

Haptics and brands: The effect of touch on product evaluation of branded products

Sheena W. Karangi¹  | Ben Lowe² 

¹Surrey Business School, University of Surrey, Guildford, UK

²Kent Business School, University of Kent, Canterbury, UK

Correspondence

Ben Lowe, Kent Business School, University of Kent, Canterbury CT2 7FS, UK.
Email: b.lowe@kent.ac.uk

Abstract

This research provides insight into how touch effects differ by brand familiarity and brand status. Using schema theory and contagion theory, hypotheses were tested in two between subject experiments. A sweater and pillowcase served as product stimuli and consumers were exposed to a known and unknown brand for the brand stimuli. Findings provide support for a brand contagion effect where a luxury branded product is concerned and suggest that this effect is activated through product touch. Interestingly, brand familiarity did not seem to influence the relationship between touch and product evaluation. This paper finds brand status to be a moderator of touch effects on product evaluation while brand familiarity is not. Additionally, a brand contagion effect activated through product touch is shown. The results of this paper provide insight for marketers and retailers regarding marketing strategies for different levels of the product life cycle (where familiarity differs), brand extension strategies (where familiarity and brand status may differ) and, most crucially, design of in-store layout and product displays. It advances knowledge in the field of sensory marketing by integrating and conceptualizing previously unexplored relationships between three key areas of literature, namely product touch, brand familiarity, and brand status.

1 | INTRODUCTION

Marketing practice has primarily focused on the influence of information transmitted via visual and audio means, while information transmitted by the remaining senses (touch, smell, taste) has largely been neglected (Haase & Wiedmann, 2018). According to the Office for National Statistics, 2019 saw the closure of at least 1200 high street stores across the United Kingdom (The Guardian, 2019). However, despite the uptake of online distribution platforms such as Amazon in the fashion industry, many executives from high-end luxury brands still believe shopping is best done in person where clothes can be seen, touched and tried on by customers as this allows them to forge a stronger connection with the brand. Intrinsic cues (e.g., texture, weight, design) are

touted as being potentially more significant in influencing consumers than extrinsic cues such as price or brand in perceived quality perception (Krishna, 2012). Extrinsic cues are characteristics that are related to the product, but are not physically part of it (Olson, 1977) such as price, brand name, place of origin, type of outlet, presentation, influence of store personnel, promotion, packaging, and advertising, are determined by marketing efforts.

For example, the inability to touch a product has a greater negative influence on purchase intentions and attitudes than the inability to see a product (Balaji et al., 2011). However, consumers do reference one or both internal and external cues in decision-making. In certain instances, extrinsic cues are favored over actual product attributes when forming opinions as they are seen as more reliable (Kardes et al., 2004). These conflicting findings necessitate a further

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examination of the direct and interactive effects of intrinsic versus extrinsic cues.

Processing the information that consumers are constantly bombarded with requires them to discerningly process and filter relevant or irrelevant information by taking “*cognitive shortcuts*” (Shugan, 1980), and often this discernment is based on a brand's familiarity. We propose that consumer response to product touch could differ (is moderated) by brand familiarity. The rationale for this line of thinking is derived from prior literature that has shown brand familiarity's ability to moderate various aspects such as advertising recall and effectiveness (Campbell & Keller, 2003; Kent & Allen, 1994) through familiar brands being more noticeable and hence, recalled more easily and preferred more than unfamiliar brands (Alba & Hutchinson, 1987; Dahlen, 2001).

Touch research has so far looked at the touch effect in contrived situations where no brand name has been present. The experientialism and symbolic dimensions of the Vickers and Renand (2003) model identifies that luxury differs from nonluxury in that luxury stimulates sensory pleasure (experientialism) and represents self-enhancement, status and a sense of group membership (symbolic interaction). Argo et al. (2008) suggest some brands may evoke positive associations that drive positive contagion effects. Touch is a key sense and has been shown to affect the evaluation of various types of goods (Grohmann et al., 2007; Schifferstein, 2006). Consumers prefer to shop for some products (e.g., clothing) in a context where they can physically engage with them/touch them rather than an online experience where touch is not possible. This preference has predominantly for product categories such as clothing (sweaters) that possess material properties of texture (McCabe & Nowlis, 2003). Existing studies are primarily based on product features and few studies examine how information generated from different modalities individually and collectively influence brand evaluations (e.g., Littel & Orth, 2013; Streicher & Estes, 2015). Brand names influence consumer decision-making (Keller, 2003) as consumers often use brand as a signal to deduce product quality when previous product experience is lacking or when unable to thoroughly assess products (Ubilava et al., 2011).

Few studies explore consumer experiences in the context of luxury brands (exceptions include Atwal & Williams, 2009; Berthon et al., 2009; Tynan et al., 2009). The research on luxury brands is limited to a large extent by a focus on definitions and conceptualizations of luxury brands and, as Patrick and Hagtveldt (2014) stress, there is need for research regarding the evaluation of luxury brands and processing of luxury brand information. Despite the common consumer preference for purchasing luxury branded products in a physical versus online store, with research by Google US revealing that 69% of luxury consumers prefer to shop in-store to experience the product visually and/or through touch (Shea, 2013), theoretically driven academic research on the relationship between such brands and product touch has not been carried out. It is therefore unknown what role brand plays in the relationship between tactile input and product evaluations (Grohmann et al., 2007; Marlow & Jansson-Boyd, 2011). Accordingly, examining how luxury brand information is processed in a context with variable touch accessibility is needed.

We aim to fill these gaps in the literature and practice by applying schema theory and contagion theory to test the generalizability of previous findings by taking account of two extrinsic factors: brand familiarity and brand status. This paper examines if product evaluation differs by touch when these products are branded. Specifically, in the context of familiar, unfamiliar, luxury and nonluxury brands. It extends the theory of contagion to the concept of luxury brands and proposes that a brand contagion effect occurs where a luxury branded product is concerned, and that this brand contagion effect is activated through product touch. Product evaluations “*encompass a set of moderately related dimensions including perceived quality, evaluative beliefs, perceived worth or value and overall affect*” (Olson, 1977, p. 283) and understanding how these evaluations are formed is one of the principal questions of consumer behavior research. Comprehension will lead to a better understanding of how these evaluations can be effectively influenced to yield greater purchase intentions, increased sales, brand equity and/or customer satisfaction, using product touch.

Based on the aforementioned discussion, our research aims to determine if brand familiarity moderates touch's effect on product evaluation, what effect touch has on evaluation of luxury branded products and if it differs by individual Need for Touch (NFT). Lastly, we seek to determine if luxury brands are a moderator of touch effects. Overall, this research contributes to the literature by examining previously unexplored relationships between product touch (sensory marketing) and brand familiarity and brand status.

2 | THEORETICAL FRAMEWORK AND HYPOTHESES

Given the emerging nature of product touch research there is no clear consensus on the use of relevant theories and concepts. Literature from the stimulus response (SR) model however provides useful insight, due to its prior applicability in sensory marketing research on touch (Grohmann et al., 2007), color (Bellizzi & Hite, 1992), lighting, scent and sound (music) effects (e.g., Turley & Milliman, 2000). The SR model posits that based on particular environmental stimuli (S), an organism reacts (R) to its environment (Mehrabian & Russell, 1974). In line with Bitner's (1992) proposition of acknowledging the effects of individual factors in response to stimuli, research also informs that an individual's NFT moderates touch effects (Peck & Childers, 2003b). This paper posits the retail environment (touch/no touch) acts as the stimulus and product evaluation as the response. NFT, brand familiarity and brand status act as moderators. The hypotheses are discussed next and the proposed conceptual framework presented thereafter.

2.1 | Touch and product evaluation

Touch allows for the intrinsic cues of a product to be examined. Intrinsic cues are features of a physical product that cannot be altered without also altering the physical product itself (Olson, 1977). Even a low priced pen may be perceived as higher quality when unpackaged

because its intrinsic cues are accessible than when presented in packaged form (Pincus & Waters, 1975). Pleasant haptic sensations are preferred over unpleasant ones and the brain reacts differently to positive and negative haptic stimulation. Its orbitofrontal cortex section responds specifically to pleasant touch such as the feel of velvet on one's skin, and this positively influences consumer evaluation of affect (emotion) and the monetary value that individuals attach to a product than unpleasant touch (Peck & Shu, 2009). While touching a product is usually associated with a positive influence on product evaluation, it is contingent on a number of factors. For example, Grohmann et al. (2007) show that the greater the quality of the product (e.g., a pillowcase with a higher thread count than one with a low thread count), the greater the positive evaluation when consumers were allowed to haptically evaluate it (vs. when they were not). Similarly, touching smooth (vs. rough) surfaced donations appeal cards increase willingness to donate more (Peck & Wiggins, 2006). Touch is a form of approach behavior (Grohmann et al., 2007) and approach behavior can result in a positive attitude, liking and preference. Touch is important and useful in evaluating product features such as weight, texture, firmness and temperature (Klatzky & Lederman, 1992; Lederman & Klatzky, 1993; Lindauer et al., 1986) and a general preference is held for engagement with such products in an environment which enables physical touch, before purchase decisions are made (Grohmann et al., 2007; McCabe & Nowlis, 2003). Consistent with prior literature it is therefore proposed that:

H1. Touch has a positive effect on product evaluation.

2.2 | Touch effects on branded products

Touch research has primarily focused on the effect of intrinsic product cues such as texture (e.g., Krishna et al., 2010), temperature (Zwebner et al., 2014), firmness (Krishna & Morrin, 2008), and weight (Jostmann et al., 2009). The more diagnostic the intrinsic cue is in decision-making (such as the texture of a sweater for example) the more influential it is on quality perception (Sprott & Shimp, 2004). While touch effects are shown to differ by individual level factors (e.g., need for touch (Peck & Childers, 2003b)), product factors (e.g., Marlow & Jansson-Boyd, 2011; McCabe & Nowlis, 2003) and situational factors (e.g., Brasel and Gips (2014), less is known of its contingent effects based on brand). Brands often provide cues for product perception and ultimately purchase decisions (e.g., Richardson et al., 1994; Teas & Agarwal, 2000). Holbrook and Hirschman (1982) highlight the importance of recognizing both experiential processing (such as multisensory aspects of product enjoyment) and information processing in determining consumer choice and consumption. Based around this premise, we examine determinants of product evaluation from both information processing (brand name) and experiential-based (product touch) perspectives. Brand familiarity is shown to moderate consumer perception, judgment and behavior and the first brand element examined is brand familiarity.

2.3 | Moderating effect of brand familiarity

One of the most differentiating characteristics of brands is their familiarity to customers (Lange & Dahlen, 2003) and from a brand perspective, schema theory has been predominantly applied to explain the effects of familiar versus unfamiliar brands in the domains of advertising and brand extensions (Aaker & Keller, 1990). Familiar brands (in comparison to unfamiliar brands) possess a more developed brand schema that serves as the basis of future comprehension of additional or new information and are often considered more trustworthy and hence more favorable (Keller, 1993). Schemas significantly affect how new information is processed (Sujan & Bettman, 1989), and familiar brands present a current pool of information from which to draw. When there is existing knowledge in memory regarding a brand (brand schema), retrieval and storage of information is easier (Dahlén & Lange, 2004; Kent & Allen, 1994) and the reliance on cognitive processing of incoming information reduces with increased familiarity (Alba & Hutchinson, 1987). Therefore, brand familiarity eases the encoding, retrieval and storage of information. Previous research findings show that this ease leads to greater preference accorded to familiar brands over unfamiliar brands (Campbell & Keller, 2003).

Essentially, brand familiarity enhances “*perceptual identification of a brand, increases the probability of inclusion in the evoked set, generates positive affect toward the brand, and motivates purchase behavior*” (Baker et al., 1986, p. 637). This positive affect is transferable from the existing brand schema to the product (Fiske, 1982). Brand familiarity would, therefore, increase positive affect toward the familiar branded product and have an overall positive effect on consumer response, compared to unfamiliar brands, irrespective of the purchase context (touch or no touch). Current schema research has established that our memory and the content of our schemas, is not innate and changes in accordance with our encounters and experiences. As such, schema is continuously constructed and determined by the interaction between stimuli from the environment and the internal state (schema) which we possess at that time. It is possible, then, that the degree of influence of touch (external environment) on consumer response may be a product of the brand schema and associations possessed (internal environment) by the consumer at the time of evaluation.

Dependent on the level of brand schema, limited or nonexistent brand schema may motivate the acquisition of knowledge or additional information search. Therefore, in seeking to acquire additional information, touch may serve as the conduit for this information. The greater uncertainty characteristic of online purchase environments (which are no touch environments) means brand familiarity is likely to have a greater positive impact in such situations (Degeratu et al., 2000).

Schema theory proposes that individuals with higher familiarity possess existing information (brand schemas) thus reducing the need for additional information required to assess a product. From a touch perspective, it is possible that despite consumer preference for

physically touching products high in diagnostic feedback during the pre-purchase stage (McCabe & Nowlis, 2003), lack of the opportunity to touch may be compensated for by brand familiarity. According to cue utilization research, intrinsic cues are considered more reliable but extrinsic cues have a greater impact when intrinsic cues are absent or taken away (Olson & Jacoby, 1972). As such, for familiar brands, existing brand schemas (extrinsic cue) may alleviate the requirement of acquiring additional information via the haptic system (intrinsic cue), hence touching or not touching a product from a familiar brand may have no significant effect on product evaluation. Therefore, this paper proposes that touch will improve product evaluation, but this effect will only be apparent for unfamiliar branded products because no pre-existing schema is contained for the unfamiliar brand. Touch serves as a conduit through which information is used to build new schema and reduce uncertainty.

H2. Brand familiarity moderates the effect of touch on product evaluation. Specifically, for unfamiliar branded products touch will have a positive effect but no effect for the familiar branded products will be found.

2.4 | The effect of touch on product evaluation (luxury branded product)

Examining how luxury brand information is processed when touch accessibility varies may help to advance knowledge in both streams of literature. An individual's brand schema contains a variety of brand associations formed through direct experience with a company, word of mouth publicity, celebrity endorsements, advertisements, or by the product. For example, Apple is associated with innovation, Hyatt Hotels with sophistication and BMW cars with superior engineering. Luxury brand schemas primarily possess associations of high price, excellent quality, rarity, esthetic appeal, extraordinariness and symbolism (Dubois et al., 2001). Beyond the functional benefits associated with luxury brands and products (e.g., high quality), the heart of luxury lies in the "symbolic desire to belong to a superior class" (Kapferer & Bastien, 2009, p. 314). Thus, exposure to luxury brands may motivate the desire to physically interact (touch) with the products to symbolically feel closer to the luxury brand. Indeed, the opportunity to see and touch luxury products (e.g., garments) is essential as consumers feel that online (a no touch environment) luxury brand shopping lacks the "environmental quality" which they enjoy in a luxury store (Dall'Olmo Riley & Lacroix, 2003). Individuals still express a liking and interest toward luxury even with limited expertise and infrequent purchase (Dubois & Laurent, 1994). High net worth individuals are becoming more discerning about where they spend their money and are craving innovative and immersive brand experiences above all else. Therefore, products that possess the "essence" of luxury brands (brand contagion) would be judged based on the known qualities of this brand (brand schema). Thus, for the first time we test product touch effects in the context of

luxury products, which allows us to further assess generalisability of these effects. It is therefore hypothesized, that:

H3a. Touch has a positive effect on consumer response to a luxury branded product.

Although this link has been tested in prior research, it has typically been done in contrived situations where no brand name is present. Therefore, testing this hypothesis in the presence of brand names provides an important extension to the literature.

2.5 | Touch, NFT, and product evaluation

NFT is the "preference for extraction and utilization of information obtained through the haptic system" (Peck & Childers, 2003b, p. 431). Drawing on the rationale of Holbrook and Hirschman's (1982) classification of shoppers as either problem-solvers or consumers seeking fun, and McClelland et al.'s (1989) dual motivation model stipulating that human motivation is either implicit or self-attributed, Peck and Childers (2003b) conceptualized NFT into two dimensions: *instrumental* and *autotelic*. High NFT implies a preference for the haptic examination of products, whether for fun or to make a decision. When assessing products with higher touch properties (where touch indicates the quality or the primary functionality of the product, e.g., the texture of a scarf), haptic information stored in the memory is accessed to a greater degree by higher NFT individuals (Peck & Childers, 2003b) and this accessibility enhances the chance that the information will be used in judgment formation (Lingle & Ostrom, 1979). The significance of individual differences in NFT is demonstrated in previous research (Krishna & Morrin, 2008; Peck & Childers, 2003a, 2003b; Peck & Johnson, 2011) with the consensus that responses of those with a high NFT are positively (negatively) influenced when haptic exploration is available (unavailable) while an indifference for low NFT is reported. As all previous studies have examined this relationship for products with no brand names, we examine if this relationship holds for luxury branded products:

H3b. Touch will only have a positive effect on product evaluation for luxury branded products for those with a high NFT but not a low NFT.

2.6 | The moderating role of brand status

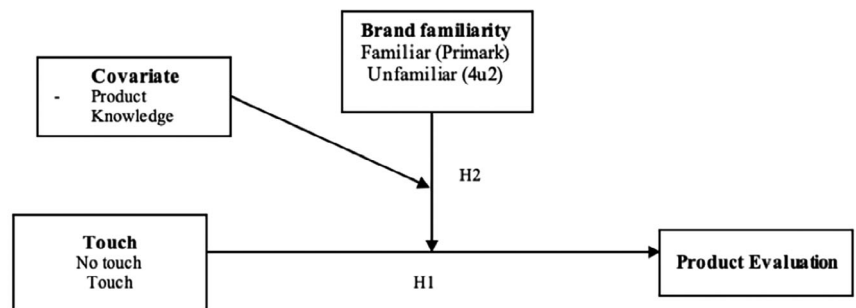
Contagion theory explains the effect that a person or object (source) has on another person or object (target) when the former comes into contact with the latter either directly or indirectly. The properties from the source are said to be transferred to the target. Marketing literature has explored the role of contagion and shows that the closeness to the source heightens feelings of contagion (Argo et al., 2006; Mishra, 2009; Morales & Fitzsimons, 2007). Products close to one another are capable of "contaminating" other products (Morales &

Fitzsimons, 2007). Studies on contagion theory in the marketing literature fall into two main categories: product-to-product contagion (Morales & Fitzsimons, 2007) and person-to-product contagion (Argo et al., 2006, 2008; Newman et al., 2011). Argo et al. (2008) suggest, but do not empirically verify, that certain brand types *could* elicit particular positive feelings or associations that drive positive contagion, and to our knowledge, no study has empirically examined contagion theory from a brand perspective. Based on the theoretical framework, the term brand contagion is proposed to reflect a brand product contagion effect and this study argues that brand contagion is transferred to consumers when the consumer makes physical contact with the “contaminated” branded product.

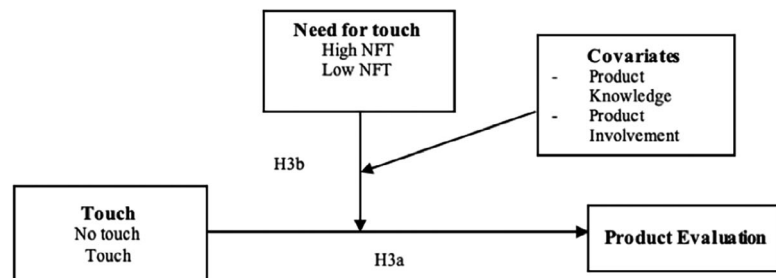
Brand schemas are the associations consumers attach to the brand as well as its benefits and market position, representing both

functional and symbolic knowledge regarding the brand (Dahlén et al., 2005; Dahlén & Lange, 2004; Hoyer & MacInnis, 2008). A consumer’s luxury brand handbag schema may thus contain information pertaining to the characteristics of the handbag (e.g., black, lightweight, signature features), the symbolism attached to the luxury brand (e.g., exclusivity, class, sophistication) and a general attitude toward the brand (positive or negative). A luxury brand’s characteristic association with status and prestige (Kapferer & Bastien, 2009), exclusivity, high quality (Dubois et al., 2001), heightened pleasure and increased self-esteem collectively embody a positive “*luxury essence*.” This study proposes that this *essence* is transferable from the luxury brand (source) to an individual (target) coming into contact with a luxury branded product. Accordingly, the positivity derived from the transference of this essence is bound to be greater for luxury than

Study 1



Study 2



Combined Data Set

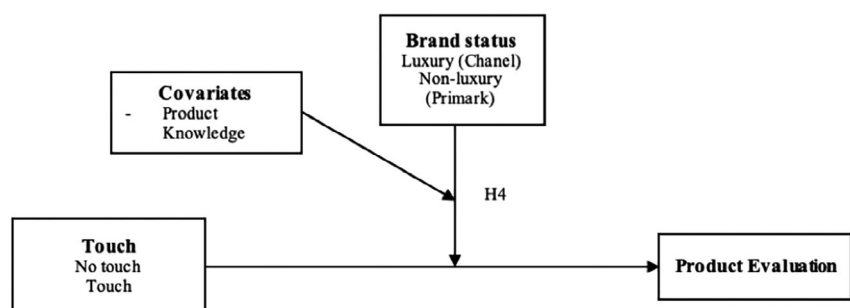


FIGURE 1 Proposed conceptual framework

nonluxury brands. Additionally, as proximity heightens the feelings of contagion (Argo et al., 2006; Mishra, 2009; Morales & Fitzsimons, 2007) it would be expected that the *luxury essence* is greater in the touch environment where proximity is enhanced. In a touch environment, an individual comes into direct physical contact with the source item; drawing on contagion theory this research infers that brand contagion is activated through physical touch with the product. For product categories that typically require physical evaluation, some of the information desirable for making a purchase decision is not available in a no touch environment. The concept of a luxury brand is fundamentally driven by the hedonic associations we hold of them (Patrick & Hagtvedt, 2014). Bloom (2010, p. 22) contends that “the pleasure we get from many things and activities is based in part on what we see as their essences... it underlies our passions, our appetites and our desires.” This suggests engagement with a luxury brand may therefore yield greater pleasure than nonluxury brands. Consequently, brand status may serve as an important surrogate for intrinsic product attribute information. Thus:

H4. Brand status moderates the effect of touch on consumer response. Specifically, for luxury branded products, product touch has a positive effect. Conversely, for nonluxury branded products, there is less likely to be an effect of touch.

To test the hypotheses two studies were carried out as detailed below (Figure 1).

3 | STUDY 1

Study 1 was designed to test H1 and H2, where touch was manipulated within the context of a lab experiment and where respondents interacted with and touched the product. After interacting with the product, respondents then answered a series of questions (via a questionnaire) about their evaluations of the product. As the key aim of this paper was the examination of brand moderators on touch effects, possible product-related factors that could confound results were measured, namely product knowledge. McCabe and Nowlis (2003) acknowledge product knowledge could reduce the impact of product touch so it was measured. Product choice was influenced by prior literature and brand choice based on a pre-study we conducted.

3.1 | Method

3.1.1 | Product selection

Some products provide touch diagnostic information useful in decision-making as they are said to contain “material properties” (e.g., texture of a pillowcase, washcloth, etc.) Grohmann et al. (2007) identified categories (in descending frequency) where touch is considered important (e.g., clothing, bed linen, pillows). Sweaters and pillowcases are products familiar to the sample and

were selected, similar to Peck and Shu (2009). We sought to select products that would be familiar to participants to minimize any effects of product unfamiliarity, therefore capturing the full effect of the manipulations. Sweaters in particular have predominantly featured as a material property-based stimulus in prior studies (Morales & Fitzsimons, 2007; Subhash, 2013). Both products belong to the same category. That is, products that are high in haptic salience. These were selected based on precedent set in prior studies for the purpose of internal validity.

3.1.2 | Brand familiarity pre-test

To create the brand familiarity levels a pre-test was carried out where respondents were asked to rate brands on their degree of brand familiarity. Specifically, for the familiar brands, we selected brands that had a retail outlet in the city centre and were targeted or frequented by the age group of the sample used in the study. The five stores selected for examination (to select the most familiar) were H&M, New Look, Primark, Topshop, and Matalan. For the unfamiliar brands, the researcher selected existing brands with similar price points that are predominantly based outside Europe and the United States thus likely unfamiliar to the United Kingdom based study sample. The four unfamiliar brands selected were Truworths, Woolworths, Mr Price and 4U2. In total, participants were presented with nine brands. Adopting Kent and Allen's (1994) brand familiarity scale, questionnaires were randomly distributed around the campus which resulted in a convenience sample of 22 university students (68% female, 32% male), aged between 18 and 24. Based on the results of the pre-test, Primark had the highest familiarity mean score while 4u2 had the lowest familiarity mean score ($M_{\text{Primark}} = 5.86$, $M_{4u2} = 1.65$). The results of a paired samples *t* test revealed the two brands differed significantly on familiarity ($t(21) = 10.76$, $p = .000$) (Babin et al., 2020). Thus, Primark was selected as the familiar brand and 4u2 as the unfamiliar brand.

Sample and procedure

A total of 119 students from a medium-sized United Kingdom university, recruited via campus advertisements participated in the study. Student samples provide good quality data comparable to other commonly used panels and MTurk respondents (Kees et al., 2017) and in preliminary studies (as in this paper) student samples are seen to be appropriate (Ashraf & Merunka, 2017). Consistent with prior experimental studies in the area of sensory marketing a student sample was thus used (e.g., Brasel & Gips, 2014; Peck & Johnson, 2011; Peck & Shu, 2009; Peck & Wiggins, 2006). Additionally, using university students decreases the probability of extraneous variables (unexplained variance) from affecting experimental analysis and therefore the research outcome (Laroche et al., 2005; Reynolds et al., 2003). The sample was primarily female (65%), with most participants aged 18–30 years (98%). Participants were subsequently randomly assigned to one of four conditions, composed of a 2 (experimental

condition: touch vs. no touch) \times 2 (brand: Primark vs. 4u2) between subjects design with the stimuli (sweater and pillowcase) assigned within-subjects. Respondents were randomly allocated to different treatment groups by allocating them to different time slots and alternating the treatment administered in each. Each participant had no prior knowledge of the condition they would be assigned to. Thus, total sample was 119 for the 4 treatment conditions. Using the presence and absence method (Keppel & Wickens, 2004) the independent variable touch was manipulated into two conditions; no touch (control condition) and touch (treatment condition) with instructions for the touch and no touch conditions adapted from Grohmann et al. (2007). Brand logo and product information tags were removed from each product. The study was carried out in a classroom where two stations had been created (A and B) with one type of product only placed on the table. On entering the room, participants sat where they wanted and were not directed to a specific table. At this point, they proceeded to read the experiment instruction leaflet. It was explained that once participants had examined the product and completed the questionnaire at that table, they were to move to the next table and carry out the same process. Participants were asked to spend 1 min carrying out the product examination. This kept evaluation time consistent across all conditions therefore reducing the chances that time was a confounding variable. This also ensured that in the touch condition participants actually physically interacted with the products, and in the no touch condition spent an appropriate amount of time visually evaluating the products. Sequence effects were controlled for by counterbalancing experimental conditions within-subjects. Product order was counter balanced to reduce the possible order effects due to fatigue. Therefore, some respondents viewed the pillow case followed by the sweater and others viewed the sweater followed by the pillow case. As there were only two products, this also helped to diminish possible order effects due to fatigue. After examination, participants responded to the questionnaire measuring product evaluation using the three-item "Attitude Toward the Product" scale (Holbrook & Batra, 1987), brand familiarity (Kent & Allen, 1994), product knowledge (Smith & Park, 1992), need for touch and gender. All measures had a Likert scale with endpoints 1 = Strongly Disagree and 7 = Strongly Agree. See Table A1 in Appendix A for all measurement items and accompanying alpha values.

3.2 | Study 1 results

3.2.1 | Manipulation check

As experiments were used, a brand familiarity manipulation check was conducted, confirming that the brand familiarity manipulation was successful. Primark was used in the familiar brand condition while 4u2 was used in the unfamiliar brand condition. A one-way ANOVA showed that brand familiarity was higher for the Primark brand ($M = 4.95$, $SD = 1.44$) than the 4u2 brand ($M = 1.80$, $SD = 1.01$) supporting the manipulations within the experiment, $F(1,117) = 192.64$, $p = .000$.

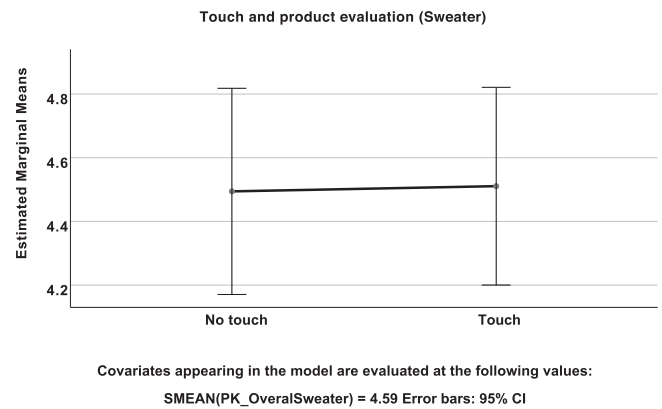


FIGURE 2 Hypothesis 1a (sweater)

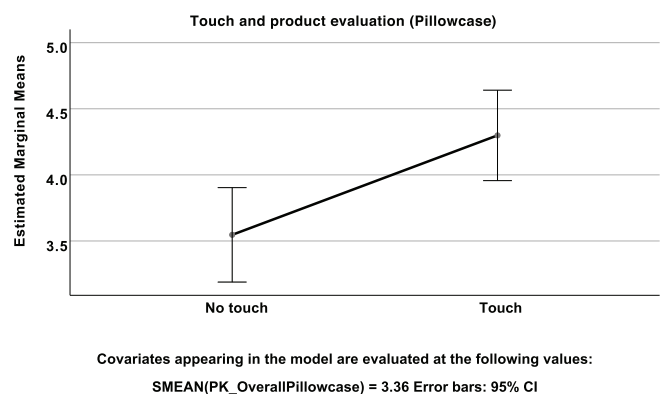


FIGURE 3 Hypothesis 1b (pillowcase)

3.2.2 | Assumption testing

Assumption testing was carried out (normality, homogeneity of variances, independence of the covariate, homogeneity of regression slopes) and the assumptions underlying the ANCOVA largely met with the data for both products (Sweater and Pillowcase). One of the groups for the sweater was not statistically normally distributed (No touch condition, $W = 0.958$, $p < .044$) and normality scores for the moderator, brand familiarity, showed the unfamiliar brand group was not statistically normally distributed ($W = 0.953$, $p < .021$). However, ANCOVA's are robust to departures from normality (Field, 2013; Rutherford, 2001). The homogeneity of regression (slopes) assumption indicated that the covariate and the dependent variable did not differ significantly as a function of the independent variables touch and brand familiarity (Pillowcase— $F(1,111) = 0.024$, $p = .878$ but differed for the sweater $F(1,111) = 5.25$, $p = .024$). ANCOVA is however robust to these deviations.

3.2.3 | Hypothesis 1

A one-way ANCOVA was run to test the effect of touch on product evaluation (H1), using product knowledge as a covariate (for each of

the two products). Results of the Pearson correlation indicated that there was a significant positive association between the covariate product knowledge and product evaluation (Sweater— $r(119) = 0.196$, $p = .032$; Pillowcase— $r(119) = 0.259$, $p = .004$). The independent between groups ANCOVA yielded a statistically significant effect of touch on product evaluation of the pillowcase ($F(1,116) = 9.03$, $p = .003$, $\eta^2 = 0.072$). Thus, the null hypothesis of no differences was rejected and 7.2% of the variance in product evaluation was accounted for by touch. Specifically, individuals in the touch condition gave higher product evaluation scores ($M_{\text{TOUCH}} = 4.26$, $M_{\text{NO-TOUCH}} = 3.58$) indicating that touch has a positive effect on product evaluation. Therefore, H1 is supported. However, ANCOVA (see Appendix B for ANCOVA table) results for the sweater yielded an insignificant effect ($M_{\text{TOUCH}} = 4.52$, $M_{\text{NO-TOUCH}} = 4.48$; $F(1,116) = 0.005$, $p = .942$, $\eta^2 < 0.001$) suggesting that touch had no effect on product evaluation of the sweater. Results are depicted in Figures 2 and 3.

3.2.4 | Hypothesis 2

The two-way ANCOVA that was run to test the effect of touch and brand familiarity on product evaluation revealed no significant interaction effect of touch and brand familiarity on product evaluation of the sweater, $F(1,114) = 0.896$, $p = .346$, $\eta^2 = 0.008$ or pillowcase, $F(1,114) = 0.189$, $p = .665$, $\eta^2 = 0.002$. The results indicate that product evaluation scores in the touch and no touch conditions do not differ by brand familiarity (*Primark Sweater* ($M_{\text{TOUCH}} = 4.23$, $M_{\text{NO-TOUCH}} = 4.43$), *4u2 Sweater* ($M_{\text{TOUCH}} = 4.82$, $M_{\text{NO-TOUCH}} = 4.52$); *Primark Pillowcase* ($M_{\text{TOUCH}} = 4.17$, $M_{\text{NO-TOUCH}} = 3.56$), *4u2 Pillowcase* ($M_{\text{TOUCH}} = 4.35$, $M_{\text{NO-TOUCH}} = 3.61$)). Therefore, H2 is rejected (see Figures 4 and 5 and Appendix B for ANCOVA table).

3.3 | Discussion

Consistent with prior literature (McCabe & Nowlis, 2003), the results of Study 1 support the notion that touch has a positive effect on product evaluation (H1). Negative information is shown to have a greater impact on unfamiliar than familiar brands (e.g., Sundaram & Webster, 1999) and a no touch environment negatively impacts consumer choice and decisions (e.g., Peck & Childers, 2003a). Thus, it was expected that product evaluation in the touch environment would be greater for the unfamiliar (than familiar) branded products. Surprisingly, the results did not show significant effects for brand familiarity moderating the relationship between touch and product evaluation (see Hypothesis 2), which contrasts with prior brand familiarity research (e.g., Campbell & Keller, 2003; Dawar & Lei, 2009; Hoyer & Brown, 1990; Kent & Allen, 1994; Machleit et al., 1993; Sundaram & Webster, 1999). Thus within the context of product touch, brand familiarity does not appear to be a moderator. Study 1 results suggest is that merely looking at the presence or absence of brand schema (familiar or unfamiliar), without

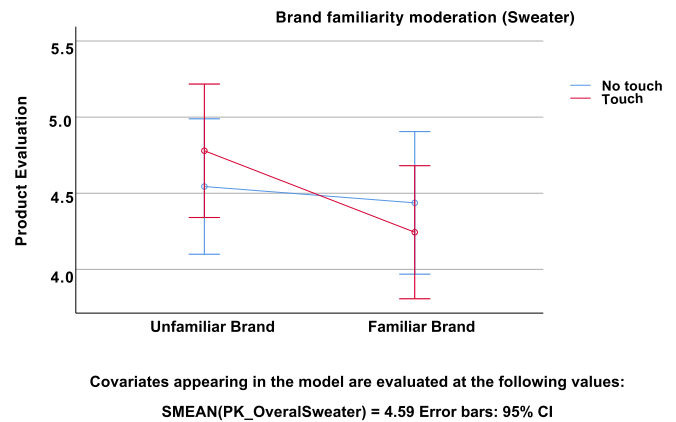


FIGURE 4 Hypothesis 2a (sweater) [Colour figure can be viewed at wileyonlinelibrary.com]

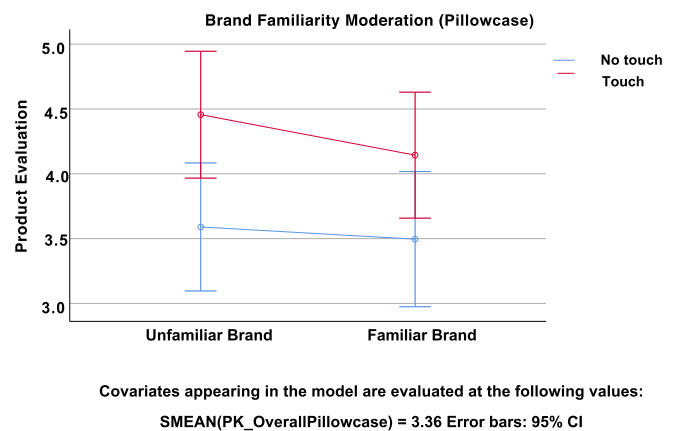


FIGURE 5 Hypothesis 2b (pillowcase) [Colour figure can be viewed at wileyonlinelibrary.com]

examining the nature of what that schema contains (e.g., what type of brand, brand status, etc.) may not be a sufficient indicator of a brand's influence on product touch effects. Study 2 was designed to address and test this speculation by replicating Study 1 and examining touch effects on product evaluation within the context of a luxury brand (Chanel). Luxury brands tend to be evaluated using different criteria compared to nonluxury brands, more so stemming from the emotional and hedonic benefits they are able to deliver to the consumer (Patrick & Hagtvedt, 2014). Therefore, it is possible that touch could play a significant role in the evaluative stage of products from such brands. Study 2 therefore examines the relationship between touch and brand status and its effect on product evaluation.

4 | STUDY 2

Building upon the findings of Study 1, Study 2 examines the effect of touch on product evaluation of a luxury branded product (H3a) and if the effect differs by NFT (H3b). In addition to product

knowledge (rationale explained in Study 1) we added product involvement as a covariate. Consumers exhibiting high product involvement have greater motivation to assign cognitive effort to evaluate the real qualities of a product (e.g., Browne & Kaldenberg, 1997) while less effort is or can be dedicated to processing information when product involvement is low (Chung et al., 2003). Thus, we controlled for its effect. Study 2 was a two-factor (Touch condition: touch, no touch) between subjects design study. Similar to Study 1, the sweater was used. As we were looking at luxury brands, we decided to stick to a product category commonly sought/bought in luxury brands. This sought to provide a more realistic stimuli for the study. Consequently, the sweater was chosen over the pillowcase as the former is more prominent in the luxury brand domain. Burberry, Ralph Lauren, Louis Vuitton, Prada, and Chanel are some of the most valuable luxury brands as ranked by Interbrand (Rapoza, 2013). These five brands were therefore selected for evaluation in the luxury brand selection phase to determine which was the most familiar. Of the luxury brands, Chanel was rated as the most familiar ($M = 5.17$, $SD = 1.57$) and thus selected as the luxury brand. Participants were therefore informed that all products were Chanel.

4.1 | Method

4.1.1 | Sample and procedure

Study 2 consisted of a sample size of 65 students from the same university as Study 1. The sample was selected in the same way as in Study 1 and the same procedure run (with only one product station for the sweater). The respondents were 66% female and 34% male and all were aged between 18 and 30. We only used a sweater for Study 2. Similar to Study 1, a sweater was used and Chanel was the luxury brand. Participants were subsequently randomly assigned to one of two conditions, composed of a two (experimental condition: touch vs. no touch).

4.1.2 | Measures

The questionnaire measured product evaluation as the dependent variable, product knowledge, and product involvement as covariates and NFT as a moderator. NFT, product evaluation and product knowledge scales used are the same as those used in Study 1. Product involvement was measured using a shortened scale from McQuarrie and Munson (1992) capturing the two facets of involvement, including perceived importance (important, care) and interest (exciting, interesting). Attitudes and behaviors relating to a product or thing are to a relative extent influenced by involvement. Product involvement has been comprehensively used as an explanatory variable in consumer behavior (Dholakia, 1997) and recognizing the potential influence of purchase involvement on consumer response coupled with the

fact that product involvement effects were not the primary research objective, its effects needed to be controlled for. The four product involvement items used were “The (product) is important to me,” “I perceive (the product) as an exciting product,” “(The product) are interesting products,” “I care about the (product) I buy.” NFT and product knowledge scales were the same as in Study 1. See Table A2 in Appendix A for all measurement items and accompanying alpha values. Exploratory factor analysis was conducted to provide evidence of construct validity. All items loaded cleanly on the intended constructs as expected.

4.2 | Study 2 results and discussion

4.2.1 | Assumption testing

Assumption testing was carried out (normality, homogeneity of variances, independence of the covariates (product knowledge and product involvement), homogeneity of regression slopes and the assumptions underlying the ANCOVA largely met. For the moderator NFT, low NFT was not normally distributed ($W = 0.933$, $p = .046$), but ANCOVA's assumptions are robust to departures from normality (Field, 2013; Rutherford, 2001).

4.2.2 | Hypotheses 3a and 3b

A two-way ANCOVA was run to test the effect of touch and NFT on product evaluation of the luxury branded sweater using product knowledge and product involvement as covariates. Prior to testing the hypotheses, assumption testing was carried out and this revealed all ANCOVA assumptions were broadly met. Furthermore, given equal group sizes, violations of assumptions are not so problematic (Hair et al., 2010). The independent variable represented two groups: touch and no touch and the moderating variable two groups: high versus low NFT (based on a median split). The ANCOVA results revealed a significant effect of touch on product evaluation of the sweater ($F(1,59) = 5.11$, $p = .027$, $\eta^2 = 0.080$). Specifically, individuals in the touch condition gave higher product evaluation scores ($M_{\text{TOUCH}} = 4.87$, $M_{\text{NO-TOUCH}} = 4.12$) indicating that touch has a positive effect on product evaluation. Therefore, H3a was supported. However, there was no significant interaction effect between touch and NFT on product evaluation of the sweater ($F(1,59) = 0.091$, $p = .764$, $\eta^2 = 0.002$). Thus, H3b was rejected (see Figures 6 and 7).

The results of Study 2 show that the sweater received higher product evaluations when participants could touch them compared to when they could not, thereby supporting Hypothesis 3a. On further examination of whether an individual's degree of NFT would moderate touch on consumer response, the results showed that there was no moderation effect on product evaluation thus no support for the predicted Hypothesis 3b was found.

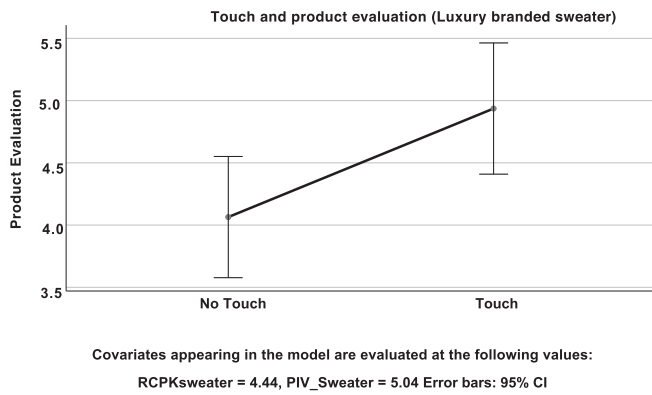


FIGURE 6 Hypothesis 3a (sweater)

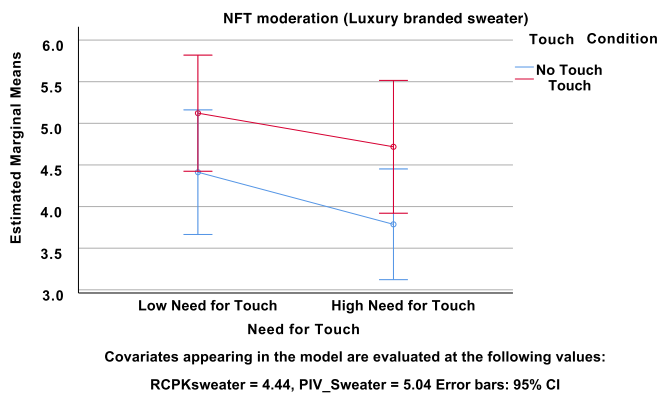


FIGURE 7 Hypothesis 3b (sweater) [Colour figure can be viewed at wileyonlinelibrary.com]

4.3 | Combined data study

In Study 1 (Primark brand—nonluxury) an insignificant touch effect on product evaluation of the sweater was revealed while in Study 2 (Chanel brand—luxury) a significant touch effect was revealed on the same sweater. Given that the same sweater was used with only the brand name differing in both studies, indicating that a brand status moderation effect could exist. However, to empirically examine and establish if brand status could be a moderator, data from Study 1 (*familiar nonluxury: Primark*) for the sweater (for all the dependent variables) was combined with similar data from Study 2 (*familiar luxury: Chanel*). Additionally, the covariate product knowledge, which was present in both studies, was used. The combined data set included 116 respondents. The sample size was less than the two sample sizes combined because not all conditions were replicated across both studies. The respondents were primarily female (61%) and primarily aged between 18 and 24 years (90%). Unlike the proposed relationship between touch and brand familiarity, where it was hypothesized that no significant difference would be noted in a touch or no touch environment for familiar brands, with the combined data set it is proposed that in spite of familiarity the nature of the brand name itself (relating to its luxury brand status) could significantly influence consumer response to touch. See Table A3 in Appendix A for all measurement items and accompanying alpha values.

4.4 | Combined data study results and discussion

4.4.1 | Assumption testing

Assumption testing was carried out (normality, homogeneity of variances, independence of the covariates (product knowledge), homogeneity of regression slopes and the assumptions underlying the ANCOVA were largely met. However, the no touch condition ($W = 0.964$, $p = .095$) and the luxury brand condition ($W = 0.966$, $p < .075$) were not normally distributed, but ANCOVA's are robust to departures from this.

4.4.2 | Hypothesis 4

A two-way ANCOVA was run to test the interaction effect of touch and brand status on product evaluation of the luxury branded sweater using product knowledge as a covariate. The independent variable represented two groups: touch and no touch. The moderating variable also represented two groups for brand status: luxury (Chanel) and nonluxury brand (Primark). The direct effect of touch on product evaluation was not significant ($F(1,111) = 0.005$, $p = .943$, $\eta^2 < 0.001$) and neither was the direct effect of brand status ($F(1,111) = 0.269$, $p = .605$, $\eta^2 = 0.002$). However, the predicted interaction effect of touch and brand status was significant ($F(1,111) = 4.06$, $p = .046$, $\eta^2 = 0.035$). Pairwise comparisons show that touch increased product evaluation for the Chanel (luxury) branded sweater ($M_{\text{TOUCH}} = 4.72$, $M_{\text{NO-TOUCH}} = 4.21$) but not for the Primark (nonluxury) branded sweater ($M_{\text{TOUCH}} = 4.30$, $M_{\text{NO-TOUCH}} = 4.83$). This indicates that a brand status effect exists and, therefore, Hypothesis 4 is supported. See Figure 8 for a diagrammatical representation of product evaluation results for H4. See Appendix B for ANCOVA table.

Brand status moderated the effect of touch on product evaluation of the Chanel (luxury brand) sweater. Specifically, product evaluation was significantly higher in the touch condition for the Chanel (luxury) branded sweater but insignificantly different for the Primark (nonluxury) sweater. This implies that touch effects on product evaluation are only significant when considering luxury branded clothing items and not nonluxury branded ones (H4).

5 | GENERAL DISCUSSION

Overall, our research contributes to the literature in several ways. First, it defines boundary conditions (brand familiarity and brand status) for touch's effect beyond simply product categorization. Brand familiarity is predominantly found to have a positive effect in areas such as brand preference (Campbell & Keller, 2003) and retrieval and storage of information (Dahlén & Lange, 2004; Kent & Allen, 1994). This paper presents findings implying familiarity of a brand may not work in its favor, contrary to the majority of existing literature that shows its influence to be positive. Specifically, it provides empirical evidence of a lack of brand familiarity moderation effects. That is,

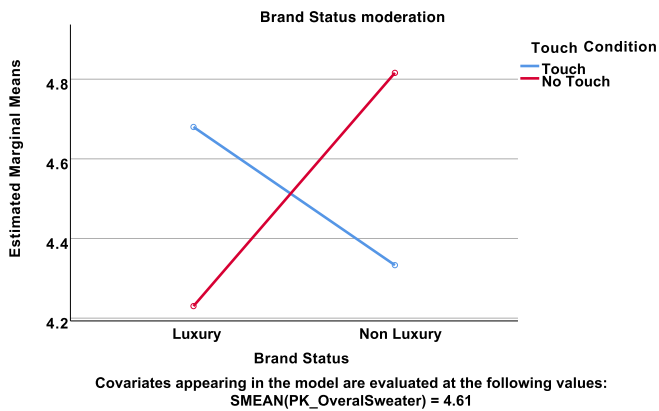


FIGURE 8 Hypothesis 4 (sweater) [Colour figure can be viewed at wileyonlinelibrary.com]

within the context of product touch, brand familiarity had no positive effect on consumer product evaluation.

Second, it advances brand luxury literature by extending the concept of luxury brand status to the area of sensory marketing and provides evidence of its influence on product touch on product evaluation. By doing so it advances our understanding of luxury brand evaluation and information processing. Drawing on contagion theory, this paper argues that in the context of luxury brands, this “essence” would be positive and transferrable from the luxury brand to the product. As such, the positivity derived from the transference would result in products from luxury brands receiving a more positive consumer response, compared to products from nonluxury brands. Furthermore, as proximity heightens the feeling of contagion (Argo et al., 2006; Mishra, 2009; Morales & Fitzsimons, 2007) this *luxury essence* would be greater when an individual came into direct physical contact (touch environment) with the source of contagion (in this case the luxury branded product) therefore intensifying this positive consumer response. Results show this positive effect to be true, but only when the luxury branded sweater was physically touched. In effect, the results imply that brand contagion did occur, but was only activated through the individual's physical contact with the source of the contagion (that is, the luxury branded sweater). The higher the perceived luxury status, the more significant touch became. These findings provide initial empirical feedback to researchers such as Grohmann et al. (2007), Marlow and Jansson-Boyd (2011) and Peck and Childers (2003a) who suggested that brand name might influence product touch effects. The results here can be integrated with expectancy (dis)confirmation theory and are consistent with it. For example, when evaluating a product, among other things, brand status and brand familiarity may affect expectations about how it will feel. These expectations are then (dis)confirmed through product touch, which influences product evaluation (performance). As such, marketers ought to have a clear understanding of consumer expectations of a product's tactile properties, particularly for luxury goods, which would have most to lose from disconfirmation.

Third, the application and effects of NFT is still in its infancy (Nusbaum et al., 2010) and this research makes novel

contributions to existing NFT literature by identifying brand-related contexts in which its effects do not apply (i.e., brand status). Fourth, contagion theory in touch literature has been examined from the perspectives of products “contaminating” other products (Morales & Fitzsimons, 2007), consumers negatively contaminating products (Argo et al., 2006) and consumers positively contaminating products (Argo et al., 2008). It has been suggested that certain brand types may evoke positive feelings or associations that could then drive positive contagion effects (Argo et al., 2008). As such, this paper extends the theory of contagion to the concept of luxury brands and proposes that a brand contagion effect occurs where a luxury branded product is concerned, and that this brand contagion effect is activated through product touch.

5.1 | Managerial implications

Given this study was conducted in a lab setting caution should be used when interpreting the results. However, the results have interesting implications for managers. For unfamiliar branded products, results show that touch is not an influential factor in defining product evaluation, meaning that retailers from such brands can afford to have an online store presence without hurting their brand. Physical stores are the most critical points of contact with luxury consumers who are heavily influenced by what they see and experience in-store. The findings reinforce this and may help explain why consumers prefer to go in-store to buy a luxury branded product compared to purchasing them online. Overall, consumer product touch seems advantageous to luxury brand retailers as opposed to nonluxury retailers.

5.2 | Limitations and future research

We did not examine additional semantic properties of the brands (e.g., Brand liking) used in the study. Different brands mean different things to consumers (e.g., based on purchase frequency or brand personality) and the lack of a brand familiarity moderation effect was surprising. It could be that consumer-based brand equity for Primark was low, creating no difference when touching products from Primark (familiar brand) or 4u2 (unfamiliar brand). Future studies may measure brand associations or assess associative maps of brands to identify factors that may have inadvertently interfered with the results. Whilst it was not a focus of this research, the effects here could be moderated by ownership. For example, touching a product you already owned may confirm existing beliefs (if the experience was consistent with expectations). However, if one did not already own the product then other cues (e.g., touch) would become more significant in your evaluations. Therefore, a further extrinsic cue for testing could be product ownership. Future studies should also replicate the study on brand status moderation with data from collected in the same study. Lastly, this study is limited by the usual issues with experimental work (e.g., the tradeoff between internal and external validity). Although student samples

were deemed appropriate for this study further testing should be done on wider samples to assess the generalisability of these effects. Likewise, the cell sizes were appropriate but, in some cases, larger cell sizes would have been more helpful in establishing the effect of moderating variables (e.g., H3b which was not significant).

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

ORCID

Sheena W. Karangi  <https://orcid.org/0000-0003-1358-3260>

Ben Lowe  <https://orcid.org/0000-0002-5041-600X>

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AUTHOR BIOGRAPHIES

Sheena Karangi is a Teaching Fellow in Marketing and Retail Management at the University of Surrey and holds a PhD degree in Marketing from the University of Kent. Her primary research interest lies in sensory marketing, multisensory marketing, retail atmospherics, consumer psychology and behavior, consumer decision-making, branding, luxury brands, and experimental research design and analysis. This includes the use of sight, scent, sound, and touch in marketing activities to subconsciously influence consumer behavior and the affective and cognitive factors underlying these effects.

Ben Lowe is Professor of Marketing and Associate Dean at Kent Business School, University of Kent. His research interests are broadly around consumer behavior and he is specifically interested in consumer adoption and acceptance of innovations. His work has been around consumer decision-making and information processing and he has looked at mobile apps, virtual health communities, water saving technologies, energy efficient technologies, pro-poor innovations and others. He is on the editorial review board of several journals and serves as an Associate Editor for the *European Journal of Marketing*. He has published refereed journal articles in journals such as the *Journal of Consumer Behavior*, *European Journal of Marketing*, *Journal of Public Policy and Marketing*, *Journal of Interactive Marketing*, *Journal of Business Research*, *Psychology & Marketing*, *Technovation*, *International Marketing Review*, the *American Journal of Agricultural Economics* and many others.

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APPENDIX A.

TABLE A1 Study 1 scale items and reliability

Scale items	Cronbach alpha (α)	
	Sweater	Pillowcase
Product evaluation	.901	.910
I like this product		
I feel positive toward the product		
The product is good		
Product knowledge	.767	.795
I am very knowledgeable about the product		
If a friend asked me about the product, I could give them advice about different brands of the product		
If I had to purchase such a product today, I would need to gather very little information in order to make a wise decision		
I feel very confident about my ability to tell the difference in quality among different brands of this product		
Brand familiarity	.909	
I am familiar with the brand		
I know a great deal about the brand		
I have no knowledge about the brand ^a		

^aReverse coded.

TABLE A2 Study 2 scale items and reliability

Scale items	Cronbach alpha (α)
	Sweater
Product evaluation	.942
I like this product	
I feel positive toward the product	
The product is good	
Product knowledge	.825
I am very knowledgeable about the product	
If a friend asked me about the product, I could give them advice about different brands of the product	
If I had to purchase such a product today, I would need to gather very little information in order to make a wise decision	
I feel very confident about my ability to tell the difference in quality among different brands of this product	
Product involvement	.762
(Product) are important to me	
I perceive (product) as exciting products	
(Product) are interesting products	
I care about the (product) I buy	
Need for touch	.812
When walking through stores, I cannot help touching all kinds of products	
Touching products can be fun	
When browsing in stores, it is important for me to handle all kinds of products	
I like to touch products even if I have no intention of buying them	
When browsing in stores, I like to touch lots of products	
I find myself touching all kinds of products in stores	

(Continues)

TABLE A2 (Continued)

Scale items	Cronbach alpha (α)
	Sweater
I place more trust in products that can be touched before purchase	
I feel more comfortable purchasing a product after physically examining it	
If I cannot touch a product in the store, I am reluctant to purchase the product	
I feel more confident making a purchase after touching a product	
The only way to make sure a product is worth buying is to actually touch it	
I would only buy a product if I could handle them before purchase	

TABLE A3 Combined dataset scale items and reliability

Scale items	Cronbach alpha (α)
	Sweater
Product evaluation	.924
I like this product	
I feel positive toward the product	
The product is good	
Product knowledge	.822
I am very knowledgeable about the product	
If a friend asked me about the product, I could give them advice about different brands of the product	
If I had to purchase such a product today, I would need to gather very little information in order to make a wise decision	
I feel very confident about my ability to tell the difference in quality among different brands of this product	

APPENDIX B.

		Sum of squares	df	Mean square	F	Sig	Partial eta squared
Hypothesis 1 Sweater	Corrected model	7.07 ^a	2	3.536	2.325	0.102	0.039
	Intercept	97.01	1	97.013	63.785	0.000	0.355
	Product knowledge (<i>covariate</i>)	7.01	1	7.012	4.611	0.034	0.038
	Touch (<i>independent variable</i>)	0.008	1	0.008	0.005	0.942	0.000
	Error	176.42	116	1.521			
	Total	2596.27	119				
	Corrected total	183.49	118				
Hypothesis 1 Pillowcase	Corrected model	33.25 ^b	2	16.62	9.01	0.000	0.135
	Intercept	132.15	1	132.15	71.68	0.000	0.382
	Product knowledge (<i>covariate</i>)	19.57	1	19.57	10.61	0.001	0.084
	Touch (<i>independent variable</i>)	16.64	1	16.64	9.03	0.003	0.072
	Error	213.85	116	1.84			
	Total	2092.88	119				
	Corrected total	247.10	118				
Hypothesis 2 Sweater	Corrected model	11.65 ^c	4	2.91	1.93	0.110	0.063
	Intercept	99.25	1	99.25	65.84	0.000	0.366
	Product knowledge (<i>covariate</i>)	6.15	1	6.15	4.08	0.046	0.035
	Touch (<i>independent variable</i>)	0.013	1	0.013	0.009	0.926	0.000
	Brand familiarity (<i>moderator</i>)	3.05	1	3.05	2.02	0.157	0.017
	Touch × brand familiarity (<i>brand familiarity moderation</i>)	1.35	1	1.35	0.896	0.346	0.008

		Sum of squares	df	Mean square	F	Sig	Partial eta squared
	Error	171.84	114	1.50			
	Total	2596.27	119				
	Corrected total	183.49	118				
Hypothesis 2 Pillowcase	Corrected model	34.86 ^d	4	8.71	4.68	0.002	0.141
	Intercept	127.25	1	127.25	68.35	0.000	0.375
	Product knowledge (covariate)	20.62	1	20.62	11.07	0.001	0.089
	Touch (independent variable)	16.85	1	16.85	9.05	0.003	0.074
	Brand familiarity (moderator)	1.21	1	1.21	0.651	0.422	0.006
	Touch × brand familiarity (brand familiarity moderation)	0.351	1	0.351	0.189	0.665	0.002
	Error	212.23	114	1.86			
	Total	2092.88	119				
	Corrected total	247.10	118				
Hypothesis 3a and 3b Sweater	Corrected model	35.41 ^e	5	7.08	3.45	0.008	0.226
	Intercept	13.34	1	13.34	6.50	0.013	0.099
	Product knowledge (covariate)	1.57	1	1.57	0.768	0.384	0.013
	Product involvement (covariate)	24.21	1	24.21	11.80	0.001	0.167
	Touch (independent variable)	10.47	1	10.47	5.11	0.027	0.080
	Need for touch (moderator)	4.04	1	4.04	1.97	0.165	0.032
	Touch × Need for touch	0.187	1	0.187	0.091	0.764	0.002
	Error	120.98	59	2.05			
	Total	1453.22					
	Corrected total	156.40					
Hypothesis 4 Sweater	Corrected model	15.29 ^f	4	3.82	2.55	0.043	0.084
	Intercept	86.81	1	86.81	58.01	0.000	0.343
	Product knowledge (covariate)	7.35	1	7.35	4.91	0.029	0.042
	Touch (independent variable)	0.008	1	0.008	0.005	0.943	0.000
	Brand status (moderator)	0.402	1	0.402	0.269	0.605	0.002
	Touch × Brand status	6.07	1	6.07	4.05	0.046	0.035
	Error	166.09	111	1.49			
	Total	2513.94	116				
	Corrected total	181.38	115				

^a R Squared = 0.063 (Adjusted R Squared = 0.022).

^b R Squared = 0.063 (Adjusted R Squared = 0.120).

^c R Squared = 0.063 (Adjusted R Squared = 0.031).

^d R Squared = 0.063 (Adjusted R Squared = 0.111).

^e R Squared = 0.063 (Adjusted R Squared = 0.161).

^f R Squared = 0.063 (Adjusted R Squared = 0.051).