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# Can Online Visual Cues Compensate For The Lack Of Touch In The Context Of Apparel Online Shopping?

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## **Background Research and Hypotheses**

In a retail store, touch plays an important role in building positive attitudes toward the store and encouraging shopping behavior. However, different from the traditional retail store, online shoppers are not able to use a tactile sense and such limitation has influenced online purchasing behavior. Research also highlights that the degree of shoppers' motivation to touch a product in product evaluation is different by individuals (Citrin et al., 2003). For those high in need for touch (NFT), touch is habitually more important and therefore, these people are more likely to use tactile information in product evaluation (Cho & Workman, 2011). However, in an online shopping context, where touch is unavailable, shoppers mainly count on visual cues such as verbal and pictorial information available in websites. Therefore, those high in NFT possibly seek more feature by feature product information as the compensation for the lack of touch (Yazdanparast & Spears, 2012). This tendency may be greater for online clothing purchase because clothing requires higher levels of tactile evaluation during the purchasing process. Both instrumental (i.e., product information quality) and aesthetic aspects (i.e., site color) of an online environment are liable to enhance consumer's perception of online store attributes, attitude, and behavioral intentions. Therefore, understanding the possible compensatory effect of both instrumental and aesthetic online cues on consumer responses when touch is unavailable is essential. In particular, understanding how the effect of online cues on consumer responses differs as a function of individual differences in NFT is important. Therefore, the purpose of this study is to investigate the moderating effect of need for touch in the relationship between visual online cues available in apparel websites and various consumer responses (i.e., perceptions of online store attributes, attitude, and purchase intention).

Hypothesis 1 - Individual difference in need for touch (NFT) will moderate the effect of product information on consumer perceptions of online store attributes, attitude toward the website, and purchase intention.

Hypothesis 2 - Individual difference in need for touch (NFT) will moderate the effect of website color on consumer perceptions of online store attributes, attitude toward the website, and purchase intention.

## Method

The study employed a 2 (NFT: high vs. low) x 2 (product information quality: high vs. medium) x 2 (website color: chromatic vs. achromatic) between-subjects factorial design. Four mock apparel websites that varied in the quality of product information and website color were created. To test for a moderating effect of difference in need for touch, the sample was divided into low and high NFT groups. A total of 1585 US adult online consumers participated in the

study. Participants were randomly assigned to one of four websites and asked to complete the survey after browsing the website. The survey questionnaire was composed of items measuring need for touch, perceived online store attributes (i.e., product quality, website design, convenience, price/value), attitude, and purchase intention. All items were adopted from previous research to ensure reliability and validity and used 7-point scales. Basic demographic information was collected as well.

## Results

The results of confirmatory factor analysis supported convergent validity, reliability, and discriminant validity of the measurement model tested in the study. The proposed model consisted of 6 latent constructs (four perceived store attributes, attitude, and purchase intention) with 17 manifest variables. Results showed an acceptable fit of the proposed model ( $\chi^2$ =831.13, *p*=.001, RMSEA=.052 [.049; .056], GFI=.95, NFI=.96, CFI=.97). Both quality of product information ( $\gamma$ =.14, *t*=2.79, *p*<.005) and website color ( $\gamma$ =.26, *t*=5.19, *p*<.0001) influenced consumer perceptions of website design. Results demonstrate that four perceived website attributes (i.e., product quality, convenience, website design, price/value) positively affected consumer attitude toward the website ( $\gamma$ =.71, *t*=16.21, *p*<.0001,  $\gamma$ =.13, *t*=4.67, *p*<.0001,  $\gamma$ =.18, *t*=8.67, *p*<.0001,  $\gamma$ =.16, *t*=4.35, *p*<.0001, respectively), which in turn positively influenced purchase intention ( $\gamma$ =.65, *t*=20.96, *p*<.0001).

To examine the moderating effect of NFT on the relationship between visual online cues and consumer responses, multi-group structural equation modeling was performed ( $\chi^2$ =1163.43, p=.0001, RMSEA=.036 [.033; .038], NFI=.95, CFI=.97). Results showed that individual differences in NFT moderate the relationships between visual online cues and consumers' perceptions of website attributes. In the case of high NFT group, product information quality significantly influenced perceived product quality ( $\gamma$ =.08, t=2.07, p<.05) and convenience ( $\gamma$ =.20, t=2.22, p<.05). Website color had no effect on consumers' perceived online store attributes for the high NFT group. On the other hand, for the low NFT group, both product information quality ( $\gamma$ =.21, t=2.87, p<.005) and website color ( $\gamma$ =.28, t=3.77, p<.0001) showed a significant impact on perception of website design.

## **Discussion and Implication**

The results highlight the compensatory role of product information and website color for different NFT groups. The results imply that consumers high in NFT pay more attention to product information to ensure product quality when touch is unavailable in the context of online apparel shopping. The results also demonstrate that for the high NFT group, product information is a significant visual online cue affecting consumer perception about website convenience (e.g., easy accessibility). Therefore, providing high quality product information is essential for online apparel retailers to reduce uncertainty about the purchase and make the purchase decision easier. Results also emphasize an important role of atmospheric cues such as website color for consumers with low NFT. This indicates that developing a website with attractive background images or colors along with high quality product information would be beneficial for online apparel retailers.

References: Available upon request.