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SENSORY MARKETING FOR PROMOTING MORE SUSTAINABLE PURCHASING BEHAVIOR

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Abstract. The article analyses sensory marketing to encourage more sustainable purchasing behaviour. The article uses the interview method to evaluate the use of sensory marketing elements to promote sustainability values. Sensory marketing affects sales and sustainability through enhanced consumer awareness of the importance of more socially responsible consumption. It is evident that the most influential of all the sensory marketing elements is sight (image), followed by hearing (sound), then smell (odour), touch (feel), and the least influential is taste (taste). According to respondents, it is acceptable that recycled materials are used to make reusable packaging, which ensures circular use of resources. Recycling gives waste a second life. Sustainable purchasing and consumption are reached by choosing products of higher quality and longer shelf life. Each person should decide whether they need a new product or service. Sensory marketing encourages a choice of higher quality, longer-lasting products. The findings show that socially responsible purchasing behaviour is still not a universal norm.

Keywords: sensory marketing; sight; hearing; taste; touch; smell; sustainability; sustainable development; social responsibility; consumers; purchasing behavior

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1. Introduction

Sensory marketing is a marketing tool that aims to entice consumers by using their senses and influencing their feelings and behaviour. Sensory marketing consists of 5 sensors: taste, smell, touch, hearing, and vision. It is challenging for brands to attract customers' attention because they all look the same in the minds of consumers, so even with the help of various advertising methods, it does not reach potential customers or consumer consciousness. Buyers have learned to distance themselves from unwanted, redundant information and have recently been paying much attention to sustainable sustainability. For this reason, new technologies are increasingly used, influencing new ones for the emergence of marketing communication elements and the creation of non-traditional brands. Sensory marketing, which combines sensations, emotions, cognition, behaviour and rationality, has become very popular these days. Sensory marketing components effectively reach the attention of potential consumers and influence their decision to purchase a product. Still, affecting not just one but all people's senses is crucial. Considering the primary receptors, it can be understood that all five primary human senses - sight, hearing, smell, taste and touch – are essential. Therefore, all of them are closely related to sensory marketing. Sensory marketing is the application of all these human senses in the field of marketing

to promote sales and harmony. It is noticeable that the further, the more the creators of sensory advertising use tools that indirectly affect the human consciousness and the subconscious mind, which relates to the primal human instincts and promotes sustainable harmony.

The authors seek to analyse how sensory marketing promotes sustainable purchasing decisions. To reach this aim, the following research tasks are raised: to examine the concepts of sensory marketing, sustainable sustainability and sensory marketing promoting sustainability, and to assess the impact of sensory marketing on promoting sustainability.

2. Literature review: sensory marketing and sustainability

Sensory marketing engages all five human senses – sight, hearing, taste, touch, and smell – to create an immersive brand experience. By strategically activating sensory cues, companies evoke specific emotions, memories, and associations with their brand in consumers' minds. Sensory branding elevates brand identity, builds loyalty, and differentiates it from competitors by leaving lasting impressions. Brands that master all five senses are better equipped to succeed in an increasingly competitive market (Jiménez-Marín et al., 2019; Jang et al. 2019, Vecchiato et al., 2021, Jiménez-Marín et al., 2021; Doucé, 2022; Di Cicco et al., 2024).

According to Platon (2021), marketers can adapt sensory marketing to the digital context and discover new ways to use the senses of sight, hearing, smell, taste and touch to engage consumers. Platon (2021) claim that it is essential to understand that sensory elements, in addition to images and sounds, will be helpful for customer engagement and that it is useful to integrate new technologies such as artificial intelligence, virtual reality, and augmented reality to create a multisensory experience that improves the user experience.

Sina et al. (2021) tested the relationship between trait attention and purchase intentions of sensory ads. They conducted an exploratory study to prepare participants' awareness. It showed that a high level of state awareness enhanced purchase intentions, determined by the number of sensory types.

Oduro et al. (2021) mentioned that by combining different plant raw materials and applying different sensory testing methods, sustainable alternatives to plant-based dairy products could be developed that can be further optimised.

Abdolmohamad et al. (2022) mentioned that sensory marketing has been described from both evolutionary psychology and social neuroscience perspectives; since a sensory stimulus elicits physiological and neurological responses, this entire procedure influences how the sensation is theoretically described.

Hamacher et al. (2022) stated specific sensory information on products and services can influence people's attitudes, purchasing intentions, and consumption and imagine the sound of opening and closing a car door, the smell and taste of freshly brewed coffee, or the feel of the textile structure of a new dress. According to Hamacher et al. (2022), all these sensory stimuli offer valuable information about the value of products and can significantly influence the purchasing decision process.

Pointke et al. (2022) mentioned that some studies have shown that external factors, e.g. packaging, brand, information, emotion and social environment, influence sensory perception.

Panea et al. (2023) stated that sensory analysis is a multidisciplinary field that involves measuring, interpreting and understanding human responses to the sensory properties of products and products necessary to study consumer behaviour. Panea et al. (2023) argue that understanding consumer preferences is key to the development of the food industry. Still, consumer behaviour is complex due to various factors influencing food choices. The author stresses that consumer attitudes result from several product attributes and depend on the importance attributed to each of them.

Li et al. (2023) considered that Sensory ads provide consumers with direct or indirect sensory cues to appeal to consumers' senses, so direct sensory marketing refers to providing consumers with direct sensory products that convey sensory cues, such as magazine advertisements using perfumes using scented strips of paper to stimulate the sense of smell. Li et al. (2023) state that indirect sensory marketing refers to activating consumers' imaginations with words or images to convey sensory cues, such as depicting multisensory information through advertising copy.

According to Sun et al. (2024), future research could delve deeper into the diversity of colours and materials, the breadth of food types, and the versatility of cultures to further enrich and refine the field's theoretical framework and practical guidelines.

Kim et al. (2024) considered that sensory experiences result from sensory cues such as sound, including music, as well as colour and smell, and can influence consumers' purchasing and consumption decisions, so creating memorable experiences in the service industry is challenging. Service industry practitioners and researchers have recognised the need for new strategies and innovative customer propositions.

Summarising the above definitions by researchers, sensory marketing, also known as sensory branding, is a form of marketing that appeals to consumers through all five senses, and each sense is used to maintain an emotional connection with consumers.

The United Nations' Sustainable Development Agenda sets out 17 universal, global and interrelated Sustainable Development Goals that cover many policy areas and are designed to be achieved by 2030.

Odrowaz-Coates (2021) argues that sustainability is based on our response to environmental challenges and changes. Odrowaz-Coates (2021) points out that ecological sustainability is interrelated with social sustainability and vice versa, and the two also intersect with economic and political sustainability, which are interrelated. Vacchi et al. (2021) mentioned that the definition of sustainable development includes three dimensions of sustainability: environmental, economic, and social.

Urdea et al. (2021) argue that experiential marketing significantly impacts the consumer's decision-making process, providing many benefits, even when used in a digital environment.

Pazienza et al. (2022) stated that sustainable development is critical in managing population impacts on ecosystems, resources, food security, and sustainable economies to reduce societal pressures on the environment.

Płonka et al. (2022) mentioned that the ambiguity of the essence of the concept of sustainable development can also arise due to the differentiated emphasis on goals in three main dimensions: social, economic, and ecological. As stated by Płonka et al. (2022), many theoreticians of sustainable development support the model of simultaneous, harmonious, and equal consideration of the three mentioned dimensions.

Rosario et al. (2022) considered that the increased demand for innovative sustainable ecosystems is one of the main aspects connecting the digital transition and sustainability.

Knaapila (2022) stated that the food system's sustainability can be improved in various ways. According to him, plant-based meat and dairy analogues can help omnivores reduce their consumption of animal foods (i.e., become more flexible) and thus have a more sustainable diet since plant foods are generally considered healthier than animal foods.

Jiménez-Marín et al. (2019) state that the obtained results revealed the importance of sensory in marketing, as this study showed that sales, customer retention and customer satisfaction in the store increased significantly after implementing relevant sensory marketing strategies. According to these scientists, the sensory marketing model is suitable and reliable for increasing sales and making the store more sustainable since all the actions performed were related to reducing material resources typical of retail stores.

Jang et al. (2019) focused on sensory marketing that appeals to the five senses of coffee shop customers ("sight", "smell", "sound", "taste", and "touch") to develop a sustainable growth model for the saturated coffee shop market. Jang et al. (2019) research found a relationship between coffee shop sensory marketing factors, emotions, such as pleasure, arousal, and dominance, flow, and behavioural intentions.

Hamacher et al. (2022) analyse that due to the increasing intensity of competition and homogenous service providers, it is becoming more difficult for service providers to capture consumers' attention in an online environment where sensory interaction is traditionally limited to mainly visual and audio input. Hence, success depends on the ability of sellers to combine textual and visual stimuli on e-commerce sites so that visitors can be effectively converted into buyers. According to Hamacher et al. (2022), sensory appeal in the online customer experience process is significant for an economically successful e-commerce platform; in addition, customers often believe that information and product visualisation do not correspond to reality and cause some uncertainty.

Li et al. (2024) mentioned that if environmentally friendly corporations motivate consumers to buy green products, it will benefit the global environmental trend. According to Li et al. (2024), consumers increasingly pay attention to a sustainable lifestyle and consider environmental protection and the personal advantages of green products. Greenness is promoted in various areas, such as green energy in manufacturing and production or environmentally friendly and waste-free packaging.

Jaeger et al. (2024) found that consumers' expectations of liking, emotional, conceptual and sustainability characteristics of yoghurts encourage consumers to use more sustainable products. Ünal et al. (2024) agree that sustainability and customer experience can be combined.

The link between sustainable marketing and the creation of sensory marketing promotes consumer engagement and promotes environmental responsibility. Sensory marketing uses sensory experiences to influence consumer behaviour and sustainable practices to encourage a more conscious consumption culture. Sensory marketing can effectively promote sustainable product choices by increasing the appeal of environmentally friendly options and thus reducing the impact of highly processed products. Integrating sensory elements into marketing increases customer satisfaction and reduces resource consumption, making retail operations more sustainable. While sensory branding can promote sustainable practices, challenges remain in ensuring that the sensory experience does not overshadow the core message of sustainability, requiring a balanced approach in marketing strategies.

3. Research methodology and research methods

A qualitative research method - interviews - was chosen for the research. The interview method was chosen for the collective research. Mohajan (2020) states that a properly selected research methodology can help achieve effective and significant research results. The sets of interview questions were developed following the latest research on sensory marketing and sustainability by Abdolmohamad et al. (2022), Hamacher et al. (2022), Pointke et al. (2022), Pazienza et al. (2022), Odrowaz-Coates (2021), Vacchi et al. (2021). These authors provided the necessary theoretical framework and proven practices that were applied to identify the most effective tools for sensory marketing and sustainable sustainability. Yusoff et al. (2021), for the development and verification of the questionnaire, also contributed to the development of the questionnaire, ensuring its methodological accuracy and validity. Research tools are necessary. The next step involved the careful definition of measurable attributes based on the analysis of literature sources.

A structured interview was chosen for the qualitative study, aiming to find out from experts what the relationship is between sensory marketing and sustainable sustainability. Qualitative research focuses on understanding the complexity of human behaviour and social phenomena, emphasising depth, context, and nuance. They are precious in revealing trends and exploring the diversity of human experiences (Lo et al., 2020). The qualitative method allows for establishing a personal relationship with the research object, diving deep and getting to know the subject's experiences, feelings, and thoughts because there are no pre-prepared answers, so the respondent

expresses his opinion based on previous experiences (Alsoaery et al., 2023). The interview recording was transcribed and interpreted.

4. Analysis of the survey results

The study involved 10 participants/informants, five women and five men. Below is an anonymous list of participants with their social status, spheres of activity, activities sections, and work positions (see Table 1).

Table 1. Characteristics of informants

Participant	Social status	Sphere of activity	Section of activities	Type of activity	Job position
T1 (M)	Employed	Private business sector	Administrative and support service activities (N)	Employment agency activities (7810)	Owner - Director
T2 (M)	Employed	Private business sector	Wholesale and retail trade activities (G)	Retail sale of clothing in specialised stores (4771)	Head of Unit
T3 (M)	Employed	Public sector	Education (P)	Higher education (8540)	Lecturer
T4 (M)	Employed	Private business sector	Information and communication (J)	News agency activities (6391)	Journalist
T5 (M)	Employed, studying	Private business sector	Financial and insurance activities (K)	Life insurance (6511)	Insurance agent
T6 (V)	Employed	Public sector	Accommodation and food service activities (I)	Holiday and other short-stay accommodation (5520)	Accommodation provider, farmhouse owner
T7 (V)	Employed	Public sector	Manufacturing (C)	Garment sewing (1400)	Clothing designer
T8 (V)	Employed	Public sector	Construction (F)	Construction development (4110)	Construction manager
T9 (V)	Employed	Private business sector	Professional, scientific and technical activities (M)	Advertising agency activities (7311)	Owner-director
T10 (V)	Employed, studying	Private business sector	Transport and storage (H)	Passenger air transport (5110)	Transport specialist

With the increasing focus on sustainable consumption in society, it was appropriate to select representatives from different audiences who could ensure the comprehensiveness of the survey and reflect the various activities of society by participating in the survey. The survey was selected from 8 sections of the economic activities out of the 21 in the Classification. This allows for a broader range of answers to the questions posed and an assessment of the general public's attitudes towards sustainability through the personal use of sensory marketing tools.

Informants first described their views on how the elements of sensory marketing (sight (image), hearing (sound), smell (odour), taste (taste), and touch (feel)) can be used to promote sustainability values. Reducing consumption, taking an interest in sustainability, giving things a second life by recycling them, and adapting them to other uses were highlighted.

Informants stressed that sustainability is a critical issue, but unfortunately, it is not yet necessary for everyone (see results in Table 2 below).

Table 2. Category - Use of sensory marketing elements to promote sustainability values

Category	Sub-category	Empirical study statements
Using sensory marketing elements to promote sustainability values	Elements of sensory marketing	"<...> Possible information on the sustainability of the product and its production process. Current and future sustainability issues are raised. Suggests a more sustainable product or service <...>" (T2, T3, T10); "<...> Recycled materials can be used to make reusable packaging, which ensures sustainable consumption. Recycling is promoted by giving waste a second life <...>" (T5, T9); "<...> Promotes sustainable purchasing and consumption by choosing products of higher quality and longer shelf life. The person can assess whether they need the product or service. Encourages the choice of a higher quality, longer lasting product <...>" (T1, T6, T8); "<...> I am not the most sustainable citizen. Discourages because it involves both extra costs and waste of resources <...>" (T4, T7).

The next question tackles integrating sensory marketing elements into sustainability themes, products or services. Nine informants said that they had noticed the integration of sensory marketing elements in sustainability, and only one did not see such integration (see results in Table 3 below).

Table 3. Category 3 - Integration of sensory marketing elements in sustainability

Category	Sub-category	Empirical study statements
Integrating sensory marketing elements in the context of sustainability	Sensory marketing elements	"<...> Sometimes there is a visible or perceived incentive to choose products. The advertising itself contains information related to sustainability. Sustainability symbols can be seen on the packaging. Emphasis is placed on the products being made from recycled elements. Attention is drawn to services that do not use harmful substances or energy-efficient equipment. <...>" (T1, T2, T3, T6); "<...> Packaging should be environmentally friendly <...>" (T9); "<...> A song has been created about sorting 'wasteful' <...>" (T10); "<...> Uncoloured brown bags are associated with being natural. Green is associated with ecology. The use of advertising in clothes softeners often transports/relocates the character to nature <...>" (T5, T7, T4); "<...> I don't know, I haven't noticed <...>" (T8).

The next question focuses on sensory marketing elements, their impact on promoting sustainability, and the impact of integrated actions on the consumer. The informants here were divided between those who were optimistic that sensory marketing elements could encourage awareness sustainability among consumers and those who were unsure about such an impact (see results in Table 4 below).

Table 4. Category - Effect of sensory marketing elements on consumer sustainability awareness

Category	Sub-category	Empirical study statements
The impact of sensory marketing elements in promoting sustainability awareness among consumers	Elements of sensory marketing	"<...> Information on the amount of material saved or recycled increases awareness of sustainable consumption. Using several elements rather than just one will potentially attract more targeted people. The compatibility of the elements encourages consumers to choose sustainability. Sustainable relationship between urge/constraint <...>" (T1, T5, T6, T9, T10); "< > I do not think that the use of sensory marketing will affect consumer sustainability. It does not work. I haven't thought about it, but it probably won't. The presentation itself is not acceptable to the consumer in the form in which it is presented. The consumer lacks information <...>" (T2, T3, T4, T7, T8).

After finding out informants' views on how the consumer is reached and what influences or can influence conscious and sustainable consumption, it was also essential to find out how informants think about the contribution of sensory marketing to increasing consumer awareness of sustainability and social responsibility (see results in Table 5 below).

Table 5. Category - Influence of sensory marketing elements on sustainability in raising consumer awareness and social responsibility

Category	Sub-category	Empirical study statements
The impact of sensory marketing elements on sustainability to increase consumer awareness and social responsibility	Elements of sensory marketing	"<...> Marketing campaign designers should be involved <...>" (T5); "<...> Using multiple sensory elements. Visual and auditory communication of the benefits of sustainability to society. Visually demonstrating how materials are produced, recycled and where leftovers are used <...>" (T2, T7, T8); "<...> Tactful, gentle and non-aggressive demonstration. Demonstrating sustainable and non-sustainable products that allow you to feel, smell, and see, such as a gift box that gives off the smell of freshly baked muffins and another box that gives off the smell of unrecycled rotten rubbish. Giving some concrete examples: say a campaign for schoolchildren to go to recycling sites to smell the smell and see the real environment and absorb the benefits of recycling <...>" (T4, T6, T9); "<...> This is a very complex action that depends very much on public awareness. Public education is needed. Raising sustainability issues - making them more visible <...>" (T1, T3, T10).

The impact of the elements of sensory marketing is increasingly evident in our lives. But do we consider how they influence our behaviour and shape our values for sustainable consumption? The informants were straightforward about the perceived impacts and what influences them most in the sustainability process. It is evident that the most influential of all the sensory marketing elements is sight (image), followed by hearing (sound), then smell (odour), touch (feel) and the least influential is taste (taste) (see results in the table below).

Table 6. Category - Sensory perceptions for sustainability

Category	Sub-category	Empirical study statements
Sensory sensations to promote sustainability	Sight (image)	"<...> Interesting presentation. The information is pleasing and aesthetically pleasing to the eye. Info stands, advertising, visibility of the product itself. Sees material that is recycled <...>" (T5, T6, T7, T10); "<...> Shows an unpleasant image-not sustainable. Multimedia, awnings-unsustainable, plastic, electricity < >" (T3, T4); "< > You see the real situation. The environment we live in <...>" (T9, T2); "< > Reduces aggression <...>" (T8); "< > Not everything is beautiful that is shiny (artificial paint) <...>" (T1).
	Hearing (sound)	"<...> You are allowed to hear the damage that is being done to, say, nature - the sound of trees being crushed. Endangered animal/bird species/noises <...>" (T2, T4); "< > Positive emotionally stimulating sound to promote sustainability. Hear info and can assimilate. Awareness < >" (T5, T7, T9); "< > Multimedia, radio - unsustainable - use of electricity, use of heat. Less advertising < >" (T1, T3); "< > Less fatigue < >" (T8).
	Olfaction (smell)	"<...> The milder the smell, the more pleasant. The more pleasant the smell of goods or services. Pleasant smells are emitted <...>" (T7, T8, T10); "< > Smelling meat in the market is a barn < >" (T3); "< > Banning synthetic smells < >" (T1); "< > It is allowed to smell bad smells, such as garbage <...>" (T4).
	Touch (smell)	"<...> By touch, we can compare quality parameters. The more pleasant the touch, the better. Bringing more robust, higher quality products to market. If it does not lose its marketable appearance, it is sustainable <...>" (T13, T7, T8, T9); "< > Touching rough surfaces - pointing to the messiness, linking denial to the roughness < >" (T4).
	Taste (tasting)	"<...> Small portions, quantities <...>" (T1); "< > Sour candy/sweet candy. Which one are you? < >" (T4); "< > Disposable dishes - unsustainable < >" (T3); "< > Hard to say < >" (T9).

Sustainable consumption is becoming increasingly important in a global consumer society, as society, the consumer, increasingly faces challenges. The theme of sustainability is also being addressed through the elements of sensory marketing. These elements are a small step closer to the consumer and, simultaneously, to a more sustainable life. Sustainable consumption is the conscious use of services and goods (products) to meet our basic needs and create a better quality of life.

Conclusions

The analysis of scientific literature showed that sensory marketing influences the choice of organic products that promote environmental sustainability. The sensory marketing model is suitable and reliable for increasing sales and making the store more sustainable.

Research data show that informants first described their views on how the elements of sensory marketing (sight (image), hearing (sound), smell (odour), taste (taste), and touch (feel)) can be used to promote sustainability values. Reducing consumption, taking an interest in sustainability, giving things a second life by recycling them, and adapting them to other uses were highlighted. Informants stressed that sustainability is a critical issue, but unfortunately, it is not yet necessary for everyone.

Sensory marketing increases consumer awareness of sustainability and social responsibility. It is evident that the most influential of all the sensory marketing elements is sight (image), followed by hearing (sound), then smell (odour), touch (feel), and the least influential is taste (taste). The theme of sustainability is also being addressed through the elements of sensory marketing. These elements are a small step closer to the consumer and, simultaneously, to a more sustainable life. Sustainable consumption is the conscious use of services and goods (products) to meet our basic needs and create a better quality of life; more social purchasing behaviour still needs to be encouraged since it is still not a universal norm.

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