NEW RESEARCH

THE ESSENTIALITY OF FRAGRANCE

The Impact And Importance
Of Scent In Household Products

A STUDY SPONSORED BY:





RESEARCH OVERVIEW

From ancient Egyptian perfumes to today's scented candles, humans have deliberately scented their environment for purpose or pleasure for millennia. While fragrance has a long cultural history and scent superfans, it is occasionally criticized as an unnecessary luxury. So why is fragrance essential? What makes certain scents attractive? How does fragrance impact our daily lives?

New research published in *Cognitive Research: Principles and Implications* tackles these questions and presents a three-factor benefits framework - functional benefits, in-use experience benefits, and emotional benefits - to advance the understanding of the essentiality of fragrance and consumer preference for scented household products.

People overwhelmingly prefer fragrance

- In the U.S., scented products represent 89% of laundry, 79% of surface cleaning, and 99% of dish washing product sales, even when unscented versions are available.
- Most consumers feel scent is an important addition to household products like air fresheners (97.1%), laundry products (82.1%), and household cleaners (78.2%).

Advancement in chemical synthesis enhanced safety, availability, and variety of fragrance materials and delivered environmental benefits

- Prior to the 20th century, natural fragrance ingredients were in limited supply and often prohibitively expensive, resulting in only the wealthy being able to enjoy perfumes and scented goods.
- Manufacturing of synthetic fragrances reduced the cost of scented consumer products, thus increasing access for more individuals.
- Chemical synthesis has allowed for the customization of scent molecules
 to be compatible with the chemistry of a variety of consumer products,
 including detergents and cleaners, thus leading to the ubiquity of scented
 household consumer products.
- Synthetic fragrance ingredients are thoroughly evaluated to support their safe use in consumer products.
- Life cycle analysis reveals that naturally derived menthol results in 5-10 times the amount of CO2 per kilogram than manufacturing the synthetic equivalent.

THE THREE-FACTOR BENEFITS FRAMEWORK

To explain the attraction to scent in household products, the research proposes a novel three-factor framework, comprising functional benefits (malodor mitigation, base odor coverage, freshening), in-use experience benefits (cleanliness, efficacy, pleasure), and emotional benefits (increase in confidence, mood, and nostalgia).



FUNCTIONAL BENEFITS - what scent "does" for the product.

To have a functional benefit, a product's scent must first functionally support and reinforce the task goal of the product, including mitigating bad odors, covering unpleasant base scents of products, or creating a sense of freshness.

- Consumers confirm that eliminating unwanted odor is a primary reason for using scented air fresheners (44.7%), household cleaners (35.9%) and laundry products (38.7%). For this reason, many laundry, cleaning, and air care products contain scent-based technologies to capture or alter the molecular structure of the underlying malodor molecules and/or prevent the perception of malodor, thus helping consumers feel that they are able to eliminate and control malodors.
- The addition of pleasant fragrance reduces the negative impact on wellbeing
 that malodors can produce. Removal of malodor in office spaces, for
 example, has been shown to increase performance and improve subjective
 responses in employees, which underscores the role that odors can play in
 workplace productivity.

IN-USE EXPERIENCE BENEFITS – management of the usage experience of a product.

This benefit improves or makes the task like bathroom cleaning pleasurable, encourages proper product use, and acts as signal that the job is complete, such as the scent of laundry indicating that clothes are clean. The signal through scent that a task is complete also has further implications, such as helping to avoid wasted time, effort, and resources (e.g., water, electricity) to re-clean clothes or surfaces.

- 54% of US consumers surveyed here said that a cleaning job is "well done" when the home smells "clean."
- These signals that a space is clean also encourage social behaviors, like welcoming guests.

EMOTIONAL BENEFITS – the feeling that scent evokes.

The presence of pleasant scents enhances mood and self-confidence, evokes emotional memories, is associated with meaningful or emotional events that promote nostalgia

- The power to evoke emotional memories is one of the defining features of olfaction. In the present survey of air care, laundry, and household cleaning products, over one-third (35.9%) claimed to have an emotional connection to the scents found in these products. Respondents further endorsed that familiar and favorite scents left them with a variety of positive emotions including "calm" (66.2%), "happy" (49.3%), and "comforted" (46.7%).
- Product scents that are associated with meaningful or emotional events become both a product scent signature and a cue that elicits happy and nostalgic memories. In a survey for a leading US detergent designed for baby clothes taken by 2,000 new parents, 90% said that the scent itself reminded them of "baby", and 87% said that the scent made them feel more connected and closer to their newborn.
- Given the power of scent to impact mood, it is not surprising that there
 is a well-defined subset of consumers who are identified by the fragrance
 industry as "scent seekers," who claim to want a lot of scent in their air care
 (57.9%), laundry (40.4%), and cleaning products (27.7%).

BENEFITS OF FRAGRANCE ARE LINKED TO IMPROVED QUALITY OF LIFE

In contrast to all other senses, olfactory information is relayed first and foremost to brain areas that process emotion, learning, and memory. This unique pathway causes an instantaneous response which affects emotional states, arousal levels, and cognitive processing – the immediacy of which helps explain the role that scent plays in signaling safety and cleanliness in environments and objects. The sense of smell and the impact of scent is fundamental to most experiences of daily life, including memory, mental and physical wellbeing, motivated behavior, and social behavior.

Wellbeing

- Pleasant ambient odors tend to improve mood and unpleasant odors worsen mood.
- People who experience odor-evoked nostalgia report higher levels of positive affect, self-esteem, and optimism.
- Odors that evoke pleasant memories are associated with a reduction in physiological stress biomarkers such as respiration rate and heart rate and may also boost immune system functioning.
- Exposure to scent has also been shown to be useful in alleviating discomfort
 and managing the perception of pain. For example, subjects exposed to a
 preferred pleasant scent while undergoing painful heat reported improved
 mood, decreased anxiety, and decreased rating of pain.
- Scent can elevate emotions when performing routine or mundane chores such as cleaning or laundering clothes, thus making these chores more pleasant.

Motivated Behavior

- Positive mood has been shown to increase productivity, decision making, and creativity.
- Scents help reduce feelings of fatigue and improve performance when undergoing tiring or difficult cognitive tasks. The US military has even reported that introducing scent during training exercises improved later performance when the scent was present during subsequent tests.
- Together these findings suggest that the preference for scented products used in household chores like cleaning or laundry may be partly because the scents make users feel more invigorated and the tasks less fatiguing.

Social Behavior

- Studies have found that pleasant ambient scents improved agreeableness and several measures of work cooperativity.
- A familiar scent highly associated with cleanliness has even been shown to promote pro-social behaviors, such as reciprocating trust and charity.
- When choosing personal scents, individuals are creating their sensory selfimage – who they are or want to be perceived as, making them feel more confident. 65% of women surveyed reported feeling more confident when they wore perfume.
- Studies have found that people whose clothing scents were associated
 with cleanliness were rated as more intelligent, attractive, successful, and
 sociable than people whose clothing smelled less clean, even though it was
 just as clean.
- People suffering from olfactory disfunction can be reassured that household products with pleasant fragrances will make their clothes and home smell clean and will mitigate potential malodors. Thus, scented household products can increase confidence and lessen anxiety about socializing and entertaining at home, which may help overcome social withdrawal.

LEARN MORE

If you're interested in learning more, we invite you to reach out to the authors involved in this paper (via fahmed@fragrancecreators.org) or review additional assets related to topics covered above, including:

- Full Research Text: A three-factor benefits framework for understanding consumer preference for scented household products: psychological interactions and implications for future development | Cognitive Research: Principles and Implications | Full Text (springeropen.com)
- The Impact of Indoor Malodor: Historical Perspective, Modern Challenges, Negative Effects, and Approaches for Mitigation
- Fragrance Conservatory

Herz, R.S., Larsson, M., Trujillo, R. et al. A three-factor benefits framework for understanding consumer preference for scented household products: psychological interactions and implications for future development.

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