The Uses and Gratifications Model of Voice Shopping

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INTRODUCTION

Voice shopping has become a buzzword as its popularity grows. According to a recent report, approximately 87.8 million of all adults in the U.S. have adopted voice assistants and the household adoption rate is to reach about 55% by 2022 (Voicebot, 2019).

Past studies based on the Technology Acceptance Model (TAM) or related theories (e.g., McLean & Osei-Frimpong, 2019; Pitardi & Marriott, 2021) provided preliminary accounts for consumers' adoption intentions. Also, another research stream based on social response theory or human-machine interaction (HMI) focused on the relational aspects (e.g., Moriuchi, 2021) and provided novel insights. However, scant research provided a comprehensive approach to understand the underlying psychological mechanisms of AI-enabled voice assistant usage and voice shopping behavior.

Therefore, this paper aims to investigate the voice shopping phenomenon. Specifically, the purpose of this research is to examine; (a) whether different gratification dimensions a voice assistant' users experience have differential influence on overall satisfaction and (b) whether overall satisfaction leads to fashion product purchases through a voice assistant.

LITERATURE REVIEW

This research adopted the uses and gratifications theory (UGT) as a theoretical basis (Katz et al., 1973). Specifically, this research adopted the four-dimensional framework from the UGT. Previous gratifications literature mainly identified gratifications from three types of sources, which are utilitarian, hedonic, and social-oriented aspects (Cutler & Danowski, 1980; Stafford et al., 2004). However, this research incorporates the fourth source, technological gratification, as it helps researchers to identify anew gratification dimension from using new media, such as AI-enabled autonomous devices (Sundar &Limperos, 2013).

- **H1**: A high level of life efficiency will lead to a high level of overall satisfaction.
- **H2**: A high level of entertainment will lead to a high level of overall satisfaction.
- **H3**: A high level of social presence will lead to a high level of overall satisfaction.
- **H4**: A high level of affordance will lead to a high level of overall satisfaction.
- **H5**: A high level of overall satisfaction will lead to a high level of fashion product purchases through a voice assistant.
- **H6**: Overall satisfaction will mediate the relationship between a) life efficiency, b) entertainment, c) social presence, d) affordance, and fashion product purchases through a voice assistant.

METHODS

This research was based on a self-administered online survey method. The research setting was tested in the context of Amazon voice shopping by recruiting the actual users of Alexa. The participants were recruited using Pollfish. Pollfish is a company that recruits respondents in a

real-time through their mobile-application developers and utilizes machine learning techniques to eliminate poor quality respondents (https://pollfish.com). A total of 166 responses was collected. The majority of the participants were male (55.4%), in their 30sand 40s (60.2%), and Caucasian (71.7%), with household income over $35K and below $110 K(53.1%). The measurement items were adopted from previous literature.

RESULTS

Partial Least Squares (PLS) modeling was used due to the small sample size and the exploratory purpose of the present research. The measurement model was tested by assessing Cronbach's alpha, average variance extracted (AVE), composite reliability (CR), discriminant validity, and the results were all satisfactory. The evaluation of structural model was tested by estimating the effect sizes (f2), predictive relevance (q2), R2 (satisfaction = .533, purchase = .315), goodness of fit (srmr = .079). The hypothesis testing revealed that H1 (β= .430, t= 4.848, p <.001), H2 (β= .262, t= 2.585, p <.01), and H5(β= .561, t= 8.91, p <.001) were supported. Mediation analysis also revealed that H6a (β= .248, t=3.872, p <.001) and H6b (β= .152, t= 2.457, p <.01) were supported.

CONCLUSIONS

The study results revealed that H1, H2, H5, and H6a, H6b were supported. However, H3, H4, and other related mediating process were rejected. Although social presence (H3) and affordance(H4) did not show a significant result, the research finding indicates the importance of incorporating utilitarian and hedonic gratification in using AI-enabled voice assistants. Understanding important gratification dimensions sought from voice assistants can guide fashion retailers in fine-tuning their voice commerce services. For example, the significant effect of life efficiency highlights the managerial importance of helping shoppers perform tasks at a much faster speed and with less cognitive effort (Rauschnabel, 2018). Also, the findings of this study suggest that voice shopping can certainly fit the hedonic consumption perspective (Holbrook& Hirschman, 1982). Finally, the following future lines of research can conduct a study that elaborates the psychological process of voice shopping behavior. For example, a study examining how each unique functional characteristics of AI-enabled voice assistants contribute to consumers' relationship building could add novel insights.

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