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Congruency of Scent and Music as a Driver of In-Store Evaluations and Behavior

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Since the beginning of the 1970s, with Kotler's pioneering work, the topic of atmospheric effects on consumer behavior has gained popularity among academic researchers and practitioners alike. Despite weak theory development in this area, managers of retail and service outlets have long understood the importance of the built environment in enhancing product evaluations, consumer satisfaction with the shopping experience and sales.

In this study, we examine the notion that consumers perceive environmental cues in a holistic manner. Prior research has isolated the effects of several general interior variables such as music, lighting, crowding, cleanliness and ambient scent on consumer evaluations of retail outlets. However, little is known about the effects of the global configurations of aspects of the environment. To fill this gap, the primary goal of this study is to extend the notion of Gestalt to consumers' perceptions of retail environments. We propose that consumer responses to a physical environment may depend on ensemble effects (configurations), and we examine this proposition using two ambient cues: music and scent.

To maximize these holistic effects, consumers need to perceive the arousing qualities of music (fast or slow tempo) to be coherent with the scent (stimulating or relaxing). We propose that matching ambient stimuli leads to higher evaluations of the store environment, more positive behavioral responses, and higher satisfaction levels than mismatch conditions.

To test our propositions, we manipulate ambient scent and music in a 3 (no music, and pleasant low arousal and high arousal music) by 3 (no scent, and pleasant low and high arousal scents) factorial design in a field setting. Specifically, the retail store is scented with either a high arousal scent (Grapefruit), low arousal scent (Lavender) or no scent, while the music manipulation involves slow tempo (low arousal), high tempo (high arousal) classical background music, or no background music.

In addition to replicating the main effects of pleasant ambient stimuli found in past studies (i.e. adding background music and pleasant aromas to a retail environment enhances consumer evaluations and shopping behaviors), we find that environmental cues interact with each other. Specifically, consumers' evaluations of the shopping experience are significantly increased when the arousal levels of ambient scent and background music matched. For example, the combination of a low arousal scent (Lavender) with slow tempo music leads to higher consumer evaluations than the use of that scent with high arousal music. Alternatively, the playing of fast tempo music had a more positive effect on approach behaviors when the store was scented with Grapefruit (high arousal scent) rather than with Lavender. When the two ambient factors were congruent with each other, shoppers evaluated the perceived environment more positively, experienced enhanced satisfaction, and exhibited higher levels of approach and impulse buying behaviors than when the environmental cues.

From a managerial point of view, the key implication from this research is the importance of building congruence among elements of the Servicescape in terms of their arousing qualities. The strategic manipulation of the retail environment requires a careful consideration of the matching effects of the ambient stimuli. For example, retail stores aimed at teenagers might want to explore combining high arousal scents with funky music to induce unplanned purchases. Or, to maximize pleasure associated with a department store shopping experience, the managers may wish to scent the Servicescape with low arousal aromas while playing classical background music. We find that intensifying the arousal of a particular environmental cue (e.g., upbeat music or bright colors) cannot

be done in isolation. It is the overall configuration of ambient cues that drives customer perceptions of the environment and more importantly their shopping behaviors.

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