



## **An Assessment of Experiential E-Commerce Apparel Websites and Psychological Personality Traits among Females**

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*Introduction.* Recently, the terms experiential and user experience have grown to be a focus amongst businesses as more UX job opportunities become available in the market and emerging technologies have provided consumers with immersive experiences. Emerging technologies such as augmented reality, virtual reality, holography and artificial intelligence have enabled consumers to participate in an experience instead of solely purchasing a product or service. Lipsman (2019) forecasted that global e-commerce will reach 5 trillion dollars by 2021. The U.S. Census Bureau predicted that online retail sales will reach 380 million dollars in 2022 (Nation Master, 2019). For customers who explore e-commerce websites without a clear idea of what they are looking for, the search engines tend to not meet their needs (Rangaswamy, Giles, & Seres, 2009). This study assesses if there will be a difference in attitudes toward websites with varying degrees of interactivity and if five personality traits influence this relationship.

*Literature Review and Hypotheses.* The experiential aspects to shopping include consumers' emotions, social interaction, aesthetic enjoyment, sensory stimulation, fantasies, and fun (Holbrook & Hirschman, 1982). Features of the website affecting consumers' experiences include: visual design, information architecture, information design, navigation design, content and interaction design (Garrett, 2003). Changing the design of cues, elements, or attributes related to these features can affect the emotional, rational or behavioral experience a consumer has (Schmitt, 1999). Furthermore, attributes are either technology-oriented (e.g. structural properties such as hyperlinks) or user-oriented. User-oriented attributes are the qualitative experiences of consumers in relation to the structural properties, such as navigability and demonstrability (Huang, 2003). Personality traits have been deemed a highly relevant explanatory concept related to type of experiential consumption (Holbrook & Hirschman, 1982). The five factor model, also known as the big five personality traits, is one of the most recognized comprehensive frameworks in social psychology literature (Briggs, 1992; Costa & McCrae, 1992; Mulyanegara et al., 2009). The five personality traits are agreeableness, conscientiousness, extroversion, neuroticism, and openness. Studies have found that each of the five personality traits exerts influence on experiential-activities and consumption preferences (Keng et al., 2013; Mehmetoglu, 2012; Tao, 2013).

Based on the literature review, five different experiential websites were created and the following hypotheses were developed for this study:

H1. There will be a more positive attitude toward websites with a higher degree of interactivity

H2. The relationship between attitude and type of website will be moderated by personality

*Methods.* Data were collected using an online Qualtrics survey distributed by Amazon Mechanical Turk. A total of 181 usable surveys were completed. As a screening criterion, respondents had to identify as a female and made an online apparel purchase within the past 12 months to participate in the study. Respondents ages ranged from 18 to 69. Forty-five percent of the female respondents were white or Caucasian, 33% were Asian, 10% were black or African American, 7% were Hispanic or Latino, 3% were Native American and 2% were other. Existing scales from previous studies were adopted to measure personality traits (Mehmetoglu, 2012), intention to purchase from website, attitude towards website, intentions to revisit website (Coyle & Thorson, 2001) and shopping value towards website (O'Brien, 2010). Personality traits were measured on a 5-point Likert scale with 1 as completely disagree and 5 as completely agree. All other items were measured on a 7-point Likert scale with strongly disagree as 1 to 7 being strongly agree.

*Results.* Exploratory Factor Analysis with varimax rotation was conducted resulting in 6 factors with an eigenvalue greater than 1. Factors 5 and 6 were defined by 1 item and so dropped from further analyses. Factor 1 describes perception towards websites (Cronbach's alpha = 0.97); factor 2 describes responsible and experience-seeking (Cronbach's alpha = 0.82); factor 3 describes neuroticism (Cronbach's alpha = 0.73) and factor 4 describes extroversion (Cronbach's alpha = 0.76). Factor loading values varied between 0.55 to 0.99. Multiple regression was used to analyze the relationships between perceptions towards the websites and personality. The level of experience or interactivity each website had to offer is in the following order from high to low: drag-n-drop (E), personal styling (C), virtual closet (D), attribute navigation (B) and traditional (A). There was a significant difference in the perceptions of the websites. Websites A (mean=5.01), B (mean=4.97), and C (mean=5.0) were different from website D (mean = 5.47) ( $p < .01$ ) and B was different from E (mean=5.24) ( $p < .01$ ). Only Factor 2 and factor 4 were significantly related to the perceptions toward all of the websites ( $p < .01$ ). Online female shoppers scoring high for Factor 2 (responsible and experience-seeking) and factor 4 (extroversion) preferred very interactive experiential websites. Factor 3 (neuroticism) was not related to perceptions towards websites. The two hypotheses were partially supported.

*Discussion and Implications.* Through utilizing a modified version of the big five inventory (BFI) for the personality scale, the findings of this study suggest personality traits exerts influence on online experiential retail preferences. Online female shoppers that score higher on agreeableness, conscientiousness and openness prefer high interactive websites compared to those who score higher on extroversion and neuroticism. These findings offer new insights for online retailers to increase engagement from consumers and conversion rates on their online websites. For instance, given the global competitiveness and rapid technological innovations driving the apparel industry, psychological consumer data can be of use to UX designers in the effort to successfully introduce new products and ideas into the market. To combat online cart abandonment and bounce rates, online retailers could provide a better overall experience through immersive interactivity, increasing visit time, average duration on a site and returning visitors. The findings provide implications for any online retailer venturing into experiential marketing by leveraging technological capabilities to address and enhance UX designs.

### References

- Briggs, S. R. (1992). Assessing the Five-Factor Model of Personality Description. *Journal of Personality*, 60(2), 253–293. <https://doi.org/10.1111/j.1467-6494.1992.tb00974.x>
- Costa, P. T., & McCrae, R. R. (1992). The Revised NEO Personality Inventory and New Five-Factor Inventory. In *Professional Manual*. Psychological Assessment Resources.
- Coyle, J. R., & Thorson, E. (2001). The Effects of Progressive Levels of Interactivity and Vividness in Web Marketing Sites. *Journal of Advertising*, 30(3), 65–77. <https://doi.org/10.1080/00913367.2001.10673646>
- Garrett, J. J. (2003). *The Elements of User Experience: User-centered Design for the Web*. New Riders Publications.
- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132–140. <https://doi.org/10.1086/208906>
- Huang, M.-H. (2003). Designing website attributes to induce experiential encounters. *Computers in Human Behavior*, 19(4), 425–442. [https://doi.org/10.1016/S0747-5632\(02\)00080-8](https://doi.org/10.1016/S0747-5632(02)00080-8)

- Keng, C.-J., Tran, V.-D., & Le Thi, T. M. (2013). Relationships among Brand Experience, Brand Personality, and Customer Experiential Value. *Contemporary Management Research; Sansia*, 9(3), 247–262.
- Lipsman, A. (2019, June 27). *Global Ecommerce 2019*. EMarketer. <https://www.emarketer.com/content/global-ecommerce-2019>
- Mehmetoglu, M. (2012). Personality effects on experiential consumption. *Personality and Individual Differences*, 52(1), 94–99. <https://doi.org/10.1016/j.paid.2011.09.008>
- Mulyanegara, R. C., Tsarenko, Y., & Anderson, A. (2009). *The Big Five and brand personality: Investigating the impact of consumer personality on preferences towards particular brand personality* | SpringerLink. 16(4), 234–247.
- Nation Master. (2019, January 14). *E-commerce 2019: Online shopping trends and statistics*. Nation Master. <http://www.nationmaster.com/ecommerce>
- O'Brien, H. L. (2010). The influence of hedonic and utilitarian motivations on user engagement: The case of online shopping experiences. *Interacting with Computers*, 22(5), 344–352. <https://doi.org/10.1016/j.intcom.2010.04.001>
- Rangaswamy, A., Giles, C. L., & Seres, S. (2009). A Strategic Perspective on Search Engines: Thought Candies for Practitioners and Researchers. *Journal of Interactive Marketing*, 23(1), 49–60. <https://doi.org/10.1016/j.intmar.2008.10.006>
- Schmitt, B. H. (1999). Experiential Marketing. *Journal of Marketing Management*, 15(1–3), 53–67. <https://doi.org/10.1362/026725799784870496>
- Tao, S.-P. (2013). Personality, Motivation, and Behavioral Intentions in the Experiential Consumption of Artworks. *Social Behavior and Personality; Palmerston North*, 41(9), 1533–1546. <http://dx.doi.org.prox.lib.ncsu.edu/10.2224/sbp.2013.41.9.1533>