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From Sensory Richness to Sensory Deprivation: How COVID-19 Reshaped Perfume Purchase Behaviour

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Introduction & Background

Perfume purchasing is a highly multisensory process, relying on olfactory, tactile and visual cues. Although online retail already restricts direct olfactory engagement, the COVID-19 pandemic heightened these constraints by temporarily removing in-store sampling and therefore limiting physical interaction with products. Despite the growing interest in sensory marketing, little is known about how consumers' real-world purchasing behaviour changes when key sensory inputs are restricted.

Objectives & Approach

This study presents a prototype for capturing continuous data streams of participants' eye movements using webcam technology in a natural browsing context. We used eye-tracking technology (Tobii Spark) to observe how 30 participants interacted with a web demo interface. Participants were asked to review information for three products presented sequentially and choose their preferred product from the website. To isolate the information search process itself, product prices were kept constant, and the products had comparable levels of review detail and average ratings. Eye-tracking data were analysed using fixation- and saccade-based metrics across predefined areas of interest (product image, price, details and reviews), allowing us to quantify participants' information search dynamics.

Relevance to Digital Footprints

This research examines how consumers' perfume purchasing behaviour shifts in limited multisensory retail environments by adopting a sensory deprivation perspective. Specifically, it investigates whether there are changes in purchasing behaviour across pre-COVID, during-COVID and post-COVID periods, including potential shifts in reliance on brand, price, product descriptions and visual cues.

Conclusions & Implications

Conceptually, this study advances sensory marketing research by shifting the focus from sensory optimisation to sensory constraint, positioning sensory deprivation as a meaningful condition that shapes consumer behavioural patterns. Empirically, it offers preliminary insights into how consumers' perfume purchasing behaviour may shift when multisensory access is disrupted. The research demonstrates how natural disruptions can be used to deepen understanding of consumer psychology in digital and physical retail marketplaces.

Keywords

sensory marketing, perfume purchasing behaviour, digital footprints, covid-19, sensory deprivation

