A Gamechanger?
Perceptions of Virtual Technology for Online Apparel Shopping among Female Baby Boomers

Youngji Lee and Nancy Hodges, Ph.D., University of North Carolina at Greensboro, USA

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Background. Once they began turning 65 years of age, members of the baby boomer generation have fueled the aging trend in the United States (U.S. Bureau of the Census, 2018). According to Statista (2019), the baby boomer generation constituted approximately 23% of the total U.S. population in 2017. In addition to its large numbers, the high purchasing power and significant disposable income of this cohort have contributed to the growth of the older consumer market (Hernandez, Jimenez, & Martin, 2011). However, as a cohort, baby boomers exhibit different apparel and technology consumption behaviors when compared to previous generations of older consumers, particularly due to their experiences with dynamic, revolutionary changes that occurred between the 1960s and 1990s (Lehto, Jang, Achana, & O'Leary, 2008). It has been suggested that these experiences are why baby boomers are called the "new older consumer," and are more open to new technologies than previous generations (Twigg, 2013). Indeed, baby boomers are more likely to use technology for shopping as they age compared with previous generations of older consumers. For instance, baby boomers frequently shop for apparel online, and ultimately have contributed to the growth of online apparel sales (Pando, 2018).

Technology has impacted how consumers across generational cohorts purchase and shop for apparel. U.S. consumers made about 20% of their total apparel expenditures online in 2017 (Statista, 2018). Technologies designed to enhance consumers' experiences with online apparel shopping have increased to address this growth, including image interactivity technology and virtual technology (Yu & Damhorst, 2015). For example, virtual try-on technology enables the consumer to assess apparel fit more accurately using 3D avatars that represent their bodies (Shin & Baytar, 2014). With the positive potential impact of virtual technology on online apparel shopping, researchers have emphasized the need for examination of consumers' attitudes toward and willingness to use such emerging technologies (Loker, Ashdown, & Carnrite, 2008). To date, most studies on virtual technology in the consumption context examine younger consumers, such as college students (e.g., Kim & Forsythe, 2008). To address this gap, the purpose of this study was to explore female baby boomers' perceptions of virtual technology in the online apparel shopping context. This study focused on the younger group of baby boomers born between 1955-1964, as they tend to have broader experience with technology compared with older baby boomers born between 1946-1954 (eMarketer, 2018). Two research questions were developed to guide this study: (1) *What do younger female baby boomer consumers think about using virtual technology in the online shopping environment?* and (2) *In what ways can online apparel retailers better serve this group of consumers using virtual technology*? Social cognitive theory (Bandura, 1986) has been used in research on consumers' adoption of technological innovations based on a reciprocal relationship among personal factors, behavior, and environmental influences (e.g., Ratten &

Ratten, 2007). This theory was adapted as the conceptual lens to explore how female baby boomers' personal factors (i.e., age-related changes, cohort characteristics) and consumption behaviors (i.e., apparel needs, online shopping patterns) influence their views of shopping environment influences (i.e., virtual technology).

Method. With IRB approval, a qualitative approach was employed to collect data. A total of 18 participants were purposively recruited to participate in focus groups based on the following three criteria: (1) female, (2) born between 1955-1964, and (3) purchased apparel online within the last three months. Participants were first asked to watch a video that provides examples of how virtual technology could work in the online apparel shopping context and then asked to share their thoughts on how virtual technology could play a role in their own online apparel shopping experiences. The focus group method was deemed appropriate, as the study aimed to understand participants' views as members of the baby boomer cohort (Kitzinger, 1999). Interviews were transcribed verbatim and then coded and iteratively analyzed by both researchers to identify categories of meaning in and across the data (Spiggle, 1994) and through the lens of Social Cognitive Theory (Bandura, 1986). Four emergent themes were used to structure the interpretation: *A Sure Fit, A Gamechanger, Virtual Paper Doll,* and *The Downside.*

Results and Discussion. When shopping online, *a sure fit* is crucial for participants because fit is a primary factor in their apparel purchase decisions. For example, Victoria shared her willingness to pay more to purchase apparel if a "sure fit" was guaranteed using virtual technology. Participants greatly valued virtual technology, especially for them as older consumers, because "it would certainly take a lot of the guesswork out of wondering how a particular piece of clothing might fit [my] body shape," as Barbara stated. This positive view was derived from the distinctive body proportions that come with aging when compared to the younger models used by most retailers in the online shopping environment (Bandura, 1986). Consequently, participants viewed virtual technology as a potential *gamechanger* because they would do more apparel shopping online if it was available, especially during the pandemic, which would make them feel more confident about their decisions. Moreover, they perceived the usefulness of virtual technology as simplifying the online shopping process, and ultimately enhancing the convenience of it, which has been found to be important to this cohort (Rahman & Yu, 2018). Participants shared that they prefer to "stick with" certain websites because they "know what size they need." However, with their own body measurements on a 3D avatar, the website itself could communicate to participants the size that they should order. As Diane said, "[You'd] have an avatar and say, 'Okay this is my size, what will fit here?'" Automatic size selection would allow participants to skip the step that usually requires a significant amount of time and effort due to inconsistent sizing among brands. Thus, their desire to wear well-fitting apparel helped shape their perceptions of the value of virtual technology in the online environment (Bandura, 1986). The aspect of the technology as a "*virtual paper doll*" was the most interesting for many participants, which aligns with the focus on hedonic values in apparel consumption characteristic of female baby boomers (Twigg, 2013). For example, Kathleen explained that virtual technology would enable her to try on "jeans with a crop top," as she "would never do that in a store." Overall, participants viewed virtual technology positively, but several expressed *the downside* regarding the uncertainty of time and effort required to make

customized 3D avatars. Consequently, Susan highlighted the importance of a portable avatar, "I could just take my avatar literally shopping online and to the different stores. It would be the same avatar so I [wouldn't] have to redo it every time."

Conclusion and Implications. Findings of this study reveal how participants perceive the value of virtual technology for addressing the drawbacks of purchasing apparel online, especially as older consumers. Participants' age-related changes and cohort characteristics (i.e., personal factors) influence their needs when shopping for apparel online (i.e., consumption behaviors), and ultimately their thoughts about the potential for using virtual technology in the online apparel shopping process (i.e., environment; Bandura, 1986). Participants considered virtual technology to be a gamechanger, but only if it is not too complicated or time consuming to adopt. Thus, retailers need to take user experiences among baby boomer consumers into account when implementing virtual technology on their websites. Future research could test the use of virtual technology by this consumer group through an experimental research design with a larger sample.

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