The Simple (And Complex) Effects of Scent on Retail Shoppers: Processing Fluency and Ambient Olfactory Stimuli

Friederike Haberland, University of St. Gallen, Switzerland
David Sprott, Washington State University, USA
Jan R. Landwehr, University of St. Gallen, Switzerland

Although ambient scents within a retail store have been demonstrated to influence shoppers, extant research has not provided an adequate theoretical explanation for observed effects. The current research addresses this issue by exploring the role of processing fluency in olfactory cue effects. Across two field experiments and in support of a fluency explanation, we demonstrate that scent complexity impacts shoppers’ response to a scented retailer. In comparison to a control condition, simple or more fluent scents led to positive customer responses (including increased spending), while more complex scents had no effect on shoppers. Results also indicate that affective responses to the environment mediate observed effects. Implications for theory and practice are provided.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/15481/volumes/v37/NA-37

copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
The Simple (and Complex) Effects of Scent on Retail Shoppers: Processing Fluency and Ambient Olfactory Stimuli

Friederike Haberland, University of St. Gallen, Switzerland
David Sprott, Washington State University, USA
Jan R. Landwehr, University of St. Gallen, Switzerland
Andreas Herrmann, University of St. Gallen, Switzerland
Eric R. Spangenberg, Washington State University, USA

EXTENDED ABSTRACT

Research in marketing suggests that customers within a retail store can be influenced by ambient scents. Unfortunately, there have been few theoretical explanations offered for observed effects. The major goal of this paper is to explore how ambient scent impacts expenditures and the extent to which specific characteristics of the olfactory cue itself plays a role. In particular, we propose that the ease with which olfactory cues are processed (i.e., processing fluency) will affect how such cues influence customer behavior. According to processing fluency, stimuli that are easier processing will trigger positive affect, which in turn will result in greater liking of a stimulus and other positive outcomes (e.g., increased spending in the presence of such a cue). In this research, we examine the perceived ease of processing of a simple versus complex olfactory cue, such that ease of processing effects are significantly stronger for simple, rather than for complex, scents (stimulus complexity is a traditional manipulation of processing fluency). To provide insights in the underlying process and support a processing fluency explanation, we explore the mediating role of affective responses on the observed effects.

In this research, two pretests were conducted for stimuli selection, followed by two experiments designed to explore the major issues of interest. In pretest 1 (N=208), we tested different scents varying in terms of complexity (or processing fluency), but that did not differ along other theoretically relevant dimensions. In cooperation with a commercial scent supplier, experimental stimuli contained only one a single scent for the simple scent condition or multiple scents for the complex condition. Participants rated scents (provided in an opaque vial) regarding stimuli complexity, pleasantness and congruency with the retail store. A significant complexity by scent interaction emerged for the selected scents but, as intended, no interactions emerged with regard to perceived congruency or pleasantness of the scent. In pretest 2 (N=156), the complexity of scents selected from the first pretest were examined in a real-world setting by diffusing the scents in a retail store. Shoppers were stopped randomly and asked to fill out a questionnaire. Using the same measures as first pretest, we obtained a significant effect on perceived complexity as expected.

In study 1 (N=186), customers were exposed to simple and complex ambient scents diffused within a retail store, or to no scent at all (in the control condition). After passing the cash register, customers were asked to indicate their spending and complete a short survey. As expected, results indicated a significant impact of ambient scent on sales, but only for simple scents. In particular, shoppers spent more money when exposed to a simple ambient scent, as compared to a complex ambient scent or no scent at all. Sales between the complex and no scent conditions did not differ. To understand the postulated underlying processes of fluency, we explore in study 2 the psychological process underlying observed effects.

In study 2 (N=220), customers were exposed to simple or complex scents, or no scent at all, within a retail store. Additionally, we assessed customers’ affective response. Results of this experiment were nearly identical to those of study 1. Given the similar result, the mediating role of affective reactions was tested via OLS regression. These results showed that the direct effect of the simple ambient scent on spending was significantly mediated by consumers affective responses, such that when consumers’ affective reactions are included in the model, the relationship weakens to non significance.

Nearly all prior research on scent has applied the S-O-R model to explain the effects of scent on customers. In our research, we demonstrate the theoretical importance of processing fluency by demonstrating stronger effects for simple (versus complex) ambient scents on sales. One of the most intriguing findings of the current research concerns our demonstration that processing fluency can be applied to olfactory stimuli, something that has yet to be shown in the fluency literature. The results of the current research are not only of theoretical interest to those in marketing and psychology, but also have important managerial implications by indicating the nature of scents that should be employed by firms and marketing managers. In particular, firms would be well served to consider the actual nature of scents and to consider employing scents that are simpler and therefore easier to process by consumers.

REFERENCES

*Journal of Marketing Research*, 43 (August), 374–85.

*Journal of Marketing Research*, 49 (May), 151-65.

*Acta Psychologica*, 123 (November), 394-413.


