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Research note

The influence of tactile input on the evaluation of retail product offerings

Bianca Grohmann [a,*], Eric R. Spangenberg [b,1], David E. Sprott [b,2]

[a] *John Molson School of Business, Concordia University, 1455 de Maisonneuve Blvd. W., Montreal, Quebec H3G 1M8, Canada*
[b] *College of Business, Washington State University, Pullman, WA 99164-4730, United States*

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Abstract

Retailers can benefit from allowing customers to touch their products. The influence of tactile input on evaluation, however, remains undemonstrated in the literature. In four experiments, effects of tactile input were observed for product categories wherein tactile input was diagnostic, and depended on product quality. While this effect was moderated by individual differences in need for touch when there was no opportunity for multiple product comparisons, there was no support for a mediating role of affect. Implications for retailing theory and practice are discussed.

Keywords: Retailers; Customers; Tactile input

When evaluating a retailers' product offering, consumers often substantially weight information obtained through tactile input (e.g., Holbrook 1983). Only recently, however, has research directly addressed the effects of tactile input with findings indicating that consumers differ with regard to their need to use touch during product evaluation (Peck and Childers 2003a) and that the opportunity to touch products affects choice in offline versus online retail environments (McCabe and Nowlis 2003). Further, the availability of tactile input has been shown to affect consumers' confidence in their evaluations, while disallowing touching of products results in high levels of frustration among consumers who rely on touch (Peck and Childers 2003b). Although this literature informs retailers that touch matters, existing research has not demonstrated that tactile input actually influences product evaluation. Further, research has not elucidated the theoretical mechanism(s) underlying observed effects of touch. While it has been suggested that the effects of tactile input are due to the information extracted through touch (McCabe and Nowlis 2003; Peck and Childers 2003b), other viable explanations such as affective responses to touch have not been explored. The primary objective of this article is to examine the effects of tactile input on product evaluation. We also provide theoretical discussion regarding why such effects may occur and implications of these findings for retail practice.

How touching a retailer's product influences evaluation

Recent research shows that tactile input can play a role in product evaluation (Peck and Childers 2003b) and decision making (McCabe and Nowlis 2003). Consumers prefer to select products from retailers who allow their products to be touched (McCabe and Nowlis 2003), especially products for which tactile input is important for evaluation (e.g., clothing, portable electronics). More generally touch can be considered a form of approach behavior. Mehrabian (1981) noted that approach behavior can induce liking, preference, and a more positive attitude. Heslin and Alper (1983) proposed that "touching does, indeed, cause liking" (p. 63). Overall, the literature suggests that tactile input (vs. lack of tactile input) leads to positive consumer responses for any product of an

* Corresponding author. Tel.: +1 514 848 2424x4845.
E-mail addresses: bgrohmann@jmsb.concordia.ca (B. Grohmann), ers@wsu.edu (E.R. Spangenberg), dsprott@wsu.edu (D.E. Sprott).
[1] Tel.: +1 509 335 3596.
[2] Tel.: +1 509 335 6896.

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acceptable quality level (i.e., we would not expect to see such a positive effect for products of extremely poor quality).

Tactile input is also essential in the evaluation of a product's substance properties, such as roughness, hardness, temperature and weight (Klatzky et al. 1991), because it provides unique information that cannot be obtained through visual inspection (Lindauer et al. 1986). Tactile input is thus of particular importance in the evaluation of retail offerings (e.g., textiles, cell phones) where substance properties are salient characteristics. For such products, tactile input is diagnostic (i.e., predictive of substance properties relevant to product performance). Extant literature suggests that allowing consumers to acquire diagnostic tactile information has predominantly positive effects on consumer responses by increasing confidence in product evaluations and decreasing frustration for consumers motivated to touch (Peck and Childers 2003b). This proposed relationship between tactile input and confidence is reexamined here to provide additional evidence relevant to the diagnostic value explanation.

H1. For products wherein tactile input is diagnostic, tactile input (vs. lack of tactile input) results in (a) more positive product evaluations, and (b) greater perceived accuracy and confidence in product evaluations.

Tactile input can also play a role in consumers' perception of product quality, such that touching of a product during evaluation can be an efficient means for consumers to assess intrinsic cues (attributes that are part of the physical product itself; Wheatley et al. 1981). Several studies (e.g., Sprott and Shimp 2004; Wheatley et al. 1981) have supported that intrinsic cues have a greater impact on quality perceptions than extrinsic cues (e.g., price, brand name) if they are more diagnostic in nature. Particularly relevant is Pincus and Waters' (1975) finding that a low-priced pen was perceived higher in quality when it was unpackaged and intrinsic cues were available than when placed in a package making intrinsic cues inaccessible. Although untested, a viable explanation for these effects is that more information is available to consumers who touch a product, resulting in more positive evaluations. If such a process exists, it is likely moderated by the nature of the product itself.

For products for which tactile input is diagnostic (i.e., predictive of substance properties relevant to product performance), touch enables consumers to make more accurate judgments and to discriminate between varying levels of product quality (i.e., the product's performance on substance properties). When consumers are unable to touch retailers' offerings, however, it is more difficult for them to discriminate between products of varying quality, especially when tactile input is important for evaluation. Consumers are thus forced to make inferences regarding a product's performance on relevant substance characteristics. Missing information is often replaced by an average value, or based on perceived covariation with known product information (Levin et al. 1984), and resulting evaluations are inaccurate. If the lack of tactile input impedes the acquisition of diagnostic information regarding substance properties related to product quality, product evaluations in this setting should vary little across product quality levels. Thus, product evaluations are not only affected by tactile input, but also by the quality of the product in terms of substance properties.

H2. Tactile input leads to more favorable (unfavorable) evaluations for high (low) quality products for which tactile input is diagnostic.

Alternately, affective reactions to tactile input are plausible mediators for the tactile input–product evaluation relationship (Holbrook 1983; Peck and Childers 2003a). Affective reactions consist of pleasure and arousal – two situational mediators in the stimulus–organism–response (SOR) framework of consumer responses (e.g., Baker et al. 1992; Donovan and Rossiter 1982). It is expected that the basic tenets of Mehrabian and Russell's (1974) SOR model also apply to tactile input in a retail context: a stimulus (product via visual or visual/tactile input) evokes affective reactions (e.g., pleasure, arousal), which in turn impact consumer responses (product evaluations). While affective mediation is a viable explanation for the effect of tactile input on product evaluation, it has not been tested.

H3. The effect of tactile input on evaluations is mediated by affective responses.

Although touch matters to consumers during product evaluation, questions remain as to the nature of the effect and its theoretical underpinnings. In a series of experiments, we consider two explanations: affective mediation and diagnostic value. While these arise from separate streams of literature, we allow for the possibility that consumers are affected by both processes.

Experiment 1

In Experiment 1, we examine the impact of tactile input on evaluations (H1a) and explore two contexts wherein tactile input is not accessible: one where the product is physically present during evaluation, but consumers are not allowed to touch it, the other where the product is not present, but is pictured on the Internet. Although extant research has compared consumer choice of products in online and offline environments (McCabe and Nowlis 2003), our study is the first to investigate the effect of physical versus virtual product presentation on product evaluations.

Method

In a one-factor (touch, no touch, Internet) between-participants design, replicated across three products presented in rotated order (ballpoint pen, fleece headband, flashlight key chain), undergraduate students ($N = 260$; 55.1