When does brand matter more than our senses?: The influence of touching or smelling experience on product evaluation

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In this work we examine the interaction between brand and direct experience on product evaluation. Specifically, we selected two products (perfume and paper) whose intrinsic quality can be inferred directly through sensory experience (i.e., scent and writing experience, respectively). Results from one field and one laboratorial experiment showed that brand impacts the perception of a product, overriding the information offered by direct sensory experience with the product. Importantly, this was more likely to occur in processing conditions that induce low elaboration (e.g., low motivation). We further discuss how these results contribute to understand the effect as supported by having brand as a heuristic or promoting a belief that is able to bias our perceptions.

Key words: Direct experience, Familiarity, Product evaluation, Brand, Quality, Touch, Smell.

We all like to believe that our consumer choices are mostly influenced by the intrinsic qualities of a product rather than by extrinsic cues such as their brands. At the very least, we would not like to believe that our sensory experiences with a product are overridden by its brand. However, several studies suggested that “label, not taste, prevails” (Woolfolk, Castellan, & Brooks, 1983). This is illustrated by the so-called “Pepsi paradox”: although no overall preference for Coke over Pepsi is found in blind taste tests, Coke outsells Pepsi. Both behavioral (e.g., Fornerino & d’Hauteville, 2010; Lee, Shimizu, Kniffin, & Wansink, 2013) and neuropsychology (e.g., Koenigs & Tranel, 2007) approaches provide converging evidence that sensory information only plays a part in how individuals evaluate a product. Indeed, our preferences are largely influenced by the product brand. In this paper, we examine in which processing conditions the brand impacts how much we rely on our senses and modulate how we evaluate a product.

When does brand override our senses?

Contemporary persuasion studies, guided by the Elaboration Likelihood Model (Petty & Cacioppo, 1986; see also, Petty, Briñol, Teeny, & Horcajo, 2018), suggest that both intrinsic and

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Extrinsic product features may influence our attitudes. However, these influences are dependent upon information processing conditions (i.e., motivation and ability to process), that determine the levels with which individuals elaborate on those product features. Specifically, processing conditions determine if individuals are more influenced by the thoughts they generate about those features (when highly motivated and with available cognitive resources) or are simply influenced by the desirability of those features (when low motivated or with lack of resources to think).

A brand is an extrinsic product feature with great persuasive power (e.g., Anees-ur-Rehman, Wong, & Hossain, 2016), being able to influence our attitudes by serving different roles depending on motivation and ability processing conditions. Specifically, for individuals engaged in elaborative thinking (i.e., with both high motivation and ability), the brand supports inferences about the quality of the product (e.g., Jacoby, Szybilko, & Busato-Schach, 1977) affecting how individuals perceive its features (e.g., Schifferstein, Kole, & Mojet, 1999). In contrast, if conditions do not favor elaborative thinking (i.e., low motivation or lack of ability), the brand offers a quick substitute for the complex process of assessing product’s quality (e.g., Dawar & Parker, 1994; Oxoby & Finnigan, 2007). This substitution supposedly occurs because a well-known and credible brand acts as an “information chunk” (Jacoby et al., 1977), acting as a heuristic that informs perceivers about the quality of the product’s intrinsic features (Erdem & Swait, 1998; Rao & Ruekert, 1994; Wernerfelt, 1988). Alternatively, the brand may influence the evaluation of the product by adding a relevant feature, such as prestige (e.g., Bhat & Reddy, 1998) or a set of emotional experiences (e.g., Elliott, 1997; Shiv, Edell, & Payne, 1997). In this case, the brand is a product feature that has its own value (Tsai, 2005) and is considered independently of processing conditions. Even so, it is able to bias either our thoughts about the product (Schifferstein et al., 1999) or our own experience with the product (Woolfolk et al., 1983).

Overall, this research suggests that brand (as other persuasive variables) can perform multiple roles in a persuasive process (e.g., Clark, Evans, & Wegener, 2011), depending upon elaborative conditions. Here we approach these conditions defined either by individuals’ levels of motivation to evaluate the product, as well as individual’s previous experience with the product (familiarity) and the complexity of the situation (which affects the ability of the individual to deal with it).

Elaborative conditions are directly related with how much the individual is motivated to attend to the attributes of the product and engaged in the process of inferring its quality (for a review, see Petty & Briñol, 2010). However, research has also shown that individuals are less likely to engage in elaborative process if they experience familiarity with the target of their evaluation (Claypool, Mackie, Garcia-Marques, McIntosh, & Udal, 2004; for reviews, see Claypool, Mackie, & Garcia-Marques, 2015; Johnston & Hawley, 1994). Such effect is more likely to be detected when individuals are neither high nor low motivated to make such evaluation (Claypool et al., 2004). Sampling a product can promote a feeling of familiarity with the product, which is both able to increase liking (mere exposure effect, Zajonc, 1968) and to decrease subsequent elaboration of incoming information.

But all these features impacting elaboration seems to be more determinant of processing outcomes when the evaluation of a product entails a higher amount of information and attributes (i.e., complex products; see Dijksterhuis, 2004). In this case, the process of inferring its quality is clearly complex as it involves more cognitive resources. Therefore, when conditions do not favor elaboration, individuals are not able to integrate all relevant information about the product. Instead, it is possible that they will rely on a quick substitute for the complex process of assessing that product quality – using the brand as a heuristic to its evaluation (e.g., Maheswaran, Mackie, & Chaiken, 1992; Oxoby & Finnigan, 2007).

Because heuristics are shortcuts that support judgments when processing is highly demanding they are less likely to have such relevance when judgments can easily rely on sensory experiences. In this case, the evaluation of a product in low elaborative conditions is more likely to be supported
by the direct processing of the product sensory attributes. As a result, we should expect the reliance on the brand to infer the quality of a product to be reduced whenever the available direct information about the product is enough to access its perceived quality. Yet, previous research has suggested that it may not be the case as there is evidence that brand influences our attitudes even when the evaluation of the product could rely solely on sensory experience. This data has been interpreted as supporting the view that beliefs in general are able to bias our experience of taste (e.g., Apaolaza, Hartmann, Echebarria, & Barrutia, 2017; Bernard & Liu, 2017; Bi, Gao, House, & Hausmann, 2015) and that senses may actually be overridden by brand name (LeClerc, Schmitt, & Dubé, 1994). However, alternative interpretation is that brand can influence quality perception by shaping/biasing the sensory experience itself or by informing participants about the quality of the product.

This matter can be addressed if we attend to the processing conditions that support such brand effects; namely if conditions are leading or not the brand to inform individuals’ thoughts about the product. If brand is supporting inferences about the quality of the product, its impact would occur whenever individuals engage in more elaborative processing (either in conditions that are highly motivated, or they are not familiarized with the product). But if brand effects are occurring only in the reduced elaboration conditions (lower motivation or recent familiarization with the product), then we could assume that brand is overcoming available information (i.e., our sensory perception), possibly even biasing our sensory experience (see Bernard & Liu, 2017; Bi et al., 2015).

In the current work, we present two experiments aiming to examine in which processing conditions the brand impacts the degree of reliance on our senses during the evaluation of products for which sensory information is perceived as a relevant quality cue. Experiment 1 is a field experiment that required clients of a trendy Parisian perfume shop to smell and to rate how much they liked a fragrance. Experiment 2 was conducted on the laboratory and entailed asking participants to evaluate the quality of paper through the experience of writing on it. Each study contrasts brand effects on product evaluations in two processing conditions: low versus high motivated participants (Experiment 1) and familiarity versus no-familiarity (Experiment 2) with the product (having familiarity reducing engagement on elaborative processes; Garcia-Marques, Fonseca, & Blascovich, 2015; Garcia-Marques & Mackie, 2001).

We expected the brand to bias participants’ reports of sensory experiences with a product, and a moderation of these effects by processing conditions. A fragrance is expected to smell better and a paper’s touch to be more agreeable when associated with a higher-status (vs. lower-status) brand. Moreover, by manipulating information processing conditions we may disentangle the role played by brand in products evaluation. Specifically, if these effects occur in high elaborative conditions, it is likely that brand is offering support for the inferential process that support individuals’ evaluations. Alternatively, if brand is expected to shape individual’s sensory experience the effects should occur in conditions that favour low-elaboration processing.

**Experiment 1**

**Participants and design**

Female tourists (n=166, between 30 and 50 years old), clients of a high fashion perfume shop, volunteered to participate in the study and were randomly allocated to the conditions defined by the first two factors of the design: 2 (Brand information: present vs. absent) x 2 (Product quality: high vs. low) x 2 (Motivation: Low vs. High) between-participants design. GPower analyses
suggest as necessary a sample of 128 to detect an effect of moderate magnitude with alpha of .05 and a power of .80.

**Materials**

A pilot study \((n=30)\) showed that the fragrance of perfume was unanimously defined as the most relevant feature of this type of product (46.6\% of the sample also reported other relevant features, such as price). The two selected perfumes are from a very high-status French brand. One was their best-selling perfume (hereafter defined as high-quality), whereas the other was their least-selling perfume (hereafter defined as low quality).

**Procedure**

Female tourists were invited to evaluate a sample of perfume presented in a paper strip and to indicate how much they liked the experience of smelling the fragrance (from 1=Not a good olfactory experience to 7=Very good olfactory experience). The brand was either disclosed immediately prior to the experience or after the rating of the product. All participants reported knowing the brand very well and perceiving it as a high-status brand.

Two independent judges, blind to the experimental conditions, observed the interaction between the experimenter and the participants and estimated how motivated the participants were regarding the task, using a 5-point scale (from 1=Not at all motivated to 5=Highly motivated). This estimation was based on several cues provided by participants’ behavior (e.g., willingness to experience the product, number of times they smelled the sample, and number and type of questions asked about the product).

**Results**

Three participants did not get full agreement between the two judges regarding their estimation of participant motivation levels. As such, their data was excluded from our analysis. Participants’ evaluations were analyzed within an ANOVA, defined by the full design. All three main effects were significant. Participants were sensitive to the quality of the fragrances, such that higher liking was observed for the high-quality \((M=4.17, SD=1.87)\) than for the low-quality perfume \((M=3.32, SD=1.49)\), \(F(1,156)=13.67, p<.001, \eta^2=0.08\). Less motivated participants reported higher liking \((M=4.03, SD=1.86)\) than those who were more motivated \((M=3.46, SD=1.49)\), \(F(1,156)=6.21, p=0.014, \eta^2=0.04\). Also, as expected, participants who received information about the brand prior to product evaluation reported higher liking \((M=4.43, SD=1.55)\) than those who did not \((M=3.05, SD=1.64)\), \(F(1,156)=35.75, p<.001, \eta^2=0.19\). The comparison of the magnitude of the effects suggests that, although additive (interaction \(F<1\)), brand was more relevant than the quality of the fragrance itself.

We hypothesized that brand effects on product evaluation would depend on processing conditions. Indeed, a significant interaction between brand information and motivation was found, \(F(1,156)=19.12, p<.001, \eta^2=0.10\), such that brand effects were stronger for less motivated participants \((M_{\text{present}}=5.22, SD=1.13; M_{\text{absent}}=2.84, SD=1.58)\) than for the more motivated

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1 In an evaluation of a subset of 15 participants, the frequency of these behaviors was shown to be correlated with the ratings provided by the judges (all \(r>0.35\)).
(\(M_{\text{present}}=3.64, SD=1.49; M_{\text{absent}}=3.27, SD=1.72\)). This pattern is congruent with the idea that brand bias our perceptions.

Level of motivation did not moderate the quality of the product effect (\(F<1\)), and the three-way interaction was also not significant, \(F(1,156)=1.37, p=.242\) (see Figure 1).

![Figure 1. Impact of brand, product quality, and participants’ motivation on the evaluation of the product (Experiment 1)](image)

**Experiment 2**

**Participants and design**

A sample of 91 high-school students (53.1% female, \(M_{\text{Age}}=17.5\)) volunteered to participate in this study and were randomly allocated to the conditions defined by a 2 (Brand information: present vs. absent) x 2 (Product quality: low vs. high) x 2 (Previous exposure to the product: yes vs. no) between-participants design. This sample size, determined by the availability of participants, is lower than the number of 128 desired to detect an effect of moderate magnitude with alpha of .05 and a power of .80.

**Materials**

Products were samples of paper, presented as pages of a notebook available on the market. A pilot study showed that grammage (paper density) is perceived as a relevant feature to evaluate the quality of paper. Specifically, there was consensus that the experience of writing on paper with higher grammage (120g/m²) was more pleasant than writing on lightweight paper (60g/m²). These types of paper are henceforth defined as high and low quality, respectively. Also, it was found that this product was weakly associated with the expression of social status, and thus more dependent of its intrinsic sensory features than perfume. The paper sample was associated with a brand, that was pre-tested as familiar, high-status and as plausible to be associated with a notebook (i.e., as a plausible brand extension).
Procedure

Each participant received a questionnaire and a pencil. Those in the “previous experience with the product” condition also received a sample of the paper and were asked to write their gender and age on it before initiating the study. This was the paper that they would evaluate later on. Participants in the “no previous experience with the product” conditions were asked to write their gender and age on the first page of the questionnaire. Next, participants were told that the study aimed to evaluate a new type of paper and that a sample would be provided. Brand information was either included in the instructions (allegedly because there was a collaboration with the researchers) or absent. Participants had three minutes to freely experience the low or high-quality paper, by writing whatever they wanted on it. Afterwards, they were asked to evaluate their sensory experience with the paper, how much they liked how the paper feels, how much they liked to write on it, and how good they felt the paper to be (7-point ratings scales).

Results

The three items used to evaluate the pleasure of the sensory aspects of the product (akin to the product evaluation) were combined into an index (a single factor explained 79.61% of the variance; Cronbach’s alpha=.87) that was analyzed in an ANOVA defined by the full design.

Corroborating our manipulation, the low-quality product was evaluated less positively (\(M=3.55, SD=1.16\)) than the high-quality product (\(M=5.43, SD=0.98\)), \(F(1,82)=68.79, p<.001, \eta^2_p=.45\). Also as expected, previous exposure with the product interacted with brand information conditions, \(F(1,82)=4.55, p=.035, \eta^2_p=.05\) (see Figure 2), suggesting that brand effects were only found for some processing conditions (i.e., when participants experienced the paper prior to its evaluation).

All the other effects were non-significant (all \(Fs<1\) with the exception of the main effect of previous exposure \(F(1,82)=1.13, p=.290\); and the three-way interaction, \(F(1,82)=1.55, p=.216\).

![Figure 2. Impact of brand and previous exposure on the evaluation of the product (Experiment 2)](image)

Discussion

Overall, results from two experiments support the hypothesis that brand biases how participants report their sensory experiences with a product (e.g., Apaolaza et al., 2017; Bernard & Liu, 2017;
Bi et al., 2015). Specifically, a perfume is said to smell better, and paper to provide a better writing experience if it is known to be of a high-status brand. Thus, when reporting an evaluation, senses may be overridden by brand name (LeClerc et al., 1994). The results of these two experiments are also in line with the literature by showing that sampling a branded product substantially increased evaluation if the brand was high quality (Sprott & Shimp, 2004), and that this sampling increases the choice of a known brand even when the product has lower quality (Hoyer & Brown, 1990). In doing so, we contribute to replication of those effects.

The novelty of our data stems from examining the conditions that favor (or counteract) such brand effects. Indeed, our data adds to previous research, by clarifying that the effect of the brand over a product evaluation is more likely to occur when motivation is low, and that the previously found sampling effect is also related with a decrease of elaboration. That is, these brand effects emerged in conditions that favor low elaboration, either because participants did not look motivated to perform the task (Experiment 1) or because they experience a feeling of familiarity when having such experiences (Experiment 2). This suggests that individuals were not using the brand as a source of information that simply allows them to infer the quality of the product. Instead, it seems more likely that the effect emerges because a brand can bias our experience with the product (e.g., Apaolaza et al., 2017; Bernard & Liu, 2017; Bi et al., 2015). However, it can also be the case that, even when the sensory experience is informative about product quality, participants continue to rely on brand to assess the quality of the product. That is, the use of the brand as a heuristic co-occurs with the direct inference made from our senses. Still, our studies do not offer evidence that helps to clarify if in the low elaboration condition our potential consumers were relying on their senses (either smell or touch) to form an impression of the product. Although we believe that is the case, this question should be empirical addressed in future studies. In line with other authors (e.g., LeClerc et al., 1994), we can also argue that the most likely pathway of brand influence is through biasing our senses. For instance, how much we desire chocolate should be less informed by how participants perceive the chocolate brand than by individuals’ sensory experience. There are plenty examples of foods that are often disliked when if recognized as high quality foods (e.g., caviar). As the popular proverb states “every man to his taste” – taste is a personal feature, something you do not control, something you simply experience. So, the use of brand as a cue about the quality of something we are tasting, does not seem as likely as the possibility that a bias is occurring in the senses themselves. One way of approaching this possibility in the future is to address if the belief that “senses don’t lie”, is underlying these effects, by measuring the extent to which participants believe it, as a potential moderator of the effect of brand on sensory experiences.

The assumption that a brand can bias our senses, is coherent with the literature that shows labels to influence our perception of a product. Apaolaza et al. (2017) results indicates that sensory perception changes significantly when a wine carries an organic label, compared with the same wine lacking the organic claim. In the same line, Shankar, Levitan, Prescott and Spence (2009) showed that describing a chocolate as ‘dark’ promote a different perception of the same chocolate described as ‘milk chocolate’. Also, Meiselman and Bell (1991) showed that, by changing the name of a food product, the perceptions of its ethnicity and taste features differed; and Morris (2018) showed that the name and the seasonal context of a beverage impacts its sensory evaluation. To test if this is the type of bias we are promoting in our participants, future studies should also address the perceptive features of the products and investigate how they change in function of being associated with a high-status brand. An alternative avenue to clarify the pathway by which a brand is influencing a product evaluation is through the selection of products whose general quality does not depend exclusively on sensory experience. By assessing those features independently, it could be tested whether brand bias the sensory experience differently from the no sensory dimension.
Our first experiment was conducted on the field and we tried to be less intrusive as possible (given the setting where data was being collected). As such, we could not directly manipulate or assess individual’s motivation. This is a strong limitation of this data, given that results would have been clearer if a high and low motivation condition was promoted experimentally. A possible way of doing it in the future would be to present a product promotion where a correct evaluation of the product would allow individuals to be selected for a random selection to winning a prize. Nevertheless, results of this experiment showed that the cues that lead observers to classify them as less motivated covaried with conditions that favor brand to impact their evaluations. However, those same conditions did not moderate the quality of the product effect, which is usually a result associated with the manipulation of motivation (for a review, see Petty & Briñol, 2010). We interpret these results as being related with the low complexity of the products, and the fact that the cue for quality is mostly of sensory nature and quick to assess. No further information is necessary for distinguish what was considered a high and low product in these studies (e.g., Inbar, Cone, & Gilovich, 2010). As such, a similar conclusion will be achieved through an elaborative or more superficial processing of that information. In Experiment 2, we tested how promoting a feeling of familiarity with the product by sampling it, decreased subsequent elaboration of incoming information (e.g., Claypool et al., 2015) having an effect on how we evaluate a product. Tasting experiences were argued to be both able (e.g., Levin & Gaeth, 1988) and not able (Roberts & Taylor, 1975; Scott & Yalch, 1980) to change consumer’s previously held perceptions; and so, the level of elaboration may be a relevant moderator of the effect. In fact, Claypool et al. (2004) showed that only in moderate elaboration conditions, repeated persuasive messages are more superficially processed than messages encountered for the first time. Thus, it is relevant to further examine the specific processing conditions that favor attitude change through tasting experiences, and to explore the mechanism underlying the effect of tasting reducing subsequent elaboration. We claim that it is the experience of familiarity activated with the product, but other mechanisms may explain the effect, such as the increase of fluency in processing the product (e.g., Alter & Oppenheimer, 2006; Alter, Oppenheimer, Epley, & Eyre, 2007) or the experience of a feeling of rightness with the response that is provided by the brand (Thompson et al., 2013).

Besides the relevance for understanding the process by which a brand influences products’ evaluation, our results are also relevant when thinking of practical issues. For instance, they inform about the mechanisms by which we can improve a “sensory brand experience” (e.g., Goldkuhl & Styvén, 2007). Professionals have suggested the use of special flagrances and flavor associated with different types of brand services (e.g., Iglesias, Markovic, & Rialp, 2019; Moreira, Fortes, & Santiago, 2017). This proposal becomes even more relevant when realizing, as our studies show, that brand and sensory experiences can be integrated. But it is also relevant to know that by increasing the familiarity with the product, such assimilation is more likely to occur.

In sum, in the current work we provide field and laboratory evidence that brand impacts the evaluation of a sensory product, overriding the information offered by direct sensory experience with the product. Importantly, this was more likely to occur in processing conditions that induce low elaboration (e.g., low motivation).

References


Quando a marca é mais determinante do que os nossos sentidos?: A influência da experiência táctil e olfactiva na avaliação de produtos

Neste artigo examinamos de que forma a marca e a experiência direta influenciam a avaliação de produtos. Especificamente, seleccionámos dois produtos (perfume e papel) cuja qualidade intrínseca pode ser inferida diretamente através da experiência sensorial (fragrância e experiência de escrita, respectivamente). Os resultados de um estudo de campo e de um experimento laboratorial demonstram que a marca influencia a percepção dos produtos, enviesando a informação diretamente acessível através dos sentidos. Os dados mostram ainda que este efeito ocorre principalmente em condições de processamento de baixa elaboração (e.g., baixa motivação). No artigo discutimos como estes resultados contribuem para entender o processo subjacente ao efeito da marca na avaliação de produtos, podendo a marca atuar por via heurística ou através da promoção de uma crença capaz de enviesar as nossas percepções.

Palavras-chave: Experiência directa, Familiaridade, Avaliação de produtos, Marca, Qualidade, Toque, Olfacto.