

Understanding the Impact of Automatic and Deliberate Mental Haptic Imagery on Consumer Touch Perception in E-commerce Environments.

Prof. Dr. Lieve Doucé¹, Felitsa Rademakers^{1,2}, Prof. Dr. Kim Willems²

¹Hasselt University, ²Vrije Universiteit Brussel, imec-SMIT

The phenomenon's relevance. In online stores, the absence of physical product inspection often leads to post-purchase disappointment. Lacking technologies for engaging other senses, webshops mainly rely on visual information. To fill out the blanks, consumers can also rely on 'mental imagery' while browsing, imagining how it would be to interact with products through all senses.

Theoretical foundations. Eliciting mental imagery has been used as a persuasive communication strategy for years. Especially in *advertising*, consumers are often encouraged to imagine the use of the product, leading to better product evaluation, stronger product desire, and greater purchase intentions (Krishna et al., 2016; Elder & Krishna, 2012). Two types of mental sensory imagery can be distinguished: deliberate (i.e., consumers being instructed to form an image) and automatic mental imagery (i.e., more spontaneous imagination, for example, by reading a description). The effects of both types of imagery are so far mostly studied in *isolation* (Elder & Krishna, 2022).

Potential contributions to the field. This research (1) examines the effect of haptic imagery on consumer reactions in webshops, while (2) comparing both types (i.e., automatic and deliberate mental imagery).

Research question(s). Our objective is to develop a better understanding of the role of these two types of haptic imagery in consumer decision-making processes in online shopping. We unravel explanatory mechanisms and inspect boundary conditions.

Methodology. A controlled lab experiment ($n = 161$) in a beauty care context with a 2 (automatic imagery: yes/no) $\times$ 2 (deliberate imagery: yes/no) full factorial design has been conducted. Mediators (e.g., processing fluency), as well as moderators (e.g., imaginativeness), have been considered.

Findings. Consumers with high imaginativeness should be encouraged to use their imaginative power by appealing to deliberate (rather than automatic) mental haptic imagery, as this activates three underlying favorable mechanisms. The indirect effect of deliberate imagery (compared to automatic imagery) on *consumer attitude towards the product* was statistically significant and positive – albeit only for highly imaginative consumers (+1SD) - and this via (1) *communication evoked imagery processing* ($\beta = .25$; 95% CI = [.05, .49]), (2) *embodied mental simulation* ($\beta = .18$; 95% CI = [.03, .36]), and (3) *processing fluency* ($\beta = .21$; 95% CI = [.05, .42]). These three mechanisms, in turn, are also directly positively related to more positive attitudes and higher purchase intentions towards the product.

Discussion. Our findings in a *webshop* context echo what has been observed in the advertising realm before. Moreover, by examining both types of haptic imagery *concurrently* (rather than separately), we were able to observe that for certain target customer segments, deliberate imagery outperforms automatic imagery.

Conclusion. These insights can inform marketing strategies and practices, ultimately leading to more effective and satisfying online shopping experiences for consumers.