in an extensive way and included for the first time the concept of "occupants" (customers and employees) while Kotler (1973) narrowed the definition only to the concept of customers. Thus, the atmosphere "refers to all the physical and nonphysical elements of a store that can be controlled in order to enhance (or restrain) the behaviours of its occupants, both customers and employees. These elements present a multitude of possibilities including ambient cues such as colour, smell, music, lighting, and textures, as well as architectural and artifactual elements" (Eroglu and Machleit, 1993: 34). In other words, according to Eroglu and Machleit (1993), the atmosphere is composed of visual, olfactory and auditory factors. However, these authors only exposed the influence of the atmosphere on the behaviour of the customer, without specifying the other dependent variables (affective, cognitive and physiological reactions) which can be influenced by the factors of the atmosphere.

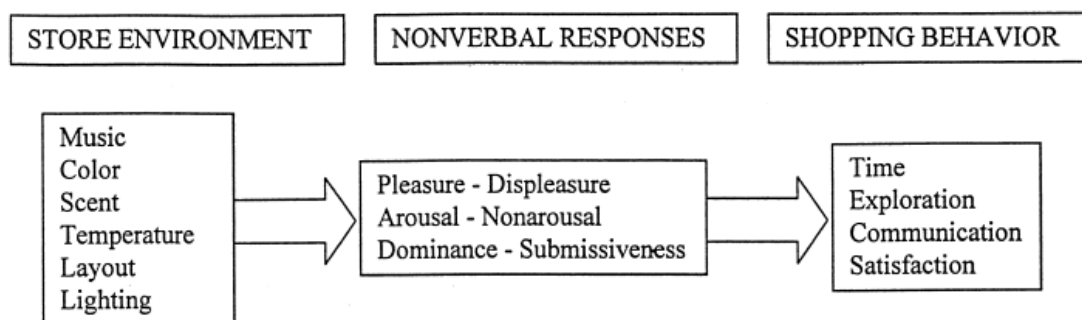


Figure 2: A framework integrating store environmental factors, non-verbal responses, and shopping behaviours (R. F. Yalch and E. R. Spangenberg, 2000: 140)

The figure 2, taken from Yalch and Spangenberg (2000), illustrates how the physical environment of the store can affect the behaviour of the customer, and especially his purchasing behaviour through different emotional states. The atmosphere of the point of purchases gathers stimuli which could be perceived by the different senses of the human being. The stimuli are excited by various parameters, such as the music: the music in the store can vary according to the tempo, the volume, the rhythm, the lyrics, the country's origin, etc. and can influence the mood of the customers in the stores (Bruner, 1990). By combining different factors, the stores can choose to create a typical and unique atmosphere, like French music with red colour decoration and elegant and sweet perfume, to project an image of romanticism. But the idea according to which the atmosphere could influence the behaviour of the individuals comes from the studies in environmental psychology of the beginning of the last century. The first studies of the psychologists on the variables of the atmosphere on the workers' behaviour are about the influence of the light (Luckiesh, 1924), of the noise (Morgan, 1917 and Gatewood, 1921) or the colour (Davison, 1918 and Pressy, 1921). The environmental psychology is not directly linked with the sensory marketing, but the studies of the last century were the premises of the studies of the influence of the environment on the behaviour of the individuals.

The atmosphere of the point of sale has a strong evocative power. Indeed, the consumer tends to associate to a product the atmospheric stimuli linked. When he needs to face once again to this atmosphere or these stimuli, the consumer remembers, therefore, his past experience. "The feelings of the individual are generally memorised with the object that caused it and then reactivated when there is a new exposure to the same stimulus" (Daucé and Rieunier, 2002: 51). According to the website e-marketing.fr, the atmosphere concerns especially the architecture, the ergonomics, the lighting, the colours, the temperature, the noise, the sound in the background, the smell, etc. of a point of sale⁷. All these constitute direct and indirect stimuli to generate traffic on the selling point, to attract customers or to trigger a purchasing behaviour. The idea is then not to be restricted only to the range of referenced products or services and on the price positioning, in order to create a competitive advantage.

As Rieunier (2000) highlighted, the design of the store has become the first communication media of the distributor. The design of the store is then used to forge the positioning, and create a value for the consumer. That is why a lot of brands realise only few advertising: Abercrombie and Fitch, Jeff de Bruges, Nature et Découvertes, IKKS, etc. The store's layout becomes then one of the few image vectors of the distributors. The atmosphere is an important factor of changes in the consumer behaviour. Better understanding the reactions of the customers concerning the variables of the

⁷ Source: www.e-marketing.fr

atmosphere is essential to help the distributor to invest on the sensory variables the most efficient to influence the consumer behaviour (Rieunier, 2000).

The atmosphere at a selling point is linked to the ambient characteristics such as the lighting, the smell, the temperature or the noise (music or noise from the crowd) which influence the consuming environment. Brobeck (1948) has demonstrated that, in the restaurants, the individuals consume more during a durable cold temperature than a durable hot temperature. It can be explained by the physiological aspect: the human body needs to be warmed when facing to a cold temperature. Eating asks a lot of energy, and by consequences warms the body. Therefore, more foods are eaten, and reciprocally for the hot temperature. From this point, the restaurants should adapt the temperature to the well-being of the consumer but also to the way of consumption they want to reach (Brobeck, 1948). What Brobeck (1948) has shown is that the perception of the atmosphere of the purchase environment is directly linked to the sensory marketing and the consumer behaviour. The atmosphere, then, is a variable factor of consumption which, if it is used efficiently, can provide a competitive advantage to the brand. The atmosphere is more than a perspective of a positioning tool which brings value to the brand because it enters directly to the decision-making process of the consumer to influence it.

In conclusion, the atmosphere is represented by all the stimuli that the consumer can perceive at a point of sale. According to Eroglu and Machleit (1993), it is divided through three elements: the visual effects, the olfactory effects and the auditory effects. The role of the atmosphere is thus to stimulate the internal response of the customer in order to increase the rate of purchase, his loyalty and to create a unique experience, by changing his behaviour, his mood, his pleasure and his satisfaction. In other words, the atmosphere, divided by the atmospheric factors, affects the non-verbal response of the customers which is translated by a change in the behaviour, such as the time spend, or the appreciation of the experience (Yalch and Spangenberg, 2000).

2.3. The internal response in the consumer decision making process

Psychological and economic studies, for a long, showed that people, in general, are following a choice in a rational way during a judgement or a decision making. However, for Krishna (2012), the consumer behaviour answers to the emotions and the motives. The emotional response is made by synergy, a superposition of the five senses. Thus, the companies which are using the multi-sensory aspect in their brand's communication have a better opportunity of creating an emotional and cognitive connection between the product, and the customer (Krishna, 2012).

The buying decision process (or decision-making process) of the customers is defined as a sequence of interrelated activities that leads a choice between alternatives. Basically, the decision-making process includes five stages: problem or need recognition, searching for information, evaluation of alternatives, purchase decision, post-purchase behaviour (Engel et al., 1968 - Kotler and Keller, 2009). Consumers do not always pass through the five steps while purchasing, and can switch them. Kotler (2003) argued that the consumers who want to buy their regular brands (for example toothpaste), usually skip the information search and alternatives evaluation steps, going directly from the problem identification to the purchase decision steps (Kotler, 2003). Marketers and psychologists believed for a long time that individuals were rational while making a judgement and making a decision (Krishna, 2012), while recent studies have shown that most of the decisions are made by using fast thinking (Kahnemann, 2011), which is based on emotions triggered by memories and past experiences (Häusel, 2011). There are a lot of factors which can influence a consumer in the decision-making process. Kotler (2000) distinguished three different categories of factors: personal, social, and psychological factors. To these three factors, Kotler (2000) added the cultural factor, but as a category which does not depend on the own willingness of the individual.

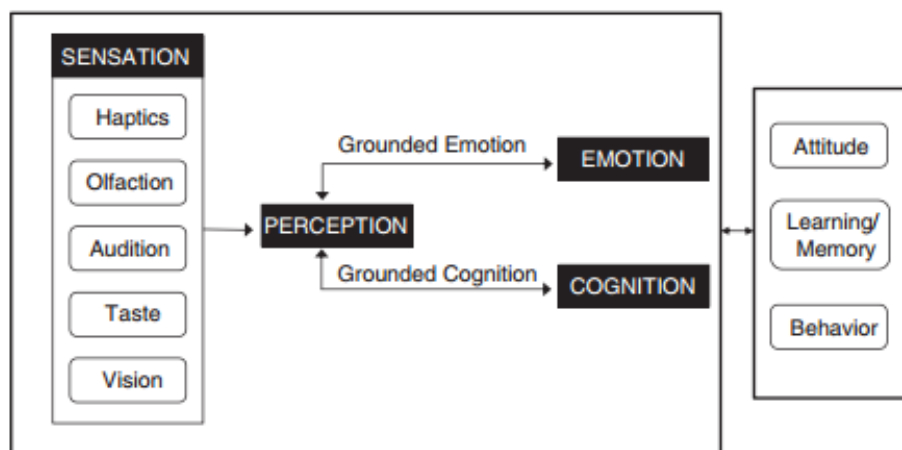


Figure 3: A conceptual framework of sensory marketing (Krishna, 2012: 4)

From the perspective of the consumer behaviour, the sensory marketing can be shown as an innovative tool. The term "innovation" does not necessarily refer to something new, but can refer to something better in order to increase the customer satisfaction according to the trends, the culture, the periods, etc. In few words, the innovation is something (a good or a service) which creates value for the customer to satisfy a need⁸. This marketing tool is an application of the understanding of the perception and the sensation of the consumer through the emotion, cognition (the knowledge about the product), preference, learning, choice of the consumers (Krishna, 2012) (see figure 3).

⁸ Source: www.businessdictionary.com

In fact, it is considered, according to the previous studies, that the internal response of the consumer triggered by the stimulation of the consumer's senses by the atmospheric factors, influences the decision making process and judgement. The decision making of the customer is, in fact, the consequence of the internal response caused by the atmospheric stimuli of the point of sale, and the consequence of the way of feeling (sensations), perceiving (perception), and interpreting these stimuli. Indeed, the sensory organs of the individuals feel and perceive the environment in different ways. For example, some people will feel the weather colder than someone else. This is called the sensations and the perceptions. How does it work? How do the marketers use these concepts of perception and sensation in the sensory marketing? What is the influence of the atmosphere of the point of sale on the perceptions and the sensations of the consumers? And mainly, how do the sensation and perception impact the internal response of the customers?

2.3.1. The sensations in the consumer internal response process

The sensations are the direct and immediate responses of the human being to external stimulus thanks to receptors called sensory organs (ear, body, nose, mouth and tongue, eyes). It is the reaction of the organism caused by the perceived stimuli. These stimuli are caught by the sensory receptors, or sensory organs, or by a reaction of the organism linked to physiological needs: the hunger, the thirst, the lack of sleep, etc. The sensations are both a universal character (all the human beings perceive the environment with one or several senses) and a relative character (the individuals do not feel the same stimuli in the same way). A sound which could be relaxing and peaceful for one person could be disturbing for another person; a person living in the centre of New York could feel differently the noise of the city than a person living in Druskininkai, etc. The perception of the sensations depends on the environment where the changes occur. In the situation where there are some sensory habits, the senses will not be able to detect any small changes. The sensory functions of the sensory organs are, obviously, to hear, to smell, to touch, to taste or to see. However, the use of these organs can differ according to people. They can use it in combination, or singly. Some people also have some senses more developed than others. For example, blind people will have the hearing sense more developed and will be able to hear some sounds (high or low levels) than an average person with all his senses. According to Krishna (2012), the sensation occurs when the environment stimulates the receptor cells of the sensory organs. The sensory organs allow individual to catch information which will be transferred and translated to the brain in nerve impulses. A feeling or an impression is then a sensation which is produced by the effect of an external stimulus.

According to Petrof (1993), the sensation is characterised by two factors: the interval and the sensibility. The interval is bounded from the lower level of stimuli that an individual can perceive to the higher level of the stimuli beyond which one the individual cannot perceive any changes any more (for example the human ears can hear in average between 16 hertz by second and 25 000 hertz by second, Petrof, 1993). The sensibility characterises the minimum variation between two stimuli from which the individual starts to perceive a difference. These parameters can vary a lot from an individual to another one, according to the age, the gender or the experience (produced by the environment). It is almost impossible, here, not to quote the Weber's law, stated in 1834, according to which one the stronger a stimulus is, the more important must be the modification to be perceptible.

The sensation can be, in a part, predetermined by the identity of a group of individuals. Thus, the sensation is, in a part, conditioned by the culture of the individual: A meal based of snails in France, will not occur the same sensation for French people, who use to eat it, and for Lithuanian people.

2.3.2. The perception in the consumer internal response process

According to Ladwein (1999), the perception and its interpretation allow the individual to give a meaning of the information based on his environment. It exists several definitions about the perception, but the selected ones, here, correspond directly to the framework of this thesis because they are based on the marketing and the business orientation. The definition given by Dussart (1983) is more orientated on the business field, but allows to understand the functioning of the perception. According to the author, the perception is the process through which one the individual becomes aware of his marketing environment. The individual interprets this marketing environment in such a way that it is agreement with his reference model (Dussart, 1983). Moreover, the perception is a process through which one the individual chooses, organises and interprets the external information (the information he receives from his environment) to build a consistent image of the world surrounding him (Kotler and Dubois, 2002). According to the specialist in social policy analysis and popular culture Blank (2013), the concept of customer perception involves the concept of sensory perception. In the sensory perception concept, the customer perceives the environment in the shop thanks to his five senses. It concerns the way in which the human-being analyses, perceives and treats the information stimulated in a sensory way thanks to the five senses (Blank, 2013). The customer perception is almost based on the same concept than the sensory perception because it relates to the manner that the individuals (the customers) create an opinion about the brand, the company, and the product or service through the purchase (Blank, 2013). Thus, the definitions given by these three authors are important because the perception determines thereafter the perceived image of the environment. In that way, the perception is critical

because it would build the point of view and the feeling about the selling point. Then, the perception induces the positioning of the consumer toward the point of sale and can be determinant for the action which would result in this positioning.

The study of how the customers perceive the environment in the shop is interesting for the marketers because they can forecast their behaviour by improving their possible satisfaction through a product, a visual, or even an atmosphere. Petrof (1993) stressed that the perception is the way that a consumer interprets his environment. Individuals interpret the sensations according to the environment in which they are. Therefore, a same sensation can be interpreted in different ways according to how people live or feel (for example, a Lithuanian does not have the same perception of the cold than a French). In fact, the perception is "the process of selecting, organising and interpreting information inputs to produce meaning" (Pride and Ferrell, 2010: 200). The information inputs, according to these two authors are the sensations received from the sensory organs. The perception is the adaptation of the reality. This is the process by which one the individual organises and interprets the sensations in order to give a meaning to his environment.

As remarked Johannes P. Müller (one of the first physiologists of the XIXth century), in his theory about the sense perception (Müller, 1837), the individuals can only perceive the world around them thanks to the senses, and after they transform these perceptions into experiences: "perception is not the conduction to our consciousness of a quality or circumstance outside of our body, but the conduction to our consciousness of a quality or circumstance of our nerves which has been caused by an external event" (Müller 1837: 780). According to the author, each nerve can respond only in a specific way to the stimulus. Thus, the knowledge, the perception of the world, only reflects the structure, the way of feeling, of our nervous system. For example, if a robot is presented to a manager and a worker, they would perceive this object in a different way: the manager could see the robot as a useful tool which can avoid the waste of time while the worker could see it as an object which can make him losing his job. How the individuals perceive their environment depends thus on the context in which they evolve. The selection of the perception by the brain of an individual depends on two main factors: the first one is the experiences that the consumer received or perceived in the past and that would affect the expectation and the perception of the environment. The second factor depends on the motivation of the consumer when he will realise a purchase. Usually, an individual tends to perceive what he desires or what he needs. The more he needs a product, the more he would perceive the stimuli linked to his need. For example, the French company "Nature et Découverte", which is related to the natures and the discovery (telescope, hiking, animals, etc.) uses a natural sound atmosphere at the point of sale.

The consumers who visit the stores take care about these stimuli because it is related to their needs, which means the products linked to the ecology. These two factors will increase or decrease the chance that a stimulus will be received, analysed and perceived by the brain. The perception is an active process but also a creative process: the same sensory input can be perceived in a different way, depending on the context. The perception affects the attitude and the behaviour of the individual, and even the memory through the way that the individual perceives the environment through the sensory organs (Krishna, 2012). Therefore, Krishna (2012) raised the term of "sensory perception" because the perception process is felt through the senses of the individuals.

The perception is an essential concept for the understanding of the human being. The consequences and the importance of the perception in marketing and especially in sensory marketing, are obvious. The consumers react to the sensory marketing strategies, especially according to their perceptions. The marketers can only a few change the perceptions, but the understanding of the perception process would provide them a tool to increase the success of their strategies. By summarising the process of perception, four steps are derived: the attention (the reaction of a stimulus), the interpretation (analyse, translation), the comprehension and the memorisation (recording of the phenomenon in the memory) (Compte, 2013). The perception is an immediate, meaningful and selective process: this is an automatic and unconscious process which depends on the environment (for the interpretation), but all the stimuli are not transformed into perception. The strength of the sensory marketing is the understanding of the differences and the links (the synergy) between the perception and the sensation that an individual feels and perceives about his environment (Krishna, 2012).

2.3.3. The synergy between the perception and the sensation as a factor of influence on the internal response of the customer

In some ways, sensations and perceptions are so complementary that it is difficult to separate them: the individuals receive through the sensory organs information from the stimuli of the environment (sensation). This information is spontaneously organised and changed into the experiences that individuals refer as perceptions. Mather (2006) defined the sensation as the stimulus process through which one the sensory organs respond to and translate to the brain through the nerve impulses (nervous system). The brain feels the world in an indirect way: the sensory organs convert the stimulation of the environment into neural messages. The perception is the interpretation of these stimulus inputs. Thus, the perceptions produce an interpretation of the world and the environment (Mather, 2006). A. Krishna (2012) (see Figure 3) follows the same statement. Indeed, for the author, the sensory organs feel the stimulus of the environment: the environment stimulates these sensory organs. The brain will, then,

transform and interpret these sensations into perceptions. According to Krishna (2012), the sensory marketing can be used as a tool that creates subconscious triggers. These triggers characterise the consumer perceptions about the abstract notion of the product, such as its quality (Krishna, 2012). The understanding of the sensations and the perceptions is the research perspective of the sensory marketing field because it applies to the consumer behaviour (Krishna, 2012).

To quote once again Pride and Ferrell (2010), the perception is "the process of selecting, organising and interpreting inputs to produce meaning" (Pride and Ferrell, 2010: 200). In other words, the sensory organs catch information coming from the environment. This is the immediate response of the sensory organs to the stimuli of the environment (light, colours, sound, etc.). The brain then selects this information, treats them, interprets them and changes them into perceptions (Durmaz and Diyarbakirlioglu, 2011). The perception is, in fact, the process of selecting these stimuli, treating them, and interpreting them.

For example, one of these stimuli, the colour, has an important role in the customer's perception. The colour is often used to call to mind some moods or feelings. But the colour is an interesting tool because, in major part, it depends on the culture of the targeted individual. Danger (1968) brought a universal listing of colour associations:

- Red: warmth, passion, excitement, fire, winter
- blue: coolness, water, sea, summer men
- green: country, coolness, restfulness, spring
- pink: gentleness, women
- white: cleanliness
- yellow: sunshine, heat, cheerfulness
- grey: dignity, quietness

However, this list was made without counting on the integration of the culture in this research. After that, some researchers found the difference of the colour meanings according to the individuals. Thus, Jacobs (1991) tried to understand if the colour differed according to the culture by studying a sample of four cultures: Chinese, Korean, Japanese and American cultures. The results pointed out that, if some colours could appear as universals, it is not always the case, and it could have different meanings according to the cultures. The blue and the green are often used as "cool" colours, with a feeling of security. Consistent with this, the companies of menthol cigarettes use these two colours in their advertisings (Engel et al., 1990). The perception depends not only on physical stimuli coming from the environment of the individuals but also on the stimuli coming from the surrounding of the

individuals, on the context and the conditions of development of the individuals (for example the society).

2.4. The impact of the sensory marketing through the atmosphere on the internal response of the customer

The studies about the influence of the atmosphere on the behaviour of the individuals in a point of sale have been inserted in the conceptual framework proposed by Mehrabian and Russell (1974).

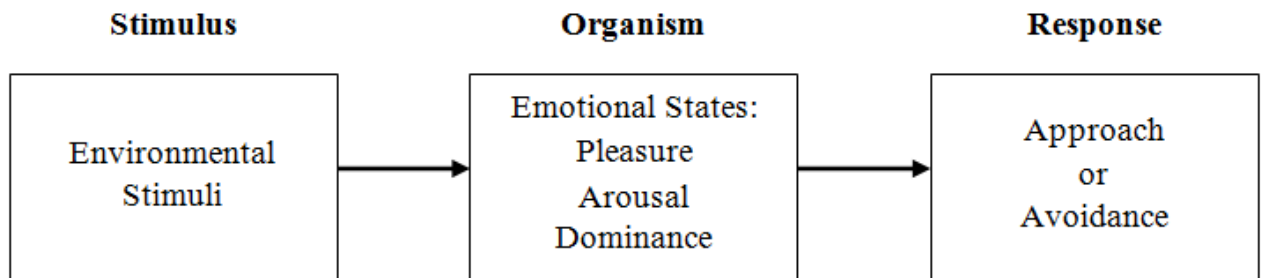


Figure 4: S-O-R framework (designed according to Mehrabian and Russell, 1974)

Russell and Mehrabian (1974) have postulated that the individuals respond to the environment by behaviours of approaching or behaviours of avoiding which are led by the emotional reactions (see Figure 4). These reactions are captured through three dimensions: the pleasure, the arousal and the domination (Russell and Mehrabian, 1974):

- The "pleasure" refers to a positive affective state felt by the individual to be separated from the positive reinforcement, liking, preference and approach-avoidance.
- The "Arousal" refers to a feeling state which varies along a single dimension, from sleep (it means without any feelings towards a context) to excitement.
- The "dominance" is based on the importance that an individual feels free to act in a variety of ways.

According to these three variables, Russell and Mehrabian (1974), have developed a measuring tool of the emotional response including eighteen items: the individuals are submitted to a situation X, and then has to score the items from 1 to 7. Russell and Mehrabian thought that all the emotional responses of individuals can be represented by these three factors (pleasure, arousal and domination), or by their combinations. The PAD (pleasure, arousal and domination) scale (see Figure 4) of Russell and Mehrabian (1974) is usually used to evaluate the emotional reactions to marketing and environmental stimuli. The model represents the affective and cognitive states and processes and it mediates the relationship between the stimuli and the behavioural responses of the individuals. It was then extended by

several marketing researchers such as Bitner (1992), Greenland and Golrick (1994), Botschen (1999), Krishna (2012).

According to Rieunier and Daucé (2002), the model of Bitner (1992) appears to be the most complete (see Figure 5). This framework suggests that the different dimensions of the environment are perceived by all the protagonists of the point of sale, who respond in cognitive, emotional and psychological ways to the atmosphere. These responses influence the behaviour in the place while affecting the interactions between and among the clients and the employees. In the following part, we will see the internal responses of the individual facing to the atmosphere of the selling point. The Bitner's model (1992) have been retaken by Krishna (2012) (see Figure 3) who has focused on the emotional and the cognitive reactions of the internal responses of the individuals.

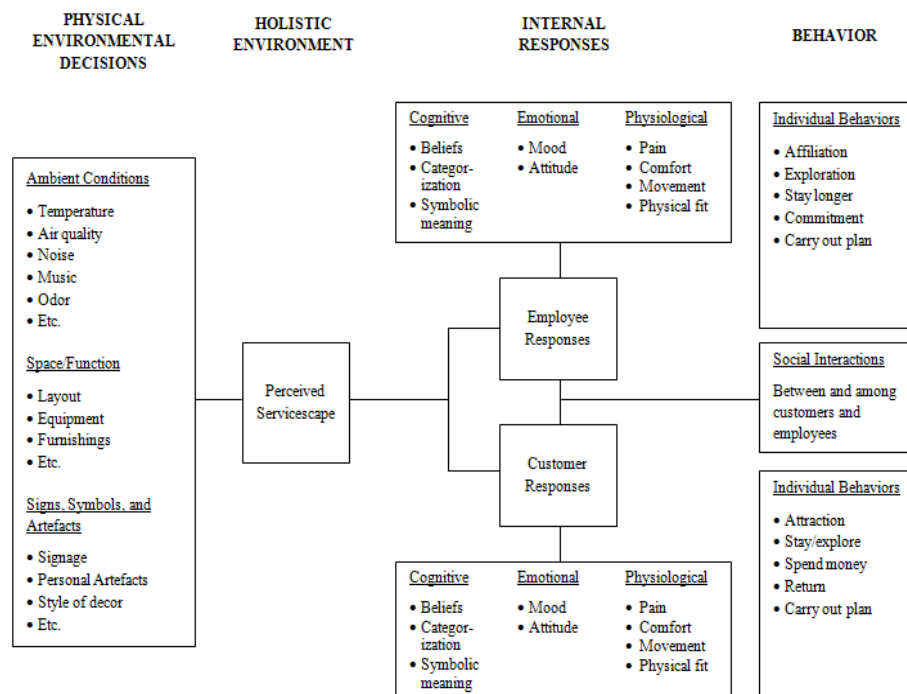


Figure 5: Framework for understanding environment-user relationships in service organisations (Bitner, 1992: 60)

2.4.1. The cognitive reactions to the atmosphere in the sensory marketing

The studies of the reactions of the consumers facing the atmosphere of a point of sale involved a lot of academic studies. These studies rely mostly on the SOR model (Stimulus, attraction - procedures in the Organism - Reaction, response of the organism - see Figure 4) developed by Mehrabian and Russell (1974): environmental stimuli induce the reaction and the influence of the consumer's behavioural response. In the classical S-O-R model (figure 4), the *stimulus* can be described as the factors which can affect the internal states of the individuals and which can induce an influence that stimulates

them. The *organism* induces the process between the environmental stimuli, and the reaction of the individual linked with these stimuli (i.e. the emotional activities, perceptual activities, etc.). The *response* refers to the final effect, the final decision of the consumer, which can be a behaviour of avoidance, or an approach behaviour (i.e. a positive action such as buying or spending time at the point of sale). In other words, the framework of the S-O-R model shows that the consumer perception of the atmosphere of the point of sale can impact the consumer internal response in a positive way. This positive internal response is expected to have an influence of pushing on the buying behaviour (Chang et al., 2011). The marketers are more and more aware of the fact that the atmospheric factors have a symbolic meaning which is able to strengthen the image, the reputation and the value of the point of sale. The major part of the companies in the world are not multinational companies with a strong marketing budget (especially about the commercial ads), that is why the atmosphere becomes an important choice in the business and marketing processes to satisfy the customers and to reach a positioning which is proper to the company.

When the customer is not able to evaluate the intrinsic quality of the products or is not able to refer to his past experiences with the product or the brand, he realises "inferences" from the extrinsic assets of the product (atmosphere) (Rieunier and Daucé, 2002). According to the inference theory, defined by Nisbett and Ross (1980), the customers use available information cues to evaluate the features of the product or the brand: in other words, the customer would base his evaluation about, for example, the quality (when there is a lack of information about it) on the atmospheric cues of the store (Zeithaml, 1988, Baker, 1994, 1998, 2002). Following on, Michon et al. (2003, 2005), have proved that the ambient scent (the olfactory stimulation), in a store context, influenced the perception of the quality of the product.

Also, the background music can change completely the behaviour of the customers and the way they evaluate the selling point. Indeed, the result of the research of Yalch and Spangenberg (1993) on the influence of the music on the purchasing behaviour showed that the perception of the quality of the store can depend on the category of music played. However, the study showed on the other hand that the music in a store does not interact with the gender of the customers, but affects the customer according to their age: indeed, middle-aged consumers (25-49 years old) tend to purchase more and to shop longer with a foreground music than with a background music. In contrary, older consumers (above 50 years old) tend to buy more and to shop longer with music played in the background (Yalck and Spangenberg, 1993). To go further, Caldwell and Hibbert (1999), have studied the influence of the tempo of music on the consumer behaviour: A slow music condition involves more time spent in the restaurant

than a fast music condition. In the study, it is shown that a customer eating under a slow tempo condition under-estimates the time he spends in a restaurant. In contrary, a fast tempo condition makes a customer over-estimating the time spent in a restaurant. Thus, the music in a point of sale has an influence on the amount of money that a customer spends there, but also an influence on the amount of time. The music is, then, a stimulus which influences the way of perception of the customer during his purchasing experience.

Moreover, the same phenomenon as the music happens with the atmospheric scents and visual effects: indeed, customers subjected to a pleasant smell have a better perception of the quality of the sold products and evaluate them in a positive way in a store; the perception of the product quality involves and influences, then, the pleasure of the purchasing experience (Chebat, Michon, 2003). Concerning the visual effects, the colour, for example, has an effect on the perception of the individual (Damhorst and Reed, 1986), but also on the way of evaluating a situation, a context (Garrett and Brooks, 1987). Thereby, Damhorst and Reed (1986) showed that usually a male individual (in the context of voting for top models) perceives a woman wearing dark clothes more competent, powerful and convincing than a woman wearing light clothes. In an operational way, thus, the inference reaction relative to the atmosphere is used over all the five senses.

According to Rieunier and Daucé (2002), the atmospheric factors (which are according to the authors: the tactile factors, the gustatory factors, the olfactory factors, the visual factors, the hearing factors, and the social factors) can also have a strong power of evocation regarding a country, a culture, a category of products, etc. Indeed, the sensations of an individual are memorised by the brain and associated with the context, the object or the experience that provoked it, and then, reactivated when facing to the same stimulus (Rieunier and Daucé, 2002). In other words, an exposition to the atmospheric factors can catch the attention of the customers towards a specific category of products. This is called the sensory memory: "it is the ability to retain impressions of sensory information after the original stimuli have ended"⁹. The atmosphere can also be evocative to a specific product. Indeed, North, Hargreaves and McKendrick (1999) have shown that according to the music broadcasted in the store, the customers can be guided to a certain category of product: for example, by broadcasting French music, the customers tend to head to the French wines instead of other wines. They showed that the origin of the music activates in the brain a stimulation linked to the country, and then influences the final choice of the customers. Usually, the memory, the evocation involved by the atmosphere, is used through the music or through scents at the point of sale and stresses the image and value of the brand.

⁹ source: www.human-memory.net

2.4.2. The emotional reaction to the atmosphere in the sensory marketing

Through the management of the atmosphere in the selling point, the brand often tries to increase the pleasure, the well-being and the stimulation of the customer (Rieunier and Daucé, 2002). According to the Bitner's model (1992), in Figure 5, two factors have a role in the emotional reaction of individuals: the mood and the attitude. According to Bitner (1992), the environment is the set of the tangible or intangible stimuli which influences the perception and the reaction of the individuals. The interaction among these stimuli creates a global atmosphere which would create an affective reaction in the customer's brain. Indeed, Russell and Mehrabian (1974) defined the emotional state as being a reaction that the individuals show while facing to the environment. The emotional response of employees and customers follows the PAD concept (Pleasure, Arousal and Domination) developed by Russell and Mehrabian (1974) (see Figure 4) to describe and to measure the emotional states according to the atmosphere and the environment.

Several studies have explored the effects of a specific dimension on the emotional reaction of the customers. Lemoine (2002) showed that the light influences the pleasure and the stimulation of the customer at the point of sale. The customers feel more dynamics and more nervous when facing to an unpleasant light while a pleasant lighting would involve a significant effect on the degree of happiness of the individual while visiting the point of sale. In the same idea, several studies, especially on the ambient music (ex: Alpert & Alpert, 1989, Bruner, 1990), have proved that the factors of atmosphere can influence the mood of individuals. The results of these studies showed that a store can influence the mood of the customer by broadcasting varied, dynamic and rhythmic music (Alpert & Alpert, 1989). These results highlighted as well that the management of the music is able to influence the pleasure felt by the customer (Sibénil, 1994). When the music broadcasted is pleasant for the customers, then, they are in a better mood (positive mood). Otherwise, the diffusion of the ambient scent has, as well, an impact on the pleasure felt by the customers in a selling point: some pleasant smells bring a favourable affective response, while if the customer faces to an unpleasant smell, he can feel dissatisfaction and a deterioration of his mood (Rieunier and Daucé, 2002).

Adopting the atmosphere in a holistic way, Lemoine and Plichon (2000) have shown that the pleasure felt by the customer at the point of sale and his stimulation state are influenced by the social environment and the design environment. The studies in psychology and sensory marketing fields have proved that the individuals react in a physiological way to the environmental stimuli: it can appear through the increasing of the heart rate, the sweating of the skin or even the increase of the muscle tension (Rieunier and Daucé, 2002). Lemoine (2002) showed that the combination of the music, the light-

ing and the layout of the store could have a positive impact on the satisfaction of the customers, his degree of gladness and his entertainment. The association between the music and the helpfulness of the staff would have an impact on the relaxation and the calmness of the consumer, and on his ability to feel full of energy.

2.5. A theoretical framework of the impact of the sensory marketing through the atmosphere on the consumer internal response

The theoretical review can help to create a theoretical framework of this thesis and to understand the main objective of it: how does the sensory marketing through the atmosphere (of the point of sale) impact the internal response of customer (both cognitive and emotional reactions). From the theoretical review, we can point out that the senses of individuals, the way they perceive and feel the atmosphere of the point of purchases, are stimulated by what Rieunier and Daucé (2002) called the "atmospheric factors". The synergy between the perception and the sensation is, in one way, what can define the sensory marketing field (Krishna, 2012). After that the sensory organs are stimulated, the brain of the individual will create an internal response, according to the way and the context he perceives these stimuli. The internal response is characterised by an emotional and/or a cognitive reactions which create a positive or negative positioning of the individual towards the brand or the product (Krishna, 2012). This positioning is important because it would define the positive or negative reaction that would follow the individual (avoidance or approaching reaction) (Russell and Mehrabian, 1974). The following figure 6 proposes a model based on the theoretical framework of the sensory marketing (figure 3) of Krishna (2012), the theoretical framework of the relationship between the environment and the customers Bitner (1992) (figure 5), and on the studies organised by Rieunier and Daucé about the sensory marketing and on the definition of the atmosphere of Eroglu and Machleit (1993) as "all the physical and nonphysical elements of a store that can be controlled in order to enhance (or restrain) the behaviours of its occupants, both customers and employees. These elements present a multitude of possibilities including ambient cues such as colour, smell, music, lighting, and textures, as well as architectural and artifactual elements" (Eroglu and Machleit, 1993 : 34). In other words, the atmosphere is composed of visual effects, olfactory effects and hearing effects.

Indeed, the atmospheric factors come right out from the research of Rieunier and Daucé concerning the atmosphere of the selling points. They described the atmospheric factors as the scent, vision, sound, taste and touch, and integrated all these factors in the sensory marketing process. Moreover, Eroglu and Machleit (1993) defined the atmosphere as a set of visual, olfactory and hearing effects. These atmospheric factors stimulate the sensory organs. The sensations (what the consumer feel through his sensory organs) and the perceptions (the transmission, the analysis, and the interpretation

of the sensation by the brain) derived from this stimulation are transmitted to the brain which analyses and translates them in order to produce an internal response of the individuals (Bitner, 1992 - Krishna, 2012).

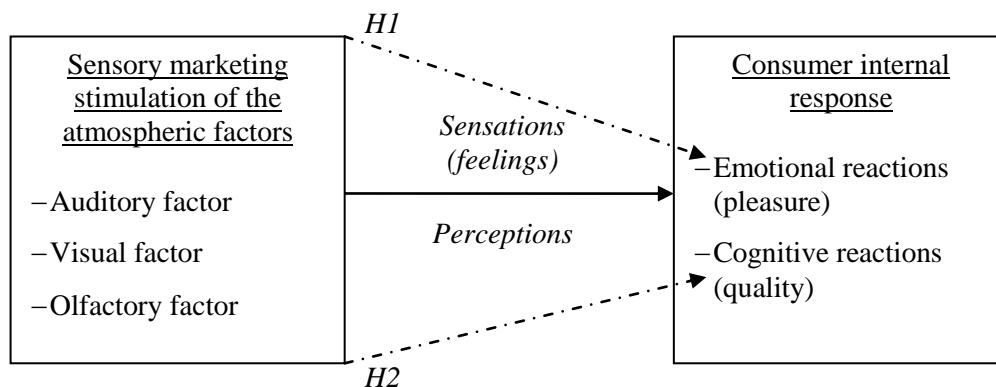


Figure 6: Theoretical framework of the impact of the sensory marketing through the atmosphere (at the point of sale) on the consumer internal response (Bitner, 1992: 60, Eroglu and Machleit, 1993: 34, Daucé and Rieunier, 2002: 45, Krishna, 2012: 4)

According to the conceptual framework of sensory marketing (figure 3) of Krishna (2012), this internal response is divided into two parts: the cognitive reaction (which can have an influence on the perception of the quality) and the emotional reaction (which can have an influence on the pleasure of the customer). To quote once again Krishna (2012), the sensory marketing is the “marketing that engages the consumers' senses and affects their perception, judgement and behaviour” (Krishna, 2012: 333). This main definition of the sensory marketing can verify the proposed theoretical framework of this thesis (figure 6): Indeed, the atmospheric factors are the vectors of the internal responses of the customers. These stimuli would affect the judgements, the behaviours, the attitudes, and even the experience they can have at the point of sale towards the pleasure the customer feel at the point of sale and the quality they perceive of it.

According to the theories concerning the sensory marketing and especially the role of the atmosphere at the point of sale on the internal response of consumers (see figure 6) that it has been explored, and the analysis and the results found by the researchers in the past studies, as well as the previous frameworks (Mehrabian and Russell, 1974, Bitner, 1992, Yalch and E. R. Spangenberg, 2000, Lindström, 2008, Krishna, 2012), some hypotheses can be built in correlation with the objective of this thesis.

First of all, as seen in the previous part (theoretical), the sensory marketing has an impact on the consumer behaviour, and especially on the willingness of purchase state of consumers. As Rieunier and Daucé argued, the atmosphere at the point of sale can totally change the attitude of the customers.

Some experiments made by researchers such as Hui and Dube (1997), showed that the atmospheric factors, and especially the music, can have a positive impact on the mood of behaviour. The music, and the sounds in general can stimulate the pleasure and the memory of individuals, which probably can result in a desire to buy more, or at least to spend more time at the point of sale. As seen in the theoretical part, the smell has a huge impact on the memory by touching the emotions that the customers have had in a past experience (pleasant or unpleasant). The researchers speak then about sensory memory (Lindstöm, 2005). The smell can induce a relaxing feeling, or can arouse a desire from the sensory memory. In general, according to the previous studies, all the researchers from the sensory marketing field agreed to say that the atmosphere (and the sensory marketing in general) influences the behaviour and the perceptions of the consumers. Krishna (2012), raised the fact that the stimulation of the customer by the atmosphere induces two categories of internal response: the cognitive reaction, and the emotional reaction. The emotional reaction can be define by the pleasure and the satisfaction felt by the customer through the stimulation of his sensory organs while the cognitive reaction rather falls into the topic of the quality perceived by the customer in the restaurant. From there, we can build two general hypotheses (represented in Figure 6) which will lead the empirical part of this thesis:

H1: The consumers feel more pleasure when their senses are stimulated by the atmospheric factors

H2: The consumers perceive a better quality of the point of sale when their senses are stimulated by the atmospheric factors

Through the theoretical framework (see figure 6) and the hypotheses built on the topic and the objectives of this thesis, but also on the idea generated through the figure 6, it has been organised a research on the field, about the internal responses of the international students concerning the stimuli of the restaurants in Lithuania.

3. METHODOLOGY OF THE EMPIRICAL RESEARCH OF THE IMPACT OF THE SENSORY MARKETING THROUGH THE ATMOSPHERE ON THE CONSUMER INTERNAL RESPONSE

This part aims to describe the different possibilities of approaches to answer, in an empirical way, to the research problem of this thesis (i.e. the influence of the atmosphere on the consumer internal response) and to choose the most efficient and relevant one. The research methods and the tools of the process of data collection will be presented below. The chosen method, then, will be discussed and argued. There are different ways and methods to handle the empirical research to analyse and to present the collected data in order to answer to the problem research, but only one method will be kept to guide this answer. The objective of this chapter is to help the research of this thesis to follow and to be guided by an organised research process which will give relevance, reliability and coherency to the empirical part analysis.

3.1. Research approach

To describe the trends, the characteristics and the reactions of the behaviour, etc., of a strategy, it is important, or even essential to collect and gather the data and information, to analyse it, in order to have a feedback and to improve or to understand the specific strategy. The research methodology induces three categories of questions: What to observe? Who to observe? How to observe?

3.1.1. What to observe: defining the problem

The formulation of the research problem of the empirical part will be done by respecting the goal of this thesis which is to observe and to understand the role of the atmosphere at the point of sales in the sensory marketing process, and more specifically, the role of the atmosphere at the selling point on the internal responses of consumers. Indeed, according to Rieunier and Daucé, the consumers react to the stimuli of the atmospheric factors (Scent, visual, touch, taste, sound). Krishna (2012) proposed a conceptual framework which includes the notion of perception and sensation in the sensory marketing process: indeed, the individuals would feel the atmospheric factors through the sensory organs (the sensations). These feelings or sensations should be transmitted to the brain through the notion of perception, which would produce an internal response: an emotional reaction or/and a cognitive reaction. All this process would define the behaviour and the attitude of the customers (Krishna, 2012). Based on the previous studies on the sensory marketing field, and especially on the reaction of the customers toward the sensory marketing stimuli (expressed through the atmosphere at the point of sales), a theoretical framework has been developed (figure 6). In fact, using the empirical research, the objective is, on one hand, to understand the place of the atmosphere in the sensory marketing process, and espe-

cially the internal response of the customer facing this process, and on the other hand to interpret and to understand if the studied sample is influenced by this phenomenon and uses it. In other words, the empirical research has the goal to verify the theoretical part and the theoretical framework proposed in Figure 6.

3.1.2. How to observe: the quantitative research method

Usually, there are two main groups for a research method: quantitative and qualitative. These two terms are widely used in business studies (in general) to make the difference between data collection techniques and data analysis procedure (Saunders et al., 2009). According to Saunders et al. (2009), the qualitative data are presented as being non-quantified and non-numerical. The main objective is to collect information thanks to observations and discussions of the studied subject. A qualitative approach helps to measure a quite small sample of views of individuals (customers) or companies or products, etc. and to collect information in depth, by exploring feelings, motivations, thoughts, purchase behaviour, etc.

The quantitative techniques are mainly used to specify the causality, usually between two or more variables. The qualitative method searches statistic results to point out the trends or frequencies. The objective is to standardise the data by collecting numerical information (Saunders et al. 2009) and to develop and use mathematical models, theories and/or hypothesis related to phenomena.

According to these facts, the primary data will be collected through the questionnaire method (quantitative method). Indeed, the questionnaire has the objective of observing, measuring, decoding, understanding and interpreting the behaviour and the opinions of the studied population or the studied sample, by comparing and quantifying them, to have a statistical inference. This method appears to be the most efficient in this thesis to have an overall perspective on the role of the atmosphere on the internal response of individuals. For practical reasons, it has been decided in this thesis to focus the research on the use of the atmosphere in the restaurants in Lithuania. Indeed, more or less every individuals have attended, in theory, at least one time in a restaurant. Furthermore, the restaurants implement different atmospheres to attract the customers. It appears to be one of the place the most efficient to realise the empirical research. The choice of Lithuania as location of the research has been chosen for practical reasons of the research control. Through the questionnaire (see the questionnaire in Annex), and the quantitative research method in general, the goal is to measure the trends of the representative sample of international students when they are going to restaurants in Lithuania, and to verify the validity of the two hypotheses (H1 and H2) arising from the theoretical framework represented in Figure 6.

Scientific articles, books, journals and previous studies such as shown in the theoretical part were mostly gathered and used as secondary data to support the primary data (collected through the questionnaire) to accomplish in a most efficient way the analysis process. The secondary data are used to have a global view of the sensory marketing and the atmosphere in the restaurants.

3.1.3. Who to observe: the sample

In the statistic field, the sample is a set of individual representing a population. The objective is to have a better knowledge of one or several populations or subpopulations. Using a sampling plan, usually, answers to practical constraints (such as lack of time, space, financial costs, etc.), prohibiting, or at least avoiding, the study of the whole population. According to Webster (1985), the sample is a small part of a statistical population. The features of this sample are studied to gain information about the whole population. Hawkins et al. (2004) argued the fact that, to select a sample in a survey of a research, there are different steps to realise it: the first two steps are to define the population (the customers who are targeted for the survey: users, potential users, purchaser, etc.) and to specify the frame of this population (the individuals who represent the whole population of interest). In the case of this thesis, the targeted population is the foreigners living in Lithuania and having already the opportunity to visit a restaurant. More specifically, the selected consumers are international students in Lithuania. The goal was to choose a population who can potentially have differences of cultures, and thus differences in the way of perceiving and reacting in front of the sensory marketing process. This difference of culture and perception allow gathering a general trend of international students. Then, the next step, according to Hawkins et al. (2004) consists of choosing a sampling method, which is either probability (it means by random system) or non-probability (non-random system). According to the fact that in this research the international students in Lithuania are aimed and in order to have a general trend of the influence of the atmosphere in the restaurants on this population (international students in Lithuania), the non-probability system appears to be the better one (for this thesis).

Fisher et al. (2007) gave a table allowing to estimate the size of the sample needed (see Table 1). According to the website Lietuva.lt, the international students in Lithuania represented 4 618 individuals in 2015¹⁰. By this context, and if we want to reach a 5 percent of margin error, the sample size should gather between 322 and 357 individuals (Fisher et al., 2007, see Table 1). The quantitative research through the questionnaire gathered 327 respondents (international students), in order to understand the general trend of the foreigners studying in Lithuania and visiting the restaurants.

¹⁰ Source: www.lietuva.lt

Table 1: Estimating margin of error on sample survey results (Fisher et al., 2007: 190)

<i>Population</i>	<i>Margin of error</i>			
	<i>5%</i>	<i>3%</i>	<i>2%</i>	<i>1%</i>
50	44	48	49	50
100	79	91	96	99
150	108	132	141	148
200	132	168	185	196
250	151	203	226	244
300	168	234	267	291
400	196	291	343	384
500	217	340	414	475
750	254	440	571	696
1,000	278	516	706	906
2,000	322	696	1,091	1,655
5,000	357	879	1,622	3,288
10,000	370	964	1,936	4,899
100,000	383	1,056	2,345	8,762
1,000,000	384	1,066	2,395	9,513
10,000,000	384	1,067	2,400	9,595

3.2. Data collection: the questionnaire design

In order to achieve the research, a questionnaire is used as a main tool of the empirical part. The survey is willingly short (twenty-three questions) to facilitate the work of the respondents and to obtain a maximum of completed questionnaires (indeed, the risk with a long questionnaire is that the respondents become indignant about it, and stop to answer at the half of the questionnaire). Therefore, having a short questionnaire can bring statistics more efficient and closer to the reality. The questionnaire was developed and transmitted to the respondents through internet network: More specifically, the creation of the questionnaire was made through the tool "*Google Form*"¹¹ and sent through the social networks from the 1st of April 2016 until the 26th of April 2016. Therefore, it can be characterised as "*e-questionnaire*".

The questionnaire starts with a short presentation in order to place the respondents in the context of this thesis, and to specify the objective of the research in order to motivate the students to answer. However, the objective of the thesis was not placed in this introduction, to avoid the fact that the re-

¹¹ <https://docs.google.com>

spondents could lead their answers according to this objective, which could distort the viability of the questionnaire. Also, in the introduction, it is specified that the questionnaire is anonymous and that there are not good and bad answers, to increase the openness of the respondents.

Later, the questions entered straight in the objective of the thesis and tried to define the internal response of the respondents through the atmosphere in general. Eroglu and Machleit (1993) defined the atmosphere of a point of sales as a set of visual factors, hearing factors and olfactory factors. From this definition, the following questions relate to these three factors so as to understand more specifically this phenomenon.

3.3. Data analysis tool

The data analysis is crucial for this thesis because it offers the chance to analyse, to interpret and to develop the theoretical studies made by the different researchers, as seen in the theoretical part. Usually, the selection of the tool to analyse the data depends on the type of data's collection such as quantitative or qualitative approaches. For examining the quantitative data collected through the questionnaire, it has been used SPSS software (Statistical Package for the Social Sciences): *IBM SPSS Statistics 23.0*. Through this tool, it has been created and developed different crosstabs or tables (such as frequency tables), in order to analyse and to answer to the main question of this thesis: how does the sensory marketing through the atmosphere (of the point of sale) impact the internal response of customer (cognitive and emotional reaction)?

Following statistical methods were used for the data analysis: the descriptive statistics (frequencies) were used to describe and discuss the characteristics of the sample; to explore the relationship between the variables, the non-parametric statistical technique was used (Chi-Square Test), and to know the strength of these relationships, the symmetric measures, and especially the Phi coefficients, were used.

3.4. Method reflection: reliability and validity

In a rough aspect, validity refers to the extent of which a survey measures what the researcher actually wish to measure (Blumberg et al., 2005). In this thesis, the validity is measured through the quantitative research. Saunders et al. (2009) divided the validity into three different categories:

- Construct validity: consists of ensuring that the research measurements are measuring what is intended to be measured
- Internal validity: is concerned with the demonstration of a causal relationship between two variables within the study

- External validity: describes the generalisation of the study and how applicable the findings are to other related settings or groups

The reliability refers to a measurement that supplies consistent results (Blumberg et al., 2005). According to Bryman et al. (2007) and Newman et al. (1998), there are three factors to consider to know if the data are reliable: the internal reliability, the inter-observer consistency, and the stability. In other words, the conducted survey should have the same results if it would be administrated again. Moreover, the questionnaire should be coherent all along it with relevant sections and items. Also, to be reliable, the researcher should not give any personal opinion, to keep an objective point of view and to have the necessary perspective for the data analysis.

Between the validity and the reliability, the validity appears to be more essential: if a research is not valid, it hardly matters if it is reliable. In other words, the conducted research needs to be valid to be able to answer to the research question and the objectives of the thesis, although the optimal situation would be to conduct a research which is both reliable and valid (Blumberg et al., 2005).

4. RESEARCH FINDINGS AND DISCUSSION OF THE EMPIRICAL RESEARCH OF THE IMPACT OF THE SENSORY MARKETING THROUGH THE ATMOSPHERE ON THE CONSUMER INTERNAL RESPONSE

In this part are analysed the results of the questionnaire. As mentioned in the Methodology Part, the questionnaire includes thirty-four questions to determine the role of the atmosphere in the sensory marketing process on the pleasure felt and on the quality perceived in the restaurants for the international students living in Lithuania (see the questionnaire in Annex). In other words, the objective of this questionnaire was to determine the impact on the internal response of international students/ customers in Lithuania. In order to make clearer the questionnaire for respondents, it has been divided into six parts: 1) the general information, 2) the general atmosphere, 3) the hearing cues, 4) the visual cues, 5) the olfactory cues, and 6) the profile of the respondents. The buying process becomes more and more important to better understand what are the factors that influence the consumer in his decision-making process and how marketers can offer to the consumer a unique and memorable experience through this process (Bettman et al., 2008). The consumer's affective and internal response can often be the consequence of some factors that are out of the consumer's brand awareness and the consumer's consciousness (Solomon et al., 2010).

4.1. Information about the respondents

The questionnaire has been delivered toward 327 International students living in Lithuania. This has been possible thanks to the fact that the questionnaire was online (through Google Drive) and was delivered through the social networks, especially the groups gathering international students network in Lithuania and Erasmus Students Network in Lithuania (ESN). Indeed, according to Bryman and Bell (2007), the bigger the sample size is, the stronger and the greater the precision will be.

Table 2: Gender of individuals

Genders	Frequency	Percent	Valid Percent	Cumulative Percent
Male	203	62,1	62,1	62,1
Female	124	37,9	37,9	100,0
Total	327	100,0	100,0	

First of all, the sample gathers 203 males and 124 females, it means 62.1 percent of men and 37.9 percent of women (see Table 2), mainly aged between 22 and 25 years old (see Table 3). While distributing the questionnaires, it has been only asked to individuals who already have visited in restaurants in Lithuania to answer. Thus, all the information collected in the survey correspond to interna-

tional students living in Lithuania and who already have visited in restaurants in Lithuania, as they represented the target of this research.

Table 3: The age of the respondents according to the gender

Genders	age of individuals			Total
	21 years old and less	from 22 to 25 years old	26 years old and more	
Male	59	115	29	203
Female	40	78	6	124
Total	99	193	35	327

It is important to specify that the main part of the data have been collected through international students in Vilnius and in Kaunas. Then, the sample is representative only from these two cities. It is also interesting to notice that the respondents are from thirty-two different countries including France (24.2 percent), Spain (17.1 percent), India (10.1 percent), Italy (8.0 percent) or Turkey (4.9 percent). The fact to know the origin of the respondents would be interesting to understand and to have an overview of the role of the atmosphere in the restaurant.

Table 4: Average amount of incomes

Average amount of incomes	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 150€	80	24,5	24,5	24,5
From 151€ to 500€	183	56,0	56,0	80,4
More than 501€	64	19,6	19,6	100,0
Total	327	100,0	100,0	

Table 5: Frequency of visiting the restaurants

Frequency of restaurants	Frequency	Percent	Valid Percent	Cumulative Percent
2 times and less	177	54,1	54,1	54,1
Between 3 and 6 times	130	39,8	39,8	93,9
More than 6 times	20	6,1	6,1	100,0
Total	327	100,0	100,0	

As shown in Table 4, 56 percent of the sample have an income per month between 151 Euros and 500 Euros. Also, we can notice that 54.1 percent of the sample goes in a restaurant between two times and less per week (which represents the main part of the sample), and 39.8 percent goes between

three and six times in a restaurant per week (see Table 5). Over 73 percent of the sample spends between 6 and 15 Euros each time they are going to a restaurant (see Table 6).

Table 6: Money spent in the restaurant each time

Money spent in the restaurant	Frequency	Percent	Valid Percent	Cumulative Percent
5€ and less	55	16,8	16,8	16,8
Between 6€ and 15€	238	72,8	72,8	89,6
More than 16€	34	10,4	10,4	100,0
Total	327	100,0	100,0	

According to the data collected in the survey, each factor presented in Table 7 has an impact more or less important on the consumer behaviour while entering in a restaurant. However, the importance of these factors varies greatly according to the respondents. The survey has shown that the most important factor the individuals are sensitive to is the atmosphere in general (39.1 percent of the respondents crossed this factor). Table 7 is interesting because it shows that the respondents are more sensitive to the atmosphere in general of the restaurant than the price or the taste for example. It means that, as has shown the different studies in the theoretical part, the atmosphere of the restaurants has a greater impact on the behaviour of consumers than other factors.

Table 7: Main sensitive factor while entering in restaurant

Main sensitive factor	Frequency	Percent	Valid Percent	Cumulative Percent
The taste	96	29,4	29,4	29,4
The atmosphere in general (music, smell, etc.)	128	39,1	39,1	68,5
The price	76	23,2	23,2	91,7
The location	12	3,7	3,7	95,4
The layout	15	4,6	4,6	100,0
Total	327	100,0	100,0	

Table 8 shows the proportion of stimulation through the smell, the music and the visual effects of the restaurants. 64.5 percent of the respondents assured that the smell stimulates them while entering in a restaurant. 60.5 percent approved the fact that the music stimulates them when they enter in a restaurant, and 76.8 percent for the design and 61.4 percent for the colours. It appears, therefore, that the design is the most important factor of attraction for the respondents. It joins then the theory of Lindström (2005): the author found out that the sight is the most seductive sense over the others and the oldest and the most used in the marketing field. According to Jayakrishnan (2013), 80 percent of the com-

mercial communication is delivered through this sense. The visual effects represent 80 percent of the information transmitted through the sensory organs, which makes this sense the most important in the business and communication process (Jayakrishnan, 2013).

Table 8: The influence of the atmospheric factors in the restaurants

Attraction	Frequencies (%)			
	Always	Sometimes	Never	Without opinion
Smell	32.7	31.8	12.2	23.2
Music	32.1	28.4	18.3	21.1
Design	57.8	19.0	8.9	14.4
Colours	32.7	28.4	19.6	19.3

Table 9: the proportion of the importance of the features of the restaurants

Features of the restaurants	Frequency	Percent	Valid Percent	Cumulative Percent
The colour of the restaurant	26	8,0	8,0	8,0
The scent of the restaurant	26	8,0	8,0	15,9
The taste in the restaurant	195	59,6	59,6	75,5
The music in the restaurant	14	4,3	4,3	79,8
The layout of the restaurant	66	20,2	20,2	100,0
Total	327	100,0	100,0	

Therefore, it is not surprising to notice in Table 9, that the visual cues (layout and colour of the restaurant) are ranked second (8 percent for the colour and 20.2 percent for the layout) after the tasting cues when respondents are asked to choose the most important feature of a restaurant. Indeed, the taste representing the main business of the restaurants, it is totally reasonable to see that the proportion of respondents approving it as the most important feature of a restaurant, reaches 59.6 percent.

The previous data about the general information and the general behaviours of respondents highlighted the validity of the survey by considering that through the consequent numbers of respondents (327 respondents), the collected data correspond to the exact targeted purpose of this thesis, by linking the restaurants in Lithuania, the behaviour of the respondents and the atmosphere of these restaurants.

4.2. Findings and discussion

In this part, the results will be analysed, commented and discussed in order to link it with the theoretical part and the theoretical framework (see figure 6), to assess to the validity of the two hypotheses. As we have seen in the theoretical part, the emotional response of the customers can be translated through the dimension of the pleasure (Rieunier and Daucé, 2002, Lemoine, 2002) and the cognitive response through the dimension of the quality (Yalch and Spangenberg (1993), Michon (2003, 2005)). The hypothesis 1 (H1: The consumers feel more pleasure when their senses are stimulated by the atmospheric factors) and the hypothesis 2 (H2: The consumers perceive a better quality of the point of sales when their senses are stimulated by the atmospheric factors) have been divided into four parts in order to collect a maximum of relevant information to answer to the purpose of this thesis: the atmosphere cues in general (including the different atmospheric factors involved in the restaurant), and more particularly, the sound cues, the visual cues and the olfactory cues. thirty-four questions have been asked to the respondents. These questions aim to compare the different atmospheric factors involved in the restaurants in Lithuania to have an overview and to draw the trends of the perception of the quality and the feeling of pleasure through the atmospheric factors.

4.2.1. The impact of the atmosphere in general on the consumer internal response (emotional and cognitive reactions)

The emotional reaction (pleasure) facing to the atmospheric cues

The atmosphere, as described by Kotler (1973), Rieunier and Daucé (2002) or Krishna (2010), has an influence on the emotional response of the consumer (see figure 3) which would be translated through the attitude or the behaviour of the consumers.

Table 10: Pleasure and satisfaction caused by the atmosphere inside a restaurant

Atmosphere as vector of Pleasure and Satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	263	80,4	80,4	80,4
No	33	10,1	10,1	90,5
Without opinion	31	9,5	9,5	100,0
Total	327	100,0	100,0	

According to Table 10, 80.4 percent of the respondents declared that the pleasure is induced by the atmosphere inside the restaurant. It appears that the consumers feel more pleasure when they are facing to atmospheric cues. Also, while the respondents are asked if the atmosphere affects more the

pleasure they experience inside or the quality they perceive, 52.9 percent answered in favour of the pleasure, against 43.1 percent for the quality (4 percent without opinion).

To go further, it has been analysed if a relationship existed between the main factor the respondents are sensitive to while entering in a restaurant, and the pleasure they feel because of the atmosphere. Therefore, we can set two hypotheses h_0 and h_1 :

- h_0 : there is not any relationship between the proportion of respondents who feel pleasure through the atmosphere and the factors they are sensitive to while entering in a restaurant.
- h_1 : there is a relationship between the proportion of respondents who feel pleasure through the atmosphere and the factors they are sensitive to while entering in a restaurant. In other words, the pleasure felt through the atmosphere depends on the fact that the atmosphere stimulates them while entering in the restaurant, and thus that the pleasure is the cause that the atmosphere stimulates the respondent to enter in the restaurant.

Table 11: Cross tabulation of the main sensitive factor while entering in a restaurant and the fact that the pleasure is caused by the atmosphere in the restaurant

Main sensitive factor while entering in restaurant	pleasure and satisfaction caused by the atmosphere inside			Total
	Yes	No	Without opinion	
The taste	69	13	14	96
The atmosphere in general (music, smell, etc.)	115	6	7	128
The price	56	12	8	76
The location	12	0	0	12
The layout	11	2	2	15
Total	263	33	31	327

Table 12: Chi-Square test of the main sensitive factor while entering in a restaurant and the fact that the pleasure is caused by the atmosphere in the restaurant

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18,298 ^a	8	,019
Likelihood Ratio	21,031	8	,007
Linear-by-Linear Association	,618	1	,432
N of Valid Cases	327		

a. 4 cells (26,7 percent) have expected count less than 5. The minimum expected count is 1,14.

The Chi-square test allows understanding if it exists a significant link between the two variables "main sensitive factor" and "pleasure caused by atmosphere". The value of the Chi-Square is about

18.298 and the asymptotic significance (= p) about 0.019 (see Table 12). The p-value being less than 0.05 (the value of the statistical signification), we can reject H_0 and we can confirm H_1 : there is a significant relationship between what respondents choose as main factors and their answer about the pleasure caused by the atmosphere. We can then deduce that a link exists between the fact that the atmosphere attracts them in the restaurant and the fact that they feel pleasure inside because of it.

Table 13: Symmetric measures of the main sensitive factor and the pleasure caused by the atmosphere

Symmetric measures	Value	Approximate Significance
Phi	,237	,019
Cramer's V	,167	,019
N of Valid Cases	327	

The association measures (Phi and Cramer's V) indicate the strength of the relationship between the two variables (see Table 13). The Phi statistic has a value of 0.237 (out of a maximum value of 1) which means that the relationship between these two variables has a medium strength. Therefore, the relationship between the main factor the respondents are sensitive to and the variable "pleasure caused by the atmosphere" is significant, but with a medium strength.

The cognitive reaction (quality) facing to the atmospheric cues

If the customer is not able to evaluate the intrinsic quality of the products or is not able to refer to his past experiences with the product or the brand, he realises what is called "inferences" (see theoretical part - 2.4.1: The cognitive reactions to the atmosphere in the sensory marketing) from the extrinsic assets of the product, it means the atmosphere (Rieunier and Daucé, 2002). In other words, the customer uses the atmospheric information to evaluate the product (for example the quality of it).

Table 14: The atmosphere of the restaurant affects the perception of the quality of the restaurant

Atmosphere as vector of the perception of the quality	Frequency	Percent	Valid Percent	Cumulative Percent
Always	236	72,2	72,2	72,2
Sometimes	77	23,5	23,5	95,7
Never	2	,6	,6	96,3
Without opinion	12	3,7	3,7	100,0
Total	327	100,0	100,0	

Table 14 shows the proportion of the answers of the respondents. It has been asked if the atmosphere of a restaurant affects the perception of the quality of it. There is a large majority of respondents answering that it happens always (72.2 percent of the respondents) and 23.5 percent answering that it sometimes happens (against 0.6 percent saying that it never happens).

With the same objective than previously, a Chi-Square test has been used to understand if a relationship existed between the variable "main sensitive factor" and the fact that the atmosphere affects the perception of the quality. For the well-being of this test, the variable "atmosphere perception quality" has been recoded.

Table 15: Chi-Square test of the main sensitive factor while entering in a restaurant and the fact that the atmosphere affects the perception of the quality

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,128 ^a	8	,421
Likelihood Ratio	8,934	8	,348
Linear-by-Linear Association	3,778	1	,052
N of Valid Cases	327		

a. 10 cells (66,7 percent) have expected count less than 5. The minimum expected count is ,07.

The value of the Chi-Square test (see Table 15) is about 8.128 and the p-value about 0.421. This value being above the statistical signification's value (0.05), we have to accept the null hypothesis and to conclude that there is not any relationship between the main sensitive factor of the respondents while entering in the restaurants, and the fact that that the atmosphere affects the perception of the quality.

To well understand the role of the atmosphere in the cognitive reaction of the customers, and especially in the perception of the quality, the atmospheric factors have been divided and analysed through the different senses (hearing, visual and olfactory) related to the atmosphere in a restaurant.

Discussion of the impact of the atmosphere in general on the consumer internal response

Through the data collected, we can see that the atmosphere has an important role in the stimulation of the consumer and on the changing of state toward a product, a context or a place. In the case of this study, the place is the restaurants in Lithuania. Indeed, this is the opinion of a main part of the sample when they are asked if the pleasure and the satisfaction are caused by the atmosphere in the restaurant, 80.4 percent agreed and only 10.1 percent disagreed (9.5 percent without opinion), see Ta-

ble 10. Concerning the cognitive reactions of the respondents, a large majority of them (95.7 percent) affirmed that the atmosphere of the restaurant affected the perception of the quality (72.2 percent always, 23.5 percent sometimes), see Table 14. These findings are in correlation with the definition of the sensory marketing of Rieunier and Daucé (2002), who defined it as the factors of atmosphere that arouse the affective, cognitive and behavioural reactions of the customers in order to realise the purchase act. The atmosphere has a strong evocative power. The sensory factors that the customers experience in a restaurant are directly derived from his past experience: the feelings and the perceptions of the individuals are memorised and then reactivated when the customers are facing to the same stimuli (Daucé and Rieunier, 2002). Indeed, the idea of the sensory marketing, and more specifically the idea of the atmosphere, is not to be restricted only on the characterisation of the product itself (such as the price) to create an experience for the consumer and to create therefore a competitive advantage for the company (Kotler, 1973). The findings showed that the atmosphere has an influence on the cognitive and emotional reactions of the respondents. But what would be the results if more precisely the atmospheric factors are analysed. As the theoretical analysis showed, the atmosphere can be composed of "ambient cues such as colour, smell, music, lighting, and textures, as well as architectural and artificial elements" (Eroglu and Machleit, 1993: 34). In other words, the atmosphere can be summarised as the visual cues, the olfactory cues and the auditory cues. The following findings have been analysed according to this definition.

4.2.2. The impact of the hearing cues on the consumer internal response (emotional and cognitive reactions)

The emotional reaction (pleasure) facing to the hearing cues

Concerning the hearing cues, 40.4 percent of the respondents declared that the music influences sometimes their consumption while eating, and 20.5 percent declared that it always happens. Furthermore, 71.6 percent of the respondents agreed with the fact that the music influences positively the time they spend in a restaurant. These two variables have joined the statements of Tom (1990) and Caldwell and Hibbert (1999) by saying that the role of the music in the purchasing process is effective in the business process: the music affects the quantity of purchase and the time that the consumer spends in the selling point. Moreover, 60.5 percent of the respondents agreed on the fact that the music attracts them to enter in a restaurant (see Table 8), including 32.1 percent who claimed that it always happens, which mean that the music has a strong power of evocation and attraction.

Is there any relationship between the fact that respondents enter in a restaurant because of the music, and the fact that the music affects positively their mood and then their pleasure they experiment

inside the restaurant? To use the Chi-square test, the variables have been recoded in order to have two nominal variables. Therefore, we can set two hypotheses of research:

- h0: there is not any relationship between the fact that respondents enter in a restaurant because of the music, and the fact that the music affects positively their mood and then their pleasure they experiment inside the restaurant
- h1: there is a significant relationship between the fact that respondents enter in a restaurant because of the music, and the fact that the music affects positively their mood and then their pleasure they experiment inside the restaurant. In other words, the variables are dependents each other (The music affect positively the mood of the respondents because the music attracts them).

Table 16: Chi-Square Test between the fact that respondents enter in a restaurant because of the music and the fact that the music affects positively their mood/ pleasure they experiment in the restaurant

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25,858 ^a	4	,000
Likelihood Ratio	29,993	4	,000
Linear-by-Linear Association	1,367	1	,242
N of Valid Cases	327		

a. 2 cells (22,2 percent) have expected count less than 5. The minimum expected count is 2,39.

Thanks to Table 16, we can notice that the Chi-Square value is about 25.858 and the p-value about 0.000. The p-value being less than 0.05 (the value of the statistical significance), h0 can be rejected and h1 is confirmed: there is a significant relationship between the fact that respondents enter in a restaurant because of the music, and the fact that the music affects positively their mood and then their pleasure they experiment inside the restaurant.

Table 17: Symmetric Measures between the fact that respondents enter in a restaurant because of the music and the fact that the music affects positively their mood/ pleasure they experiment in the restaurant

Symmetric measures	Value	Approximate Significance
Phi	,281	,000
Cramer's V	,199	,000
N of Valid Cases	327	

The association measures (Phi and Cramer's V) indicate the strength of this relationship between the two variables (see Table 17). The phi statistic having a value of 0.281, we can conclude that the relationship between the fact that respondents enter in a restaurant because of the music, and the fact

that the music affects positively their mood and then their pleasure they experiment inside the restaurant has a medium strength. In other words, the pleasure that the respondents feel inside the restaurant is linked (depends on) the attraction of the hearing cues.

Table 18: The effect of the music in the restaurant

The effect of the music in the restaurants	Frequency	Percent	Valid Percent	Cumulative Percent
The pleasure you experience inside	239	73,1	73,1	73,1
your perception of the quality of the restaurant	60	18,3	18,3	91,4
None	28	8,6	8,6	100,0
Total	327	100,0	100,0	

According to Table 18, and according to the data collected from the respondents, 73.1 percent declared that the music inside a restaurant is favourable to the pleasure they experience inside while 18.3 percent declared that the music influences more the perception of the quality of the restaurants. Table 18 confirms then that the consumers feel more pleasure when they are facing to hearing cues.

The cognitive reaction (quality) facing to the hearing cues

It has been asked to the respondents to choose one category of music between four (relaxing music, soft music with slow tempo, swinging music with fast tempo, or modern/radio music) which is the most appropriated for a daily restaurant, and later for a gastronomic restaurant (see Table 19).

Table 19: Proportion of types of music according to the categories of restaurants

types of music	Proportions (percentages)	
	Daily Restaurants	Gastronomic restaurants
Relaxing music	16.8	43.1
Soft music with slow tempo	39.1	47.7
Swinging music with fast tempo	11.9	4.3
Modern/Radio music	32.1	4.9
Total	100	100

It has been pointed out that the proportion of respondent describing the soft music with slow tempo as a category of music the most adapted for both gastronomic (47.7 percent) and daily restaurants (39.1 percent) is more important than for others categories. However, if the main part of the respondents prefers relaxing music or soft tempo for a gastronomic restaurant (90.8 percent in total), the soft tempo and the modern music seem to be the most adapted for a daily restaurant. This Table 19

shows that there is a difference of influence according to the category of music. But do these types of music define the quality of the restaurant?

Table 20: The types of music played in a restaurant defines the quality of this restaurant

type of music defines the quality	Frequency	Percent	Valid Percent	Cumulative Percent
I totally agree	35	10,7	10,7	10,7
I rather agree	122	37,3	37,3	48,0
I rather disagree	51	15,6	15,6	93,3
I totally disagree	22	6,7	6,7	100,0
Without opinion	97	29,7	29,7	77,7
Total	327	100,0	100,0	

Only 48 percent of the respondents agreed with the fact that the category of music played in a restaurant defines the quality of this restaurant (see Table 20). Although, the results of the research of Yalch and Spangenberg (1993) on the influence of the music on the purchasing behaviour showed that the perception of the quality of the store can depend on the type of the music played. Then, how to explain this gap? Then, if the category of music does not influence the perception the respondents have about the quality of the restaurants, according to them, does the music in general influence it?

Table 21: The music in the restaurants affects the perception of the quality

The music in the restaurant as vector of perception of the quality	Frequency	Percent	Valid Percent	Cumulative Percent
I totally agree	39	11,9	11,9	11,9
I rather agree	149	45,6	45,6	57,5
I rather disagree	31	9,5	9,5	98,8
I totally disagree	4	1,2	1,2	100,0
Without opinion	104	31,8	31,8	89,3
Total	327	100,0	100,0	

Here again, the respondents are moderately agreed because "only" 57.5 percent of them approved that the music in general influences their perception of the quality (see Table 21). However, according to the huge amount of answers "without opinion" we can consider that the main part of the respondents agreed with this statement.

To go further, it has been analysed, through the Chi-Square test, if there is any relationship between the fact that respondents enter in a restaurant because of the music, and the fact that a pleasant music affects positively the perception of the quality.

Table 22: Chi-Square test between the fact that respondents enter in a restaurant because of the music and the fact that a pleasant music affects positively their perception of the quality of the restaurant

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18,088 ^a	4	,001
Likelihood Ratio	16,766	4	,002
Linear-by-Linear Association	6,396	1	,011
N of Valid Cases	327		

a. 0 cells (0,0 percent) have expected count less than 5. The minimum expected count is 6,42.

Thanks to Table 22, we can notice that the Chi-Square value is about 18.088 and the p-value about 0.001. The p-value being less than 0.05 (the value of the statistical significance), the null hypothesis can be rejected and we can conclude that there is a significant relationship between the fact that respondents enter in a restaurant because of the music, and the fact that a pleasant music affects the perception of the quality of the respondents in the restaurant.

Table 23: Symmetric Measures between the fact that respondents enter in a restaurant because of the music and the fact that a pleasant music affects positively their perception of the quality of the restaurant

Symmetric Measures	Value	Approximate Significance
Phi	,235	,001
Cramer's V	,166	,001
N of Valid Cases	327	

The association measures (Phi and Cramer's V) indicate the strength of this relationship between the two variables (see Table 23). The phi statistic having a value of 0.235, we can conclude that the relationship between the fact that respondents enter in a restaurant because of the music, and the fact that a pleasant music affects positively the perception of the quality of the respondents has a medium magnitude. In other words, the quality that the respondents perceive inside the restaurant is linked (depends on) the attraction of the hearing cues, but this relationship is medium.

Finally, if the respondents asserted that the music in a restaurant affects more the pleasure they experience inside (73.1 percent) than the perception of the quality of the restaurant (18.3 percent) (see

Table 18), we cannot avoid the power of the influence of the music. Indeed, the results of the research led by North et al. (1999) showing that the music broadcasted in a store can guide the customer to a certain category of product (when French music was broadcasted, customers tended to head to the French wines) proved that the music influences not only the behaviour of the customer but uses to influence the unconsciousness of the customers, their memories and their past experiences. In one word, the music is able to influence their private zone.

Discussion of the impact of the hearing cues on the consumer internal response

The collected data tend to highlight that the music plays a role in the sensory marketing strategy and the atmosphere of the point of sales. However, this role is not huge: indeed, if the previous studies (North et al., 1999 ; Tom, 1990 ; Caldwell and Hibbert, 1999) have shown that the music can literally change the behaviour of the consumer by touching to the unconsciousness of the individuals and their memory and past experiences, the results of the questionnaire has shown that the impact of the music on the internal response is not the main factor of stimulation for the respondents (only 4.3 percent of the respondents situated the music as the most important feature of a restaurant, far away the taste which represents 59.6 percent). One of the reasons of this lack of involvement for the music can be explained by Elder (2010): indeed, the author raised the possible risk that there is a confusion in the perception and the sensation of the customers, between the pleasure felt by the consumers and the perception of the quality, and the familiarity of the music or category of music. Elder (2010) highlighted the fact that the impact of the music on the internal response of the customer can be partially explained by the familiarity that the customers have with the music: the results of the experiment of North, Hargreaves and McKendrick (1999) on the impact of the music on the consumer behaviour while he is purchasing (with a French music the consumers tended to head to the French wine) can be explained by the reputation of French culture on the consumer's behaviour. Despite the lack of involvement of the respondents in the sensory stimulation of the music, it can impact on their perception of the quality and the pleasure felt in the restaurant (the respondents tend to agree that the music plays more on the pleasure than on the quality). Indeed, Tom (1990) proved that the music influences the mood of the consumers and their behaviour while purchasing. However, the respondent may not be aware of the real impact of the music on their internal response, which can explain their answers while asking what is the main feature of a restaurant. It can be good to remember that 60.5 percent of the respondents said that the music can attract them to a restaurant. Probably the explanation of the "main feature issue" is that they do not think about the music as the first and main feature of a restaurant.

4.2.3. The impact of the visual cues on the consumer internal response (emotional and cognitive reactions)

The emotional reaction (pleasure) facing to the visual cues

Concerning the visual cues, 68.5 percent of the respondents declared that the music influences their consumption while eating, including 32.1 percent of the respondents who declared that it always happens. Moreover, 71.6 percent of the respondents agreed with the fact that the music influences positively the time they spend in a restaurant. Moreover, according to Table 9, the visual effects (both the layout and the colours) are considered as important features of the restaurant: 92 percent of the respondents consider them as the most important (26 percent the colour of the restaurant, 66 percent the layout of the restaurant). Also, while asking if the visual effects stimulate them to enter in a restaurant, 76.8 percent of the respondents agreed concerning the design and 61.1 percent agreed concerning the colours (see Table 8).

Table 24 shows the answers of the respondents concerning the fact that the visual cues affect more the pleasure they experience in the restaurant or the perception of the quality of the restaurant. The percentage of the answers is almost the same for the two propositions (46.5 percent of the answers due to the pleasure and 40.7 percent due to the quality), even if the statement concerning the pleasure gathers 19 agreements more than the one concerning the quality.

Table 24: The effect of the visual cues

The effect of the visual cues	Frequency	Percent	Valid Percent	Cumulative Percent
The pleasure you experience inside	152	46,5	46,5	46,5
your perception of the quality of the restaurant	133	40,7	40,7	87,2
None	42	12,8	12,8	100,0
Total	327	100,0	100,0	

Lemoine (2002) showed that the light influences the pleasure and the stimulation of the customer at the point of sale. Wolfe et al. (2006) stood on the fact that all the vision is about lights because the colours are only distributions and divisions of different wavelengths which are analysed by the proper visual system of each human. According to the previous analyse, we can agree on the fact that the visual cues stimulate the pleasure of the consumers in a restaurant.

The cognitive reaction (quality) facing to the visual cues

In the questionnaire, it has been asked to the respondents to choose one or more colours that can be appropriated for a gastronomic restaurant. The respondents had to choose between several colours such as the Blue, the Green, etc. The goal of the question was to make them thinking if a relationship existed between the colours and the perception of the quality of the restaurants. Indeed, according to Damhorst and Reed (1986), the visual effects, and especially the colours, have an effect on the perception of the customers (such as the perception of the quality).

Table 25: The colours in a restaurant define the quality of this restaurant

The colours define the quality	Frequency	Percent	Valid Percent	Cumulative Percent
I totally agree	0	0	0	0
I rather agree	97	29,7	29,7	29,7
I rather disagree	74	22,6	22,6	84,1
I totally disagree	52	15,9	15,9	100,0
Without opinion	104	31,8	31,8	61,5
Total	327	100,0	100,0	

Table 25 tends to demonstrate if the colours have a role in the definition of the quality of the restaurant. Surprisingly, none of the 327 respondents answered that they totally agreed with this statement, and only 29.7 percent rather agreed with this statement (see Table 25).

Is there any relationship between the choice in the most important feature of the restaurants by the respondents and the fact that the colour defines the quality of the restaurants? To analyse this question, the variables have been recoded into categorical variables in order to use the Chi-Square test. Two hypotheses of research have been set:

- h0: there is not any relationship between the choice in the most important feature of the restaurants by the respondents and the fact that the colour defines the quality of the restaurants.
- h1: there is a significant relationship between the choice in the most important feature of the restaurants by the respondents and the fact that the colour defines the quality of the restaurants.

Table 26: Chi-Square Test - the most important feature of the restaurant and the colour defining the quality of the restaurant

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7,024 ^a	4	,135
Likelihood Ratio	6,825	4	,145
Linear-by-Linear Association	,289	1	,591
N of Valid Cases	327		

a. 0 cells (0,0 percent) have expected count less than 5. The minimum expected count is 5,39.

The Chi-Square test allows understanding if a significant link between the two variables exists. Thus, the asymptotic significance of the Chi-Square has a value of 0.135 (see Table 26), which is above the statistical significance value (0.05). Therefore, the null hypothesis is confirmed: there is not any relationship between the choice in the most important feature of the restaurants by the respondents and the fact that the colour defines the quality of the restaurants.

To go further, we will study the integration of the stimulation of the colour of the cognitive reaction of the respondents: indeed, we will analyse if a relationship exists between the stimulation of the respondents by the colours and the fact that they agree that the colour defines the quality of the restaurants. Thus, two hypotheses of research have been set:

- h0: there is not any relationship between the stimulation of the colours while entering in the restaurant and the fact that the colours define the quality of the restaurants.
- h1: there is a significant relationship between the stimulation of the colours while entering in the restaurant and the fact that the colours define the quality of the restaurants.

Table 27: Chi-Square Test between the stimulation of the respondents by the colours and the fact that the colour defines the quality of the restaurants

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12,741 ^a	2	,002
Likelihood Ratio	12,656	2	,002
Linear-by-Linear Association	8,848	1	,003
N of Valid Cases	327		

a. 0 cells (0,0 percent) have expected count less than 5. The minimum expected count is 24,28.

The Chi-Square, represented in Table 27, has a value of 12.741 and the Sig's value is about 0.002, which is below the value of the statistical significance (0.05). In that case, h0 is rejected while h1 is confirmed. Therefore, there is a significant relationship between the stimulation of the colours while entering in the restaurant and the fact that the colours define the quality of the restaurants. In

other words, the cognitive reaction concerning the colour of the respondents is due to the stimulation of the colour cues when they are entering in a restaurant.

Table 28: Symmetric Measures between the stimulation of the respondents by the colours and the fact that the colour defines the quality of the restaurants

Symmetric measures	Value	Approximate Significance
Phi	,197	,002
Cramer's V	,197	,002
N of Valid Cases	327	

The association measures (Phi and Cramer's V) indicate the strength of the relationship between the two variables (see Table 28). The Phi statistic has a value of 0.197 (out of a maximum value of 1) which corresponds to a relationship with a medium strength. Therefore, it can be concluded that there is a significant relationship between the stimulation of the colours while entering in the restaurant and the fact that the colours define the quality of the restaurants, and that this relationship has a medium magnitude.

Damhorst and Reed (1986) and Garret and Brooks (1987) proved that the colour has an effect on the perception of the individual but also on the way of evaluating a situation, a context. Therefore, we can add to these findings the perspective of the quality. The colours, and the visual effects in general, have an effect on the perception of the quality by the individuals.

Discussion of the impact of the visual cues on the consumer internal response

As explained in the theoretical part, the sight appears to be the most important sense according to the fact that 80 percent of the information that individuals get is transmitted through it (Jayakrishnan, 2013). When the respondents are asked to choose which main feature represents the restaurant, they chose in first the taste (which represents the main business idea of the restaurants), and secondly the visual cues (the design and the colours). The same phenomenon happens when they are asked if the visual effects attract them to a restaurant. 76.8 percent of the respondents approved concerning the design of the restaurants and 61.1 percent concerning the colours (see Table 8). When the respondents are asked to choose if the visual effects affect more their pleasure they experience inside or the perception of the quality of the restaurant, 46.5 percent answered about the pleasure and 40.7 percent about the quality (see Table 24), which proved that the sight acts both on the quality and the pleasure, and therefore both on the perceptions and the sensations of the customers. However, in these visual effects, the colour does not have an important role in the stimulation of the perception of the quality: Indeed,

while they were asked if the colours defined the quality of the restaurant, only 29.7 percent of the respondents answered that they rather were agreeing with this statement (see Table 25). To go further, when the respondents are asked what is the most important feature of a restaurant (see Table 9), 8 percent answered for the colours and 20.2 percent for the layout. It proved then that the respondents are more aware and more sensitive to the stimulation coming from the design and the layout of the restaurants than the one coming from the colours, for both pleasure and quality. This is partially in contradiction with the findings of Wolfe et al. (2006) who stood on the fact that all the vision is about lights because the colours are distributions, divisions and subdivisions of different wavelengths. Therefore, according to Wolfe et al. (2006), the colours may have an important impact on the perception of the quality and the pleasure felt by the consumers in a restaurant.

4.2.4. The impact of the olfactory cues on the consumer internal response (emotional and cognitive reactions)

The emotional reaction (pleasure) facing to the olfactory cues

The smell is a powerful sense. From the moment that the olfactory cues were integrated into the marketing process, marketers started to speak about Sensory Marketing. 75 percent of the emotions of the human being are generated by this sense, and, then, it has a strong impact on the sensory memory of individuals (Lindström, 2005). Indeed, 74.9 percent of the respondents declared that the olfactory cues motivate them to choose a restaurant in a spontaneous way.

Table 29 shows that the main part of the respondents (88.7 percent) agreed with the fact that the smell influences their pleasure they experience inside the restaurant. There is a significant influence of the smell on the pleasure of the customers (only 5.5 percent of the respondents answered that the smell does not affect their pleasure).

Table 29: The smell in the restaurant affects the pleasure

The smell affects the pleasure	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	290	88,7	88,7	88,7
No	18	5,5	5,5	94,2
Without opinion	19	5,8	5,8	100,0
Total	327	100,0	100,0	

This analysis about the smell and the pleasure stands on the same conclusion than Schiffman et al. (1995), and Villemure et al. (2003) who proved, through an experiment, that a pleasant fragrance could improve the mood, and then the pleasure felt by the consumers, and even sometimes could calm

some symptoms, such as an unpleasant physical condition. Lindström (2005) highlighted the fact that the smell is a powerful generator of emotions and therefore is an efficient tool to create a link between the brand and the customer, by bounding the memory, the emotions and the products.

To go further, it has been realised a Chi-Square test to understand if any relationship existed between the fact that the smell affects the pleasure and the fact that the smell attracts the respondents to a restaurant.

Table 30: Chi-Square test between the fact that the smell affects the pleasure and the fact that the respondents are attracted to the restaurant by the smell

Chi-Square test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	32,660 ^a	4	,000
Likelihood Ratio	24,428	4	,000
Linear-by-Linear Association	,438	1	,508
N of Valid Cases	327		

a. 4 cells (44,4 percent) have expected count less than 5. The minimum expected count is 2,20.

The Chi-Square, represented in Table 30, has a value of 32.660 and the Sig's value is about 0.000, which is below the value of the statistical signification (0.05). In that case, the null hypothesis is rejected while we can conclude that there is a significant relationship between the fact that the smell affects the pleasure and the fact that the respondents are attracted to the restaurant by the smell.

Table 31: Symmetric Measures between the fact that the smell affects the pleasure and the fact that the respondents are attracted to the restaurant by the smell

Symmetric Measures	Value	Approximate Significance
Phi	,316	,000
Cramer's V	,223	,000
N of Valid Cases	327	

The association measures (Phi and Cramer's V) indicate the strength of the relationship between the two variables (see Table 31). The Phi statistic has a value of 0.316 (out of a maximum value of 1) which corresponds to a relationship with a medium strength. Therefore, it can be concluded that there is a significant relationship between the fact that the smell affects the pleasure and the fact that the respondents are attracted to the restaurant by the smell and that this relationship has a medium magnitude. In other words, the emotional reaction concerning the smell, expressed through the pleasure felt, of the respondents is due to the stimulation of the olfactory cues when they are entering in a restaurant.

The smell is a subjective tool because each individual feels and perceives it in different ways. Thus, the emotional reaction facing to a certain smell depends on the receivers because it appeals to the memory and the past experiences (Fox, 2009).

Also, according to Table 32, it is clear that smell influence more the pleasure felt by the consumers in the restaurants than the quality of it. In other words, the olfactory cues stimulate more the emotional reactions of the respondents than the cognitive reactions. This phenomenon can be explained by Fox (2009) who claimed that the emotional reaction in front of a certain smell depends on the receiver because it touches to the sensory memory of individuals based on their past experiences. Therefore, it appears that the olfactory cues are a link between the past experience, the sensory memory and the emotional reactions of the respondents.

Table 32: the effects of the olfactory cues

The effects of the olfactory cues	Frequency	Percent	Valid Percent	Cumulative Percent
The pleasure you experience inside your perception of the quality of the restaurant	163	49,8	49,8	49,8
None	142	43,4	43,4	93,3
None	22	6,7	6,7	100,0
Total	327	100,0	100,0	

The cognitive reaction (quality) facing to the olfactory cues

Laird (1932), last century, investigated the influence of the scented hosiery on the women's perception quality. He found out that there was a positive bond between the quality perceived by the individual, and the use of scent. The olfactory mark of a brand, as a strategic tool, is an asset for the company by making a connection between the customer and the brand, and to strengthen the brand identity, especially when speaking about the quality and the efficiency (Schmitt and Simonson, 1997).

Table 33: The smell in a restaurant affects the perception of the quality

The smell affects the perception of the quality	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	264	80,7	80,7	80,7
No	38	11,6	11,6	92,4
Without opinion	25	7,6	7,6	100,0
Total	327	100,0	100,0	

When the respondents have been asked if the olfactory factors affected their perception of the quality of the restaurants (see Table 33), a large majority approved (80.7 percent) (only 11.6 percent disapproved and 7.6 percent without opinion). This can be further understood when pointing out the proportion of respondents who affirmed that the smell stimulates them while entering in a restaurant (64.5 percent) (see Table 8). These elements join the statement of Michon (2003, 2005), who proved that the ambient scent, in the context of the point of sales, influenced the perception of the quality of the products. Indeed, customers subjected to a pleasant smell have a better perception of the quality of the sold products and evaluate them in a positive way in a store. To make a link with the hypothesis 1 (H1), the perception of the product quality involves and influences the pleasure of the purchasing experience (Chebat, Michon, 2003).

Nevertheless, to go deeper in this analysis and on the same wavelength than previously, it has been realised a Chi-Square test in order to understand if a relationship existed between the fact that the smell affects the perception of the quality and the fact that the smell attracts the respondents to a restaurant.

Table 34: Chi-Square test between the fact that the smell affects the perception of the quality and the fact that the respondents are attracted to the restaurant by the smell

Chi-Square Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12,500 ^a	4	,014
Likelihood Ratio	11,968	4	,018
Linear-by-Linear Association	,725	1	,394
N of Valid Cases	327		

a. 2 cells (22,2 percent) have expected count less than 5. The minimum expected count is 3,06.

The Chi-Square, represented in Table 34, has a value of 12.500 and the Sig's value is about 0.014, which is below the value of the statistical signification (0.05). In that case, the null hypothesis is rejected while we can conclude that there is a significant relationship between the fact that the smell affects the perception of the quality and the fact that the respondents are attracted to the restaurant by the smell.

Table 35: Symmetric Measures between the fact that the smell affects the perception of the quality and the fact that the respondents are attracted to the restaurant by the smell

Symmetric Measures	Value	Approximate Significance
Phi	,196	,014
Cramer's V	,138	,014
N of Valid Cases	327	

The association measures (Phi and Cramer's V) which indicate the strength of the relationship between the two variables (see Table 35) show that the Phi statistic has a value of 0.196 (out of a maximum value of 1) which corresponds to a relationship with a medium/weak strength. Therefore, it can be concluded that there is a significant relationship between the fact that the smell affects the perception of the quality and the fact that the respondents are attracted to the restaurant by the smell and that this relationship has a medium/weak magnitude. In other words, the cognitive reaction concerning the smell, expressed through the quality perceived, of the respondents is due weakly to the stimulation of the olfactory cues when they are entering in a restaurant.

Discussion of the impact of the olfactory cues on the consumer internal response

According to the collected and analysed data, we can suppose that the olfactory cues are an important element of the sensory marketing felt and perceived by the customers (64.5 percent of the respondents are sensitive to this sense while entering in a restaurant - see Table 8), which can attract directly by communicating with the unconsciousness and the memory of the individual: 74.9 percent of the respondents declared that the scent of a restaurant can influence spontaneously their choice. As we have seen in the theoretical part, all individuals can be sensitive to the smell (positively or negatively), because it is a high link with the emotional and cognitive parts of the human beings, and is able to catch the sensory memory. Concerning the sensitiveness of the individual regarding the olfactory cues of the restaurants, the tables above showed a small difference concerning the feeling of pleasure and the perception of the quality: If 88.7 percent of the individuals declared that the smell is a factor of pleasure, 80.7 percent declared that it influences their perception of the quality. It is surprising to see that the smell is not the main feature of a restaurant for the respondents while it can influence them while when they are walking in the street (the taste is ranked first, and the visual effects are ranked second). If the smell is not the key element of the attraction of the consumers, according to our data, it is the one which can repulse the most: 45.6 percent of the respondents declared that it has happened at least once that they left the restaurant because of the smell. The contradiction of attraction/ repulsion with the use of the smell proves that this atmospheric factor should be used carefully. Indeed, the smell is an essential element because it is a part of the air, and consequently, it is very hard not to be aware of it (Lindström, 2005). Therefore, if the smell is a powerful tool to attract people, and to change the mood and the consumer behaviour, to change the way of perceiving the quality and feeling the pleasure in the restaurant, it can also be a dangerous tool of repulsion. Kotler (1973) believed that, to be efficient, the olfactory cues should be in the same context than the product sold. For example, if you are promoting a sandwich restaurant, the smell of a fresh bread can attract the customers.

4.3. Validation of the hypotheses

During the empirical part, we have analysed the data collected through a quantitative research method: the questionnaire. The questionnaire has been transmitted through 327 respondents, characterised by their international student status. The objective of the analysis of the results was not to challenge the findings of the researchers but to verify their validity in an international context, in a restaurant context and a student context. Therefore, thanks to the theoretical framework (figure 6) and the theoretical part of this thesis, it has been set two hypotheses:

H1: the consumers feel more pleasure at the point of sale when their senses are stimulated by the atmospheric factors

H2: the consumers perceive a better quality of the point of sales when their senses are stimulated by the atmospheric factors

During the analysis, we have described and discuss the findings around the pleasure felt and the quality perceived by the respondents through the atmosphere, and in order to have a more accurate analysis, the same process has been made through the hearing cues, the visual cues and the olfactory cues. Indeed, as seen previously, this is based on the definition of Eroglu and Machleit (1993) who described the atmosphere as a set of visual, olfactory and hearing effects. Thus, the different atmospheric factors influence the pleasure that the respondents experienced inside the restaurants and the perception of the quality of it and even arouse some affective, behavioural and cognitive reactions in the customer's mind. The music and the smell have a huge power of evocation because it is in correlation with the sensory memories of the individuals (Rieunier and Daucé, 2002). If the music is not the main feature that the respondents are sensitive to while entering in a restaurant, we cannot avoid its impact on the internal response of the individuals. Therefore, according to the previous analysis and according to the previous studies and findings, we can confirm the two hypotheses (see Table 36), and conclude that the consumers feel more pleasure at the point of sale when their senses are stimulated by the atmospheric factors, as well as the consumers perceive a better quality of the point of sale when their senses are stimulated by the atmospheric factors. However, according to the analysis of the findings, it is clear that the respondents are more aware of the pleasure they experience inside the restaurants while facing to the stimuli of the atmosphere, than the perception of the quality.

Table 36: Validation of the hypotheses

Number of the hypothesis	Formulation of the hypothesis	Validation of the hypothesis
H1	The consumers feel more pleasure at the point of sale when their senses are stimulated by the atmospheric factors.	Confirmed
H2	The consumers perceive a better quality of the point of sale when their senses are stimulated by the atmospheric factors.	Confirmed

Therefore, it has been created an empirical framework (see Figure 7) verifying the Figure 6, by adding the data of collected through the respondents. This one confirms that the atmosphere of the restaurants affects more the emotional reactions of the respondents than the cognitive reactions. By summarizing all the data collected via the questionnaire, it can be concluded that the atmosphere stimulates the respondents, as well as on the cognitive and emotional reactions, than on the money and the time spent in the restaurant. Therefore, the atmosphere of the restaurant influences the attitude of the respondents by creating a new and unique experience through the sensory marketing process.

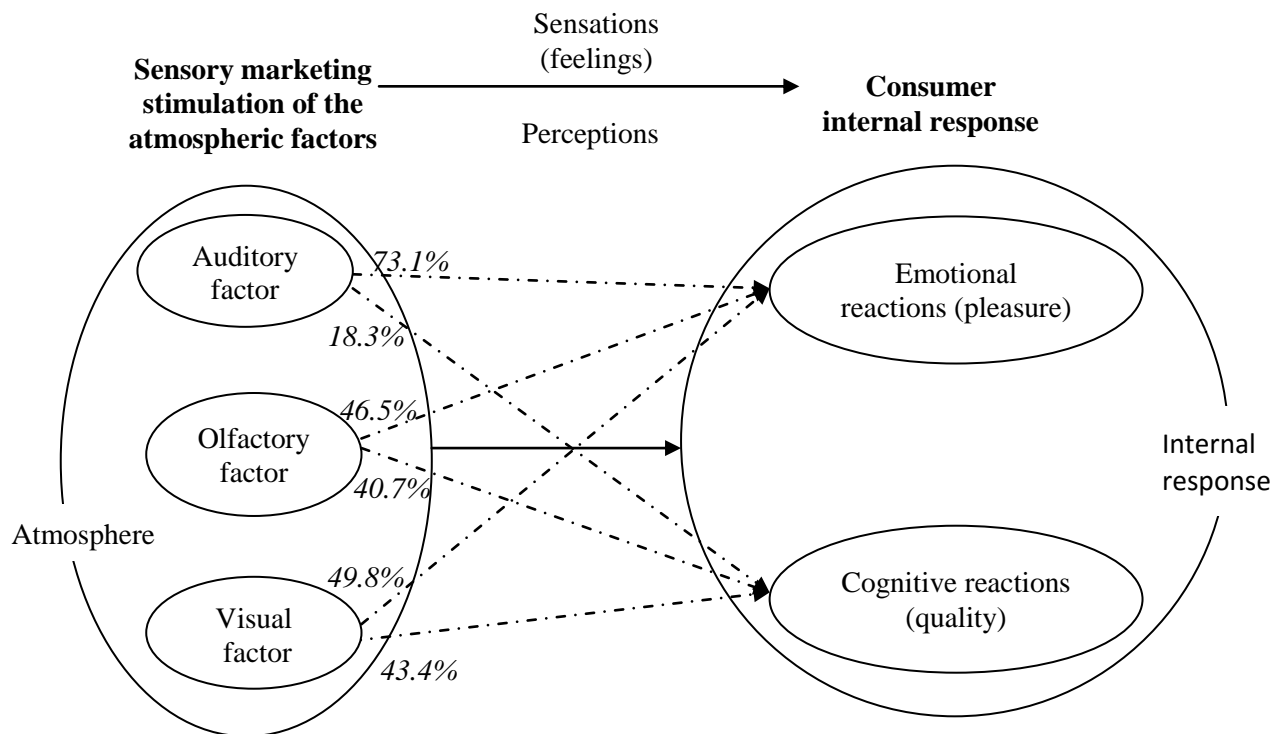


Figure 7: Empirical framework of the impact of the sensory marketing through the atmosphere of the restaurants in Lithuania on the consumer internal response of the respondents

CONCLUSIONS AND RECOMMENDATIONS

1. Our problem analysis disclosed the development of the marketing from the last century to nowadays. With the rise of the digital marketing, the decrease of the mortar stores (physical stores), the companies tried to find a way to attract customers, and to procure a competitive advantage: the sensory marketing, or the marketing appealing to the senses of the customers. Indeed, the sensory marketing is one of the bulwarks that the marketers have found to compete to the advanced of the digital companies and e-commerce. As theoretical analysis revealed, the customers are looking for a new and unique experience and are ready to pay (more) to get it. The consumer is not looking only for the purchase of a product or a service alone, but is seeking an emotional and unique experience around what he buys (Ratneshwar and Mick, 2005). Therefore, the marketers have developed an atmosphere around the point of sale through the different senses (hear, sight, taste, touch, smell) by stimulating them to encourage the purchase process. Lindström (2005, 2008) pointed out the fact that if a brand wants to be successful in the sensory marketing process, it should use multiple senses instead of focusing on only a few.

2. According to the conducted analysis, the stimuli of the atmosphere influence directly the emotional, behavioural and cognitive response of the individuals. It has been demonstrated the link that can exist between the perception of the quality by the customer and the pleasure he can feel (sensation), between the perception and the sensation. According to Krishna (2012), the gap between perception and sensation makes the strength of the sensory marketing. This concept was the basis of this thesis. For a long time, the different senses were forgotten from the business process (the smell came in the marketing process only from the 90's). The different components of the sensory stimulations can be selected, combined and improved regarding the evolution of the needs, the trends and the consumer behaviours to adapt it and to have a better impact on the experience of the customer.

3. The analysis of the role of the atmosphere in the sensory marketing has shown that Kotler (1973) was the first author to speak about the atmosphere in the stores and to argue with the fact that the customer searches an experience while he is purchasing. Eroglu and Machleit (1993) argued that the atmosphere "refers to all the physical and nonphysical elements of a store that can be controlled in order to enhance (or restrain) the behaviours of its occupants [...]. These elements present a multitude of possibilities including ambient cues such as colour, smell, music, lighting, and textures, as well as architectural and artifactual elements" (Eroglu and Machleit, 1993: 34). Following this definition, the atmosphere can be characterised as a set of visual, olfactory and auditory factors. The atmosphere affects the consumer behaviour and especially his purchasing behaviour through different emotional states (Yalch and Spangenberg, 2000). In the same time, the atmosphere has a strong evocative power

(Rieunier and Daucé, 2002) by "communicating" with the sensory memory (the memory of a past experience which can be revealed once again thanks to the sensory stimuli).

4. Analysing the significance of the internal response in the consumer decision-making process, it was revealed that the consumer behaviour responds to the emotions and the motives. The internal response of the customers facing the stimuli of the atmosphere is made by a synergy, a superposition of the five senses (hear, visual, smell, touch and taste). For a long time, the marketers and psychologists believed that the individual was rational while making a judgement and a decision (Krishna, 2012), while the recent studies have shown that the individual was making a fast thinking based on the experience and the memories. The sensations and the perceptions are stimulated by the stimuli of this atmosphere and are closely linked: the sensory organs catch information from the atmosphere of the point of sale (sensations). Then these sensations are transmitted through the nervous system to the brain which will analyse it, interpret it, and transform it into perceptions. Therefore, the brain transforms these perceptions and sensations into an internal response. This one will be the response of the individuals toward the stimuli of the atmosphere through the emotional reaction or the cognitive reaction.

5. It was determined according to theoretical analysis that the cognitive reaction evokes the quality of the point of sale (the process of inference), and the emotional reaction evokes the pleasure felt by the customers through the experience of the sensory marketing. It was identified that the atmospheric factors, such as visual, hearing and olfactory, stimulate the sensory organs of the customers. These sensory organs transform these stimulations into sensations and perceptions, which are transmitted to the brain through the nervous system. Therefore, the brain creates and develops an internal response (cognitive and/ or emotional) which affects the behaviour of the customer by creating a new and unique experience and can lead him to the purchase act.

6. The theoretical framework of the impact of the sensory marketing through the atmosphere on the internal consumer response (both cognitive and emotional reactions) was combined according to the literature analysis and it was verified by conducting the empirical research. Conducting our empirical research, we developed two hypotheses according to our theoretical insights: H1 - the consumers feel more pleasure at the point of sale when the atmospheric factors stimulate their senses, and H2 - the consumers perceive a better quality of the point of sale when the atmospheric factors stimulate their senses. Both hypotheses were confirmed according to our collected data analysis. However, we have noticed that some atmospheric factors do not have the same impact on the respondents than forecasted in theory (the smell, for example). One of the explanations to justify this phenomenon would be that the respondents are not conscious about the phenomenon which settles down. The conducted empirical research has shown that the atmosphere is a powerful tool to attract or repulse clients. It has to be ap-

plied carefully. As our research showed, the impact of the different atmospheric factors is not equal, the combination of the three factors (olfactory, visual and auditory), through the term of atmosphere in general of the point of sale, can be an efficient tool of evocation, attraction, and behavioural changes.

7. Further studies, could focus on different cultures to analyse, understand and discuss cross-cultural aspects. However, according to our research, the Lithuanian restaurants could attract more international students by developing the multi-sensory branding: As Lindström (2005, 2010) evoked, a company focusing on several senses to attract customers would be more successful than one focusing only on one or two senses. Therefore, the restaurants should work on the three atmospheric factors in the same time to increase the efficiency of the sensory marketing experience and to increase the number of clients at their point of sale.

Further studies could take into consideration an observation in a restaurant to deepen the study and to analyse the effects of the stimulations of the atmospheric factors on the internal response of the consumers deeply. Also, to understand this phenomenon, in the observation, the observed consumers could face to different variations of the stimuli: Therefore, we can easily imagine one group with a slow music, one with a loud music, one with a darker light, etc., in order to collect the necessary data and to go deeper in the analysis of the internal response of the consumers and how the stimuli of the atmosphere influence the consumer behaviour.

Our research has been done surveying the international students. So we can easily wonder if the results and the trends that we figured out in the empirical part would be the same for the foreigners in Lithuania in general or for different segmentations of socio-demographic criteria (Gender, the age, socio-professional category, etc.).

Obviously, there are still areas to discover in the sensory marketing field. The understanding of how the senses are connected with the atmosphere, the brain and the behaviour can be a considerable asset for the companies and the marketers, to face to the rise of the companies using the digital marketing. Furthermore, with the increase of the technologies such as the Augmented Reality, the virtual helmets or the touch screen in the shops, we can obviously consider a research making a link between these new technologies and the senses of the individuals. And more specifically, how to create a new and rich experience for the consumers at the point of sale through the digital technologies while retaining the influence that can have the senses on the consumer behaviour, such as digital tables in the restaurants, or digital noises and scents.

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The following questionnaire falls into the framework of a research of Master degree in Kaunas University of Technology (KTU). Your participation is crucial for the success of this project. The following questionnaire is designed only for international students living in Lithuania and is anonymous. I sincerely thank you for your participation.

General information:

1. How often do you go to a restaurant in Lithuania per week?
 - 2 times and less
 - Between 3 and 6 times
 - More than 6 times

2. How much money do you usually spend in a restaurant?
 - Less than 5€
 - Between 5€ and 15€
 - More than 16€

3. When you are entering to a restaurant, which main factor are you sensitive to?
 - The taste
 - the atmosphere in general (music, smell, etc.)
 - the price
 - the location
 - the layout

4. Do you know what "sensory marketing" is?
 - Yes
 - No

The atmosphere

5. How do you evaluate the following sentence: "I feel I can spend more money if the atmosphere of the restaurant is pleasant".
- I totally agree
 - I rather agree
 - I rather disagree
 - I totally disagree
 - Without opinion
6. Do you think that your pleasure and your satisfaction in a restaurant are caused by the atmosphere inside a restaurant?
- Yes
 - No
 - Without opinion
7. How do you evaluate the following sentence: "the atmosphere of a restaurant influences my choice for the place".
- I totally agree
 - I rather agree
 - I rather disagree
 - I totally disagree
 - Without opinion
8. In your opinion, what is the most important feature of a restaurant among the following options:
- The colours of the restaurant (decorations, etc.)
 - The scent of the restaurant
 - The taste in the restaurant
 - The music in the restaurant
 - The layout of the restaurant

9. Do you think that a pleasant atmosphere in a restaurant affects your behaviour in a positive way?

- Yes
- No
- Without opinion

10. Would you say that the atmosphere of the restaurant in general affects your perception of the quality of the restaurant?

- Always
- Sometimes
- Never
- Without opinion

11. Have you ever experienced the situation that you entered in a restaurant because you were attracted by... (put a cross)

	Never	Sometimes	Always	Without opinion
The smell				
The music				
The design				
The colours				

12. Have you ever experienced the situation that you left a restaurant because.... (put a cross)

	Never	Sometimes	Always	Without opinion
The smell was repulsive				
You disliked the type of music				
You disliked the design				
You disliked the colours				

13. Would you say that a pleasant atmosphere in a restaurant affects more...

- The pleasure you experience inside the restaurant
- Your perception of the quality of the restaurant
- None

The sound

14. Does the music in a restaurant affect, usually, positively your mood?

- Always
- Sometimes
- Never
- Without opinion

15. What type of music do you think is the most appropriated for a daily restaurant (for example with some friends)?

- Relaxing music
- Soft music with slow tempo
- Swinging music with fast tempo
- Modern music (radio music)

16. What type of music do you think is the most appropriated for a gastronomic restaurant?

- Relaxing music
- Soft music with slow tempo
- Swinging music with fast tempo
- Modern music (radio music)

17. Would you say that the type of music played in a restaurant defines the quality of this restaurant?

- I totally agree
- I rather agree
- I rather disagree
- I totally disagree
- Without opinion

18. Does the music in a restaurant influence your consumption?

- Always
- Sometimes
- Never
- Without opinion

19. How do you evaluate the following sentence: "A pleasant music in a restaurant affects positively my perception of the quality of this restaurant".

- I totally agree
- I rather agree
- I rather disagree
- I totally disagree
- Without opinion

20. How do you evaluate the following sentence: "A pleasant music can influence positively the time I spend in the restaurant".

- totally agree
- I rather agree
- I rather disagree
- I totally disagree
- Without opinion

21. Would you say that a pleasant music in a restaurant affects more...

- The pleasure you experience inside the restaurant
- Your perception of the quality of the restaurant
- None

The visual

22. Do the colours and the design in the restaurant influence your consumption?

- Always
- Sometimes
- Never
- Without opinion

23. How do you evaluate the following sentence: "The colours and the design of the restaurant can influence the time I spend inside".

- totally agree
- I rather agree
- I rather disagree
- I totally disagree
- Without opinion

24. In your opinion, what is/are the most appropriated colour(s) for a gastronomic restaurant? (you can have multiple answers)

- 1) Blue
- 2) Red
- 3) Green
- 4) Black
- 5) Yellow
- 6) White
- 7) Other

25. Would you say that the colours in a restaurant define the quality of this restaurant?

- I totally agree
- I rather agree
- I rather disagree
- I totally disagree
- Without opinion

26. Would you say that pleasant visual effects in a restaurant affect more...

- The pleasure you experience inside the restaurant
- Your perception of the quality of the restaurant
- None

The smell

27. Have you ever experienced the situation that the smell of a restaurant motivated you to choose it spontaneously, without any plans?
- Always
 - Sometimes
 - Never
 - Without opinion
28. Would you say that a pleasant smell in a restaurant (of the place, of the food, etc.) affects your pleasure?
- Yes
 - No
 - Without opinion
29. Would you say that a pleasant smell in a restaurant (of the place, of the food, etc.) affects your perception of the quality of the restaurant?
- Yes
 - No
 - Without opinion
30. Would you say that a pleasant smell in a restaurant affects more...
- The pleasure you experience inside the restaurant
 - Your perception of the quality of the restaurant
 - None

Profile of the respondent

31. You are:
- Male
 - Female
32. How old are you?
- 21 years old and less
 - From 22 to 25 years old
 - 26 years old and more

33. From which country are you?

.....

34. Select the average amount of incomes and/or scholarships you get per month.

- Less than 150€
- From 151€ to 500€
- More than 501€

Thank you for your precious answers which will help me to succeed in my Master's Thesis.