

Consumers Hedonic Shopping Motivations of using Mobile Self-checkout in Fashion Retail Stores

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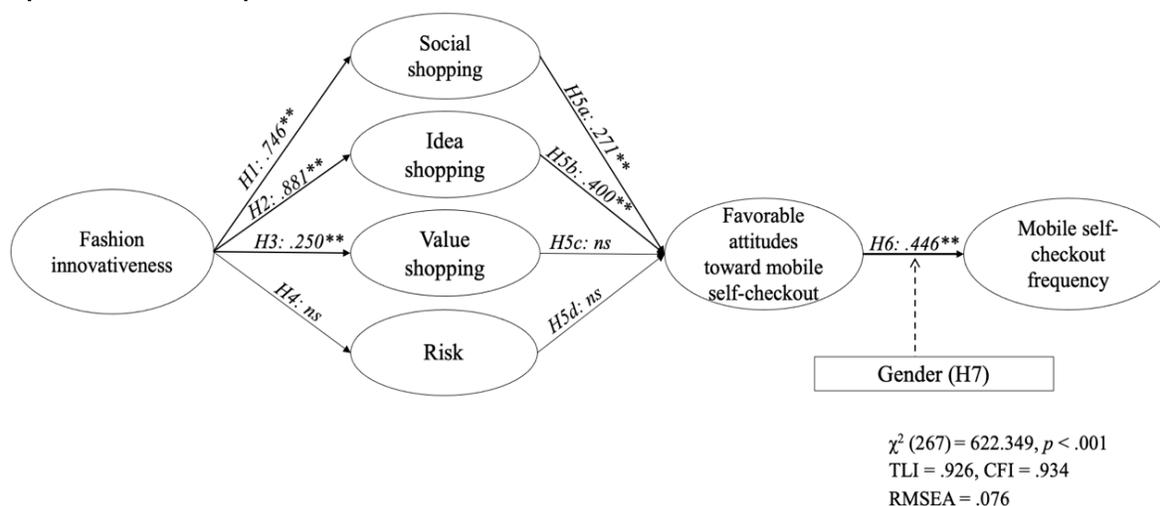
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Background and Purpose: Mobile self-checkout is an alternative way for consumers to checkout when shopping in a brick-and-mortar store by using the retailer app, instead of waiting in lines to checkout (CBS Denver, 2018). Mobile self-checkout has been used by fast-moving consumer goods retail companies and grocery stores (Aloysius et al., 2019; Andriulo et al., 2015). In the fashion industry, it has been adopted by department stores (e.g., Macy's) and national retailers (e.g., Nike) in selected cities in the US (Alvarez, 2018; CBS Denver, 2018). Since mobile self-checkout is a new application in the fashion industry, only limited numbers of retailers have adopted this system. However, as the on-going development of retailer apps, the increasing popularity of using smartphones, and consumers' intention and willingness to keep social distance in shopping (especially during and right after the COVID-19 pandemic), there is a possibility that more fashion retailers will adopt this new technology in their retail stores in the near future. However, literature is deficient concerning consumers' motivation and favorable attitudes toward this technology. To this end, the purpose of this research is to better understand consumers' favorable attitudes and use frequency of mobile self-checkout in fashion retail stores by analyzing consumers' hedonic shopping motivations, risk perceptions and fashion innovativeness.

Literature Review and Conceptual Framework: An extensive review of research on consumers' shopping motivation and shopping behavior was conducted. Because using mobile self-checkout happens in the brick-and-mortar store, a research model and hypotheses were developed by adapting Kim & Hong's (2011) framework related to hedonic shopping motivation (see Figure 1). Specifically, social shopping motivation, idea shopping motivation, and value shopping were adopted and fashion innovativeness (Batinic et al., 2008) was used to replace fashion leadership. Also, risk (Cho & Fiorito, 2009; Lee & Moon, 2015) and favorable attitudes (Choi et al., 2010) were adapted from previous research and added into the framework. To measure consumers' use of mobile self-checkout in fashion retail stores, mobile self-checkout frequency was developed as a single item variable and added to the model (see Figure 1). H1: Fashion innovativeness will be positively related to social shopping motivation. H2: Fashion innovativeness will be positively related to idea shopping motivation. H3: Fashion innovativeness will be positively related to value shopping motivation. H4: Fashion innovativeness will be negatively related to risk. H5: Social (a), idea (b) and value (c) shopping motivations will be positively related to favorable attitudes toward mobile self-checkout; risk (d) will be negatively related to favorable attitudes toward mobile self-checkout. H6: favorable

attitudes toward mobile self-checkout will be positively related to mobile self-checkout frequency. H7: Gender will moderate the path between favorable attitudes toward mobile self-checkout and mobile self-checkout frequency.

Method: Participants in this study were recruited via Qualtrics Panel services. An online self-administered questionnaire was created using Qualtrics and sent to potential participants who lived in the top 20 metropolitan areas in the US. A short video of Macy's self-checkout service was adopted as the example which was first shown to participants. Then they completed the questionnaire, which included measures from established research of fashion innovativeness, social shopping, idea shopping, value shopping, risk, favorable attitudes, and mobile self-checkout frequency. A total of 229 valid responses was obtained over a one-week period. The majority of respondents were male (n=128). Participant's age ranged from 18 to 65 with 76.3% between 19 to 45 years old. Among the participants, 131 lived in the top 5 metropolitan areas of US and 50.22% had experience using mobile self-checkout in fashion retail stores. Data analysis included descriptive statistics, confirmatory factor analysis (CFA), path analysis, multi-group comparison via chi square difference.



Note: ** $p < .001$, * $p < .05$. ns indicate non-significant and dash arrow lines indicate moderating effects.

Figure 1. Conceptual Framework and Testing Results

Results: By using AMOS 25, CFA was first performed to validate the measurement of the constructs in our hypotheses. Two items of risk and two items of fashion innovativeness were dropped due to high modification indices, the rest of the items within six factors remained, suggesting an overall good model fit ($\chi^2/df = 1.629, p < .001, RMSEA = .053, CFI = .971, and TLI = .967$) with construct reliabilities, construct validity, and discriminant validity achieved. Then, path analysis with an appropriate model fit ($\chi^2/df = 2.331, p < .001, RMSEA = .076, CFI = .934, and TLI = .926$) was used to test hypothesized relationships (see Figure 1). Multiple group comparison was conducted to examine any differences between men and women. The results

indicate that the relationship between favorable attitudes toward mobile self-checkout and mobile self-checkout frequency is significantly different (with 99% confidence) for men ($\beta = .345$) vs women ($\beta = .464$).

Discussion/implications: Proposed hypotheses H1, H2, H3, H6, and H7 were supported, H5 was partially supported; and H4 was not supported. Consistent with previous research, fashion innovativeness was related to social shopping motivation, idea shopping motivation, and value shopping motivation. Consumers' favorable attitudes towards mobile self-checkout led to a higher use frequency. Therefore, retailers will want to continue providing mobile self-checkout as a service and consistently updating the system so that consumers will have a user-friendly app. Then consumers will be more likely to have favorable attitudes towards mobile self-checkout and better acceptance of using it in the future. Also, retailers may consider targeting women first because women had more favorable attitudes toward mobile self-checkout than men did. Neither men nor women were concerned about the risk involved in using mobile self-checkout which is good news for retailers. These results might help fashion retailers better understand consumers' motivation and favorable attitudes toward mobile self-checkout, the new technology.

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