Sensory Similarity: A Physical Product Perception in Online Context

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Abstract Research in marketing recently demonstrated that touch-based devices lead to higher product evaluations when compared to traditional interfaces (Brasel SA, Gips J, J Consum Psychol 24(2):226–233, 2014; Shen H, Zhang M, Krishna A, J Market Res 53: 745–758, 2016). In this research, we aim to better understand the impact of sensory similarity related to product tactile cues, of which we focus on the tactile experience, on product evaluation. We define sensory similarity as the extent to which an indirect sensory experience mimics a traditional in store sensory experience with the product. With two experiments, we show that in online environment, the interface touch is not considered as a diagnostic, but consumers' experience is enhanced with online tactile stimulation. Yet, we also show that direct tactile stimulation becomes a piece of information when textures are unfamiliar. Based on previous researches on the absence of direct product touch in online environments, we bring another point of view regarding the way of stimulating touch via interfaces (Schlosser A, J Consum Res 30(2):184–199, 2003).

Keywords Tactile stimulation • Product evaluation • Online shopping • Haptic interface

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N. Krey, P. Rossi (eds.), *Back to the Future: Using Marketing Basics to Provide Customer Value*, Developments in Marketing Science: Proceedings of the Academy of Marketing Science, DOI 10.1007/978-3-319-66023-3_42

Introduction

Have you ever smelled, tasted, or even touched a product through any electronic device, such as tablets? What if it was possible to reproduce the in-store experience in online contexts where consumers could remotely handle and feel the products they are evaluating? To date, online sellers face a difficult challenge in overcoming the immaterial barrier of intangibility, and consequently online shoppers suffer from the absence of direct contact between consumers and products (Spence & Gallace, 2011). Such technologies are currently under development and focus mainly on force feedback stimulation (i.e., vibration system retrieved by the interface) which is the best level achieved regarding online tactile stimulation (Jin, 2011).

Previous literature has shown that consumers appreciate online purchasing because it saves time and money, but they still rely on products' physical characteristics to make decisions (Keen, Wetzels, de Ruyter, & Feinberg, 2004; Marlow & Jansson-Boyd, 2011). As well, the absence of direct product touch generates some frustration with product experience, reduces online retail benefits (i.e., information available), and leads to an unsatisfactory shopping experience for the consumer (Alba et al., 1997). To date, research on sensory perception has mainly concentrated on visual and olfactory cues, whereas marketing academics has evidenced the role of touch in physical and virtual environments (Citrin, Stem, Spangenberg, & Clark, 2003; Klatzky, Lederman, & Reed, 1987). In both environments, tactile stimulation increases product evaluation, enhances memorization, and reinforces self-brand connection (Jin, 2011; Peck & Childers, 2003a). From this, a tactile stimulation related to product cues, in computer-mediated context, should increase product evaluation. Yet, no research has examined the interaction between the interface tactile modalities used to shop online and the tactile cues of the product visualized. Indeed, touch-based devices lead to higher product evaluations when compared to traditional computers due to an increased ownership feeling (Brasel & Gips, 2014). Thus, in this research, we aim to better understand the impact of the congruency of textures between the interface and the product tactile cues on consumers' answer. Our research contributes to the consumer behavior literature when shopping on the Internet. Results point out the impact of sensory modalities through tactile stimulation on consumers' response. Specifically, our series of studies highlight that consumers appreciate the online product interaction and that sensory feedback enhances their purchase intention.

Prior Literature and Conceptual Framework

Consumers use to touch products when shopping in -store to fulfill a need (Peck & Childers, 2003a). The individual preference to touch is composed of two dimensions identified as the need for information about the product (utilitarian) and the

need for hedonic stimulation (autotelic). From an online perspective, the sense of touch is difficult to recreate through the interface, and so far, little research in marketing has explored the interface tactile stimulation when interacting in virtual environment. The closest result obtained until now is through vibration system which does not have the capacity to reproduce haptic cues virtually (Jin, 2011). Also, researchers have mostly studied indirect tactile stimulation according to the interface only (i.e., product and consumer are not directly in contact) (Daugherty, Li, & Biocca, 2008), without any relation to the product tactile cues. For instance, Brasel and Gips (2014) brought to light by varying with interfaces tactile stimulation that a touchscreen device increases ownership and endowment for high haptic product compared with a mouse and a touch pad. Also, they demonstrated how the interface touch modalities increase alternative search and modify the evaluation of tangible and intangible elements on the website (Brasel & Gips, 2015). In the same line, Shen, Zhang, and Krishna (2016) explored the effect of direct touch interface (vs. nondirect as mouse) on food perception and demonstrated that the "direct-touch" aspect of the tablet increases affective decision and facilitates mental simulation.

Furthermore, the new processing of information through interfaces implies that these interfaces create mediation between the direct and indirect tactile perception (Li, Daugherty, & Biocca, 2003). However, according to Montagu, this mediation should be considered as second-order mediation from a sensory perspective since we first perceive our environment thanks to our sensory system. As well, the embodied cognition theory states that we first get information through our sensory system to generate cerebral activity. Thus, the mediation of environments implies two types of realities. These two environments involve two types of reality which is mediated through an interface (Yadav & Pavlou, 2014). Most research on virtual environments comes from computer sciences, and little is known from consumers and product perspectives (Milgram, Takemura, Ustimi, & Kishino, 1994). To date, *webmospherics* (e.g., video or virtual try on) are part of the options to substitute the sense of touch with visual and sound effects to enhance online shopping experience (Kim & Forsythe, 2008). Indeed, Schlosser (2003) demonstrates that online dynamic features improve and facilitate online product manipulation and comprehension. Coyle and Thorson (2001) also show that using vivid and interactive features improves consumers' website evaluation. Finally, Childers, Carr, Peck, and Carson (2001) assessed the utility of w*ebmospherics* (i.e., all features on the website) to predict online shopping attitudes through the technology-assisted shopping scale (TAS). Hence, these features bring interaction and vividness to product visualization and enhance consumers' experience of product manipulation whether it is by using a mouse, a pad, or a tactile interface. Considering the product manipulation, the use of tactile stimulation upon *webmospherics* may also improve the similarity with physical sensory manipulation and then helps for tactile product information retrieval, even though the sense of touch is difficult to be retrieved with technologies as it would be in physical sensory experience (Chen, Hsu, & Lin, 2010; Daugherty et al., 2008; Yoo & Kim, 2014).

Drawing from this literature, we introduce to marketing literature the concept of sensory similarity which is related to computer sciences concept of virtual product experience (Jiang & Benbasat, 2005). The virtual product experience in computer sciences is defined as the possibility given to the consumer to interact with the product virtually through a device (i.e., a keyboard or a mouse). Yet, the broad concept of virtual product experience is mainly linked to the interaction (e.g., perceived control) and less to the sensory part of the experience. Thus, we define the sensory similarity as the extent to which an indirect sensory experience mimics a traditional in-store sensory experience with the product. Accordingly, we propose that for online decision-making, the direct tactile stimulation offered by the interface will help to improve consumers' decision by retrieving a closer tactile experience with the product (i.e., hand manipulation). In this case, manipulation refers to active form of touch (i.e., haptic) and thus implies tactile stimulation (Gibson, 1962). Marketing research has not yet paid much attention to the virtual product tactile experience from consumers' perspective. Dynamic images help to have a clearer representation of the product, and the similarity of online product manipulation to direct product examination improves consumers' shopping experience (Jin, 2009, 2011). Besides, 3D manipulation lets the person actually re-create the similar exploration movements than when examining an object as Lederman and Klatzky (1987) describe and define as exploratory procedures.

Conceptual Framework

In this paper, we focus on the interface tactile stimulation and the product texture when browsing online. The theory of embodied cognition states that knowledge is originally shaped with sensory perceptions of the body and this knowledge is transformed and analyzed through brain neuronal interactions (i.e., cognitive process). Rosa and Malter (2003) explain that embodied cognition is a constraint by the physical interaction with the product since sensors of the body deliver information which is translated to the brain as a mental representation, namely, embodied representation. For instance, when manipulating a shower towel, an individual gathers information through the sense of touch which is then cognitively interpreted to evaluate the comfort or the softness. Considering the shift of products' environment (i.e., online), show that the priming of touch helps for retrieving information when the consumer visualizes the product on a website. Previous literature on the interface tactile influence only deals with the effect of tactile stimulation unrelated to the product tactile attributes. Yet, the sense of touch seems to be unconsciously considered by the consumer to process online product evaluation (Brasel & Gips, 2014, 2015; Shen et al., 2016). Consequently, we propose that the device used by the consumer to proceed to purchase should consider the stimulation of touch in order to be as close as possible from hand physical product examination that provides tactile information. The congruency between the interface and product tactile cues

should enhance the sensory similarity. As well, the more an online product manipulation is similar to a direct tactile product experience, the more it should lead to a better product evaluation compared to an indirect product experience without related tactile input (Daugherty et al., 2008). Indeed, as underlined by Brasel and Gips (2014, 2015) and research on online product manipulation (Daugherty et al., 2008; Schlosser, 2003), the vividness and interactivity of the device enhance consumers experience and let's have a better understanding of the product (Jiang & Benbasat, 2005; Kim & Forsythe, 2008; Schlosser, 2003). Thus, the more vivid and interactive the experience is, the more the consumer perceives the online product manipulation to be analog to a real product manipulation. Then, the tactile stimulation from the interface screen related to the product tactile cues (i.e., congruency of texture) should increase the sensory similarity, which will mediate the relation between the interaction of textures and the attitude toward the product.

We hypothesize that (H1) *the congruency between the interface tactile stimulation and product texture will impact the indirect effect of sensory similarity such as when the interface direct tactile stimulation and product texture matches (*versus *mismatches), it will enhance (*versus *reduce) consumer's response.* Also, based on previous literature, we propose that (H2) *the attitude toward the product mediates the relation between the sensory similarity and the purchase intention*. Besides, texturing the interface should stimulate touch and provide useful and meaningful information regarding product characteristics for high instrumental need for touch individuals (i.e., smooth or rough texture) (McCabe & Nowlis, 2003). Consequently, we suggest that need for touch moderates consumer perception such as (H3) *the higher (*versus *lower) the consumer's instrumental need for touch is, the more positive is the relation between the interaction of texture and the sensory similarity.*

Experiment 1: The Effect of Congruency of Texture When One Texture Is Familiar

We ran a first experiment to test our hypothesis. Hypothesis 1 proposes that the interface tactile stimulation will enhance consumers' response when textures are congruent. After pretesting textures, we conducted a two (tablet screen – smooth and rough) × 2 (product packaging – cream and exfoliate) laboratory experiment. We also test the mediating role of sensory similarity.

Sample and Procedure A total of 145 participants took part in the experiment ($M_{age} = 23$; $SD = 5.45$). The sample was composed of female students from a Canadian university. Participants registered online and read the inform consent form before the study. We offered a five-Canadian-dollar amazon gift card after participation. Participants were instructed to navigate on the Web page with the interface. They could manipulate the product by turning it in 360° rotation, zooming in and out, and having a text description about the product. Then, participants filled an online questionnaire.

Material First, in line with the previous research (Schlosser, 2003), we used a dynamic 3D online product presentation to reproduce spatial manipulation similarly to in-store interaction. We selected a high *touchability* product category, as designated by Brasel and Gips (2014), because of the direct contact with the skin when used, which lets us have the full tactile experience of the product. We chose two existing shower gel products (i.e., cream and exfoliate), of which we had a professional designer[1] to modify the visual packaging texture in order to reproduce the smooth and rough sensations as it can be found in store to date. We modified products' brand name to avoid brand bias effects, and we provided a written description as usually found for online beauty products to replicate e-store environments. Second, we selected touchscreen interface on which we applied a modified screen protection in order to create direct smooth and rough tactile stimulation fitting with the product tactile cues. We controlled that this manipulation did not alter product visualization nor the tactile tablet capacities and that participants did not notice the screen changes. None of the participants made any comments on this particularity. Finally, we used Qualtrics online software to administrate the questionnaire.

Measurement We measured attitude toward the product using Bergkvitz and Rossiter scale on a seven-point semantic differential scale (*the product is unpleasant/pleasant*; *bad/good*; *I dislike/I like*) and purchase intention with a one-item scale (*It is very likely I will by this product*). We used the Need for Touch scale (Peck & Childers, 2003a) to assess individual differences regarding touching product. Finally, we measured the sensory similarity with three items developed for the study and for the sense of touch: *If I buy the product, I know I will have the same sensation/The product testing I realized is similar to a direct product testing/I would have a better idea of product result if I could put some on my hands* (reverse coded)*. To make sure participants would interact with the product, we provided 3D visualization and controlled for product manipulation by adding written information on the back of the product. With this manipulation, we could assume that participants had at least turned the product and so tactile stimulation had been performed. We checked for this information by using a recognition method similar to Lwin, Morrin, and Krishna (2010) procedure. According to Wells (2000), it should represent consumers' attention paid to the online product. We also controlled for product and interface texture awareness with a seven-point semantic differential scale. The first manipulation check was at the beginning on products texture (*the product seen on screen was… exfoliate (1)-cream (7)*) and the second at the end since it clearly referred to the texture of tablet screen (*the screen of the tablet used was…rough (1)-smooth (7)).* Finally, purchase intention was measured with a single item as recommended by Bergkvitz and Rossiter and Bergkvist: "It is very likely I will by this product."

[1] Git Develipsum©, Patrice Ferlet.

Results of Experiment 1

First, we validate the sensory similarity measurement. The exploratory factorial analysis was run with SPSS 22 software, and scale reliability is satisfying ($\alpha = 0.773$). The attitude toward the product scale is also composed of its original three items with a satisfying reliability too ($\alpha = 0.899$).

Main Effect of Texture We first run an ANOVA to examine the direct influence of the tactile stimulation and the product texture on sensory similarity. The interaction of textures has a marginal negative effect on virtual tactile similarity ($\beta = -0.68$, $F(1123) = 3.42$, $t = -1.85$, $p = 0.067$).

Moderated Mediation Model Then, using the model eight of the PROCESS Macro from Preacher and Hayes, we test the mediating role of the sensory similarity between the interaction of texture and the attitude toward the product. We introduce the interface tactile stimulation as the independent variable, the product texture as a moderator, the sensory similarity as the mediator, and the attitude toward the product as the dependent variable. Results confirm the marginal reversed effect of the interaction of textures on sensory similarity ($\beta = -.68$, $t = -1.85$, $F(3120) = 1.60$, $p = .067$) and additionally show a marginal direct positive effect of the product texture ($\beta = .47$, $t = 1.80$, $F(3120) = 1.60$, $p = .074$) and the interface tactile stimulation ($\beta = 0.53$, $t = 1.95$, $F(3120) = 1.60$, $p = .053$). Then, we observe a direct positive effect of sensory similarity on attitude toward the product ($\beta = .39$, $t = 3.58$, $F(4119) = 4.95$, $p = .000$) as well as for product texture ($\beta = .59$, $t = 1.86$, $F(4119) = 4.95$, $p = .065$). We finally validate the mediation role of sensory similarity ($\beta = -.27$, CI [−.7005: −.0112]) and the mediating role of attitude toward the product between the sensory similarity and purchase intention ($\beta = .18$, CI [.0781: .3191]). According to these results, we partially validate the hypothesis H1 since the direct effect of the interaction of texture is reversed.

Moderator Role of NFT We controlled for the moderating effect of the need for touch on the interaction of texture. We used the model 12 of the PROCESS Macro, and results show that the autotelic and instrumental dimensions do not moderate the effect of interaction of textures on virtual tactile similarity. Thus, we do not validate the hypothesis H3.

Discussion Experiment 1 validates the first test of the sensory similarity measure, from the tactile perspective, and assesses its mediation effect when browsing online for products with high tactile cues. It means that direct and indirect tactile stimulations are considered by the consumers when interacting with the product through the interface and it positively influences the attitude toward the product and purchase intention. However, the reversed effect of texture shows that the congruency between the interface tactile stimulation and the product cues does not enhance the diagnostic of the product. In online context, the consumer is visually stimulated by the product texture, but when the interface directly stimulates the sense of touch, the consumer perceived the interaction as being more similar to a physical interaction

with the product. According to these results, the sensory similarity enhances consumers' online experience and increases consumers' attitude and purchase intention. Yet, the familiarity of the consumer with one of the textures may have an effect on the results. Also, our measure of the sensory similarity might be too related to the experience rather than to the tactile experience (sensory aspect). Thus, we propose to retest our measure and to control for the familiar condition with a second experiment.

Experiment 2: The Effect of Congruency of Texture with Unfamiliar Tactile Stimulations

Experiment 2 replicates the experiment procedure and settings of the first experiment. However, we modified the type of tactile stimulations provided to assess the influence of sensory similarity when the textures are unfamiliar and unrelated.

Sample and Procedure We had 121 male and female participants in this study from a North American university. They were invited to register online and were granted with extra course credit for their participation. Instructions and procedure were the same than for the first experiment.

Material We used the same settings than for experiment 1, but we replaced the smooth tactile interface with a groovy tactile stimulation from the interface to vary on consumers' tactile familiarity with the interface and control for its effect.

Measurement As previously, we used the same measurement of the experiment 1. However, we improved the sensory similarity measure to better capture our concept such as we used the following items: "If I buy this product, I know I will have the same sensation than product examination," "the product examination is similar to a direct product examination," and "the product examination reproduces the same sensation than a direct product examination."

Results of Experiment 2

First, as for experiment 1, we validate the sensory similarity scale from the tactile perspective. The exploratory factorial analysis was run with SPSS 22 software, and scale reliability is satisfying ($\alpha = 0.787$). The attitude toward the product scale is also composed of its original three items with a satisfying reliability too ($\alpha = 0.867$).

Main Effect of Texture First, by the means of an ANOVA, we observe that the direct effect of interactions of textures on sensory similarity is not significant ($\beta = -$, $t = -1.85$, $F(3120) = 1.60$, $p = 0.067$).

Moderated Mediation Model We run the model 12 of the PROCESS Macro with the direct tactile stimulation and the product texture as independent variables, the sensory similarity as a mediator, the attitude toward the product as the dependent variable, and the need for touch as the moderator of the interaction of textures. In this case, results indicate that the direct effect of the interaction of textures on sensory similarity is positive and significant (β = 5.17, t = 2.46, $F(7112)$ = 2.08, p = .015). Moreover, at the confidence level of 10%, results show a negative and direct impact of the interface tactile stimulation (β = − 2.72, t = − 1.76, $F(7112)$ = 2.08, p = .081) and of the product texture at a 5% confidence level (β = −10.15, t = − 2.91, $F(7112)$ = 2.08, p = .004). Then, results indicate a direct and negative effect of instrumental need for touch (β = − 1.12, t = − 2.28, $F(7112)$ = 2.08, p = .024), and we validate the effect of instrumental need for touch only such as the triple interaction negatively influences sensory similarity (β = −.90, t = − 2.40, $F(7112)$ = 2.08, p = .018). Also, the instrumental need for touch positively interacts with the marginal interface direct effect (β = .48, t = 1.71, $F(7112)$ = 2.08, p = .089) and the product direct effect on sensory similarity (β = 1.85, t = 2.96, $F(7112)$ = 2.08, p = .004). Finally, results show a direct positive effect of sensory similarity on attitude toward the product at the confidence level of 10% (β = .15, t = 1.77, $F(8111)$ = 1.15, p = .078), and we validate the mediation effect according to the confidence interval excluding zero (β = −.13, CI [−.4507: −.0131]). However, attitude toward the product does not mediate the relation between sensory similarity and purchase intention. Yet, attitude toward the product has a direct impact on purchase intention (β = .62, t = 5.05, $F(2118)$ = 15.70, p = .000) as well as sensory similarity at the 10% confidence level (β = .18, t = 1.73, $F(2118)$ = 15.70, p = .085). These results partially validate H2.

Moderator Effect of NFT We now examine further the moderating role of instrumental need for touch. When consumers have a low instrumental need for touch, the effect of interaction of texture on sensory similarity is positive (β = 3.47, t = 3.49, $F(3,16)$ = 12.14, p = 0.004), whereas for middle and high consumer instrumental need, the effect is not anymore significant (β_{high} = − 1.65, t = − 1.25, $F(3,79)$ = − 1.57, p = 0.226; β_{middle} = − 0.194, t = − 0.376, $F(3,79)$ = 0.141, p = 0.708). These results validate H3.

Discussion Experiment 2 confirms that sensory similarity is a mediator of the online product evaluation. Also, when the texture is unfamiliar, the need for touch has a moderating role. Thus, consumers consider the direct tactile influence of the interface to proceed to product evaluation and purchase intention but only for low instrumental need for touch profiles. They perceived the online interaction with the product to be more analog from a tactile perspective to the in-store product manipulation. High instrumental need for touch considers for the hedonic experience. Consequently, the second experiment shows that the unfamiliar texture of the interface enhances consumers' online product experience and helps them to evaluate it since they consider to have a real and direct experience with it. In the next section, we discuss our overall findings and conclude with our contributions and limits.

General Discussion

We first confirm past literature concerning the effect of touching a smooth interface when shopping online: in this case, consumers prefer products with high tactile cues (Brasel & Gips, 2014). Second, we go further by underlying that the effect depends on the type of tactile stimulation produced by the touch-based device. We demonstrate that the textures do not necessarily need to be congruent to help consumers to understand the product (experiment 1). Indeed, direct tactile stimulation is not considered by the online consumer as a piece of information concerning the rough product presented on the screen when we have a familiar texture condition. When direct tactile stimulation is smooth, consumers seem to better evaluate the rough product, whereas when the tactile stimulation is rough, the smooth product is better evaluated. Thus, the direct tactile stimulation inferred by the device is appreciated when the product presented to the screen does not arouse the sense of touch. Yet, the direct tactile stimulation is interpreted as a piece of information by consumers with low instrumental need for touch (experiment 2). Indeed, when the interface stimulates the sense of touch on a rougher and unfamiliar base, consumers use this tactile information to evaluate the product indirectly manipulated. We explain this phenomenon partly by the attribution theory which in the present case means that the tactile stimulation might be related to the situation instead of to the product tactile cues itself. Indeed, when shopping in store, consumers are stimulated with all types of tactile inputs in addition to the product cues. Finally, we partially confirm the moderating role of instrumental need for touch since it is not consistent across experiments.

Our results join previous research findings on the tactile influence of the interface (Brasel & Gips, 2015; Shen et al., 2016) by bringing to light how different types of direct tactile stimulations modify consumers' perception of his or her product active manipulation. Overall, this research demonstrates that direct tactile stimulation from the interface while navigating online enhances sensory similarity, which validates our proposition on the cognition process: consumers rely on their senses to initiate knowledge but also to retrieve it in indirect experiences. Sensory input is occurring at different stages of the cognition process and is particularly active for reactivation phase as proposed by the perceptual symbol system of Barsalou. The use of a direct and continuous tactile stimulation as we are usually familiar with current tactile interface is relevant to acknowledge the influence of interface tactile stimulation. Nevertheless, we introduced another type of tactile stimulation to highlight this effect and show how it can be well considered. As well, the use of unfamiliar tactile stimulation brings to light the deep influence of touch in virtual environments beyond its already known in-store influence (d'Astous & Kamau, 2010; Peck & Childers, 2003b). With this research we show that tactile input is needed, as already noticed a decade ago by Citrin et al., (2003), not only to consider product attributes but also to enhance sensory similarity and to get more familiar and naturally involved into this indirect environment (Kock, 2005). Indeed, literature on online shopping and virtual environment replicated the knowledge of touch

from the physical context and shows how positive was the impact on brand-self connection or product judgment in computed-mediated environment (Jin, 2009, 2011). Here, we demonstrate that the tactile cues of the interface have to be considered as much as the product tactile cues. More widely, research in sensory marketing has shown that our senses still drive most of our decision even in online environment. Beyond the change of context, senses actually modify our way to observe, pay attention, and behave (Kim & Forsythe, 2008). This research contributes to this new and growing field of sensory marketing which is more and more related to computer-mediated sciences to understand consumers' sensory perception system in virtual environment (Citrin et al., 2003, Jin, 2011).

Also, this research has some limitations. We considered a shower product mostly designed for women, and our sample is not always composed of both genders. It would be interesting to run the same study for another type of product and to get all genders involved at every stage. Also, the texture used on the interface screen might have been surprising for participants even though none of them notice unusual features. This would, however, need to be controlled by using an existing setting of device texture such as the HAPTEX Project. Indeed, the type of stimulation, aimed to be consistent with the product attributes, is provided with a non-technological perspective. Thus, further research needs to investigate on other types of possible tactile stimulations in more realistic texture reproduction settings. It would help to differentiate if the stimulation only is responsible for creating a closer and more realistic sensation or if the consistency of texture is responsible for it. This would also help for understanding the reverse effect of texture.

Finally, our research provides insights for managers by supporting the necessity to bring hedonic and enjoyable tactile sensations to foster the selling of high haptic product online. Such technology starts to be released on the market such as the smart and connected objects which vibrates more to "talk" to the consumers and provide an information. However, beyond the experiential aspect of touch, the sensory perception needs to be replaced at the center of the customer's experience. Some past examples can be noted as Hollister, which provides to the customers an in-store sensory experience from the moment they enter. Thus, the next step is now to bring it to the online environment. The more the customer will be able to use his or her senses, the more it will be easy to understand, access, and proceed the information to finally enjoy a more natural experience with the products. Last but not least, tablets sold on mass market do not have the capacity to reproduce the texture of the product visualized. We created a specific rough tablet's surface to make the consumer experience different tactile stimulation combined with product tactile cues. We tried to implement a new type of screen which has never been seen in marketing research nor used before. In particular, we point out that the development of future haptic stimulation needs to concentrate on consumer experience during his or her navigation online. This research underlines the real opportunity for interface innovation bringing consumers and product together into virtual environments. Our research is a first insight for managers and engineers who look for changing interfaces to create new sort of interactions between consumers, devices, and products.

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