



# IMPLICIT SENSORY ASSOCIATIONS

Implicit Sensory Associations and Sensory Marketing: The integration of tools from applied consumer neuroscience and sensory science to better approach understanding of the product experience.

Sensory product attributes serve as a great way to non-consciously and emotionally communicate with a consumer. By appealing to the consumers' senses (through smell, taste, touch, sound, sight) in a way that is congruent with a concept, it is possible to suggest that a product experience will be a certain way. For example, looking at a green bottle of shampoo with images of fruit on it, it's safe to assume you would expect it to smell fruity. And when all the senses are communicating in a cohesive way, the implicit messaging can resonate strongly with the consumer. In fact, when more senses are incorporated into the messaging, the brand impact becomes greater, increasing consumer loyalty, emotional connections and associations.

Understanding how consumers perceive your brand is paramount and a good first step to uncovering the unmet needs of a product or product line. Knowing the market landscape of the brand perception provides insight into consumer need gaps that can drive innovation and uncover unique opportunities. Once the need gaps of your brand are identified, it is then possible to make informed decisions on messaging, packaging elements, and sensory attributes to help build the story you hope to achieve with your product.

The impacts of taste, smell, sight, sound and feel on overall product perception can also help in product design. For example, how will this flavor innovation affect brand perception? Is it congruent to packaging design? And does the feel of this lotion on the skin signal moisturization? Does the smell connote cleanliness? Answering these types of questions can drive the intended message through the creation of a cohesive product experience.

## SMELLS Like Teen Spirit

*The sight of the little madeleine had recalled nothing to my mind before I tasted it; perhaps because I had so often seen such things in the interval, without tasting them, on the trays in pastry-cook's windows, that their image had dissociated itself from those Combray days to take its place among others more recent; perhaps because of those memories, so long abandoned and put out of mind, nothing now survived, everything was scattered; the forms of things, including that of the little scallop-shell of pastry, so richly sensual under its severe, religious folds, were either obliterated or had been so long dormant as to have lost the power of expansion which would have allowed them to resume their place in my consciousness. But when from a long-distant past nothing subsists, after the people are dead, after the things are broken and scattered, still, alone, more fragile, but with more vitality, more unsubstantial, more persistent, more faithful, the smell and taste of things remain poised for a long time, like souls, ready to remind us, waiting and hoping for their moment, amid the ruins of all the rest; and bear unfaltering, in the tiny and almost impalpable drop of their essence, the vast structure of recollection.*

Marcel Proust, *In Search of Lost Time*

Our sense of smell is incredibly important, not only for our survival (sensing dangerous predators, leaking gas, or rotting food) but also for our psychological and behavioral responses. Research has shown that scent can help us recognize our relatives, choose our mates and even communicate to some degree. Olfaction (ability to smell) has significant links to emotion and memory. Some have called this the “Proustian Phenomenon,” which is, out of all our senses, our sense of smell produces the strongest effects on memory (De Bruijn & Bender, 2018). For Marcel Proust, this was being drawn back into memories of his childhood after smelling madeleine cookies dipped in tea. A similar example can come from the unfortunate experience of food poisoning from something such as a strawberry smoothie. Smelling anything resembling a strawberry after you recover could make you nauseated again (which is referred to as a conditioned taste aversion). In a more positive example, imagine choosing a new fragrance to wear on your wedding day. Smelling the fragrance after the wedding festivities may bring back all of the joy and romance of that special day.

When it comes to sensory marketing, scent can also play a powerful role. Fragrances have been shown to influence mood and can set the stage for a product, store or even a hotel or restaurant (Herz, 2009). When a shopper comes into a store to, for example, choose a shampoo to purchase, she will likely pop open the cap to smell it. She may also be inclined to squeeze the bread for softness, shake the juice for consistency or even test cosmetics on her skin for color and texture. Product designers have the ability in these situations to communicate information about their products. Of course, the product should have a pleasant fragrance, but **beyond just liking**, this is an opportunity to communicate a concept, a story and a brand. Is it an invigorating shampoo? Is it healthy? Is it all natural? Furthermore, building the brand harmonization includes ensuring the packaging and brand match the fragrance. Is it a prestigious brand? Does the packaging display tropical fruit and a vacation scene? Who is the target demographic- adults or teenagers? All of these ideas are communications from the company trying to send an overall positive message to the consumer.

**Outside of the traditional concept of fragrance as a means to make your home smell better or clothing smell clean, it can also be used to set the mood and convey a message about a specific product.**

## Instances of Product Interconnection

For example, consider the product development process for sunscreen lotion. The choice as to whether it's more for daily use, or for the beach, or for that matter, for sport, will influence the following decisions about the sunscreen lotion since the context of its use changes drastically. If it's an everyday lotion, perhaps you don't want to go to work smelling like a coconut. Therefore, the fragrance will need to be better suited for an office environment.

Another example of the importance fragrance has on perspective is seen in laundry. In one study, people were asked to rate the softness of a set of towels. The participants didn't know this, but the towels were all the same, with the only difference being fragrance used on them. Researchers found people actually rated the softness differently depending on the fragrance. So, products designed to calm or awaken someone would be keen to choose their associated smell wisely. The fragrance in this example is called a functional fragrance since it has a planned effect. Fragrances can also have refreshing or invigorating effects or what's called a

“higher-order benefit,” like confidence or moisturizing (Richardson, 1999; Porcherot et al., 2010; Ruzeviciute, Kamleitner, & Biswas, 2017). How can a smell make you feel “confident” or “moisturized?” It’s through learned associations as well as the context it’s presented in.

At HCD Research, we use a combination of traditional market research (interviews, surveys, focus groups, ethnography, etc.), psychology (questionnaires, implicit testing, behavioral coding) and neuroscience (physiological measures) to help companies understand the consumer response to all of their communications (from concepts to commercials to flavor and fragrances and from marketing to product development and design). We look at the communications a company can make holistically (including sensory communications) and customize our research to get the most useful and actionable answers using the right tools and right research design.

## A Better Way with Implicit *Sensory* Testing

Far too often, marketing and product development (R&D) teams work in separate streams, independent of one another. The marketing path envisions the product one way, while R&D may interpret the objectives a slightly different way. In the example below, a vanilla home fragrance had a messaging concept of rich, decadent vanilla, while R&D created a more herbal, natural vanilla. The messaging communicated vanilla sweetness, yet the product experience portrayed nodes of bergamot, cedar and jasmine.

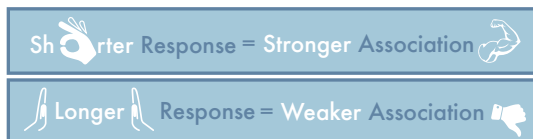


Having worked with both teams, we at HCD often find ourselves in the middle helping to solve the product conflict. And the best way forward is to do the appropriate testing to ensure harmony between both ideas expressed: the product must meet the promise.

To do so, implicit testing (as discussed in our implicit white paper here: <https://bit.ly/2SSYULM>) can be used to assess how a concept (imagery, colors, brands, etc.) or a sensory attribute (smell, taste, touch, sight) is being associated, and if it is meeting marketing goals.



Participants are instructed, depending on the type of tablet or desktop being utilized, to press either a spacebar or a button on the screen if the descriptor and the concept or sensory input (smell, taste, sound, sight) should be categorized together. For example, does the concept match (associate) with the idea of "healthy?" Does the fragrance match with the idea of "healthy?" The faster the participant presses the button to indicate a match, the stronger the association.



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### MARKETING PROFILE: Key Attributes

Creates a mood...		Fragrance smells...					
Balanced Energizing Healthy		Green Herbal Outdoor					
↑ Harmonious with product concept tested.							
Fragrance/ Concept	HIGH ASSOCIATION		MODERATE ASSOCIATION		LOW ASSOCIATION		
	Cozy Healthy	Tranquil Welcoming	Balanced Energizing	Fun Lighthearted	An escape Festive Nostalgic Sophisticated	Traditional Trendy Unexpected Unpleasant	
<b>Concept</b>	Cozy Healthy	Tranquil Welcoming	Balanced Energizing	Fun Lighthearted	An escape Festive Nostalgic Sophisticated	Traditional Trendy Unexpected Unpleasant	
<b>A</b>	Cozy Fun	Healthy Welcoming	Balanced Energizing Festive	Lighthearted Traditional Tranquil	An escape Nostalgic Trendy	Unexpected Unpleasant	
<b>B</b>	Balanced Cozy Energizing Fun	Healthy Lighthearted Welcoming		Festive Tranquil Trendy	An escape Nostalgic Sophisticated	Traditional Unexpected Unpleasant	
<b>C</b>		Cozy	Balanced Fun Healthy	Lighthearted Welcoming	An escape Energizing Festive Nostalgic Sophisticated	Traditional Trendy Unexpected Unpleasant	
<b>D</b>			Balanced Cozy	Healthy Welcoming	An escape Energizing Festive Fun Lighthearted Nostalgic	Traditional Tranquil Trendy Unexpected Unpleasant	

Implicit association makes it possible to assess holistic consumer product perceptions for cross-modal associations. Cross-modal perceptions involve multiple sensory modalities that influence observations. Our bodies react to stimulus in various ways, and to fully comprehend how the participant interacts with a stimulus, it is helpful to assimilate processes for a better overall idea. Cross-modal perception and integration involve interactions between sensory and cognitive perceptual modalities. By measuring visual attention through eye tracking or emotional arousal through skin conductance, in combination with implicit associations, we can infer not only how the body reacts, but also what is causing it.

Research does not have a single approach that works for every question. By combining methods that integrate well, a global perspective of the consumer's reaction is obtained. Objectively discovering trends in human behavior gives us the ability to reliably predict if something will reoccur. Having a window into an unfiltered, unbiased perspective gives so much value to understanding human behavior.

**IF YOU ARE INTERESTED IN LEARNING MORE ABOUT HOW THE USE OF IMPLICIT ASSOCIATION OR OTHER METHODOLOGIES CAN HELP YOU ANSWER YOUR RESEARCH QUESTIONS, PLEASE FEEL FREE TO CONTACT HCD RESEARCH VIA EMAIL AT [INFO@HCDI.NET](mailto:info@hcdi.net) OR CALL 908.788.9393.**

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