48. The Impact of AI Chatbots on Consumer Behaviour Outcomes: Exploring the Concept of Brand Personality

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Type of manuscript: Extended Abstract

Extended Abstract

In today's rapidly evolving digital landscape, consumer-brand interactions are increasingly mediated by technology, with AI-powered chatbots emerging as a prominent element in this relationship (Jiang *et al.*, 2022). Since their inception, chatbots have revolutionised the way consumers engage with brands, offering immediate assistance, personalised recommendations, and round-the-clock support (Belanche *et al.*, 2020). However, amidst this technological advancement, a critical area remains relatively unexplored—the impact of consumer-chatbot interactions on consumer-brand relationships.

Research in the field (Bergner *et al.*, 2023; Magno and Dossena, 2023; Yang and Hu, 2022; Youn and Jin, 2021) has highlighted an important gap in understanding how different types of chatbot conversational styles, for example, formal vs friendly, influence consumers' perceptions of brand personality and, subsequently, their behaviour. Consequently, this study addresses this gap by investigating the impact of different chatbot conversational styles on consumers' brand personality perception and its consequential effect on consumer behaviour outcomes, specifically purchase intent, satisfaction, and trust.

Furthermore, while age is often acknowledged as a significant factor influencing consumer behaviour (Rabby *et al.*, 2021; Ransbotham *et al.*, 2017), its role as a moderating factor in the context of consumer-chatbot interactions remains underexplored. Existing research has yet to investigate whether consumers' generational background impacts their perceptions of a chatbot, in terms of warmth and competence (Maar *et al.*, 2023), and ultimately the brand they represent (Chung *et al.*, 2020; Zarouali *et al.*, 2018). Hence, this study also seeks to examine the effect of age as a moderating variable on the relationship between chatbot conversational style and brand personality perception. As a result, this study is guided by two research questions: (1) How does the influence of different chatbot conversational styles on consumers' brand personality perceptions affect consumer behaviour outcomes? (2) How does age impact the effect of a chatbot's conversational style on the consumer's brand personality perceptions?

The research model is presented in Figure 1.

Figure 1. Research Model
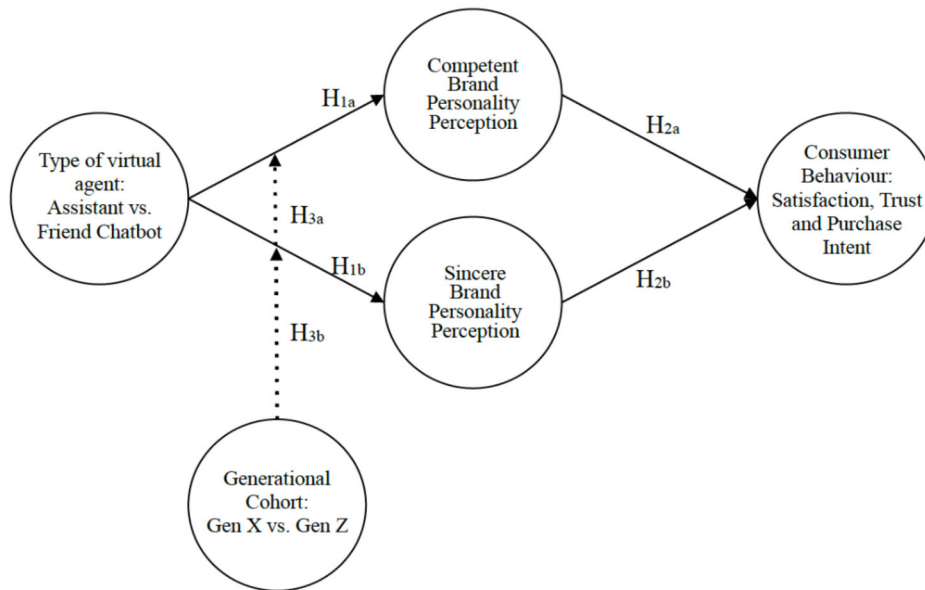
By addressing these research questions, this study aims to contribute to the advancement of knowledge in the field of consumer-brand relationships and inform the design of chatbots for enhanced consumer experiences and long-term brand success.

A scenario-based, between-subjects, 2x2 factorial experiment was conducted to analyse the causal impact of different chatbot conversational styles. The two independent variables were chatbot conversational style and generation.

The two conversational styles were operationalised as follows: (1) the use of formal language, characterised as a virtual assistant chatbot using a task-oriented communication style, prioritising task efficiency and competence; (2) the use of informal dialogue and friendly conversations, characterised as a virtual friend chatbot using a social-communication style, aiming to meet consumers' emotional requirements while providing assistance (Xu *et al.*, 2023).

The two generations included in the study were Generation X (Gen X - 1965 and 1980) and Generation Z (Gen Z - late 1990s and early 2000s). These two generational cohorts were chosen for their opposing views on AI (Salesforce, 2023).

Participants were presented with a scenario, which required them to imagine themselves as experienced runners. Participants were then asked to interact with a chatbot in real-time order to obtain recommendations for the best running shoes. The chatbot was specifically programmed for this study using the IBM Watson platform. Two chatbot variations were implemented (one formal and one friendly) and participants were randomly allocated to each of the variations. A total of 210 responses, distributed among the 4 cells, were obtained. Following the interaction with the chatbot, participants were required to answer questions through an online questionnaire. Pre-validated measures were utilised.

The results showed that the chatbot framed as a friend led to a brand personality perception of sincerity, whilst the chatbot framed as an assistant led to a brand personality perception of competence.

Sincerity led to higher consumer satisfaction, trust and purchase intent than competence, implying that despite their significant contribution towards the three consumer

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behaviour outcomes, sincerity (established through the friend chatbot) might be an overall better personality trait to adopt in brand chatbots.

Generation was established as a moderator in the relationship between chatbot conversational style and brand personality perceptions. The effect of chatbot conversational type on brand personality perceptions differed across the generational cohorts, such that Gen X were found to be more likely to perceive chatbots as competent rather than sincere.

The results, which demonstrate that the two different chatbot types resulted in different brand personality perceptions, highlight the importance of consumer-brand congruence (Popp and Woratschek, 2017) and aligning chatbot design with consumer needs. This can enhance consumers' brand experience and contribute to better consumer behaviour outcomes (Rabby *et al.*, 2021; Ransbotham *et al.*, 2017).

The brand personality perception of sincerity had a more significant impact on trust and purchase intent, than the personality perception of competence. This result substantiates previous literature, stating that chatbots with a strong sense of social presence, human-like attributes, and a conversational interface, contribute to higher levels of trust (Jiang *et al.*, 2022) and that interactive chatbot dialogue through high engagement can increase purchase intent (Suresh *et al.*, 2023).

The establishment of generation as a moderator might have stemmed from Gen Z and Gen X's opposing views on AI (Salesforce, 2023), different levels of risk avoidance and willingness to use chatbots (Calvo-Porral and Pesqueira-Sanchez, 2020), which ultimately influence their interactions with chatbots and these conversations' outcomes.

These results suggest significant theoretical implications for the design and implementation of chatbots within consumer-brand interactions. Specifically, they highlight the necessity for chatbot design to be rooted in an understanding of consumers' characteristics and needs, ensuring congruence with their values. The results also highlight the importance of aligning chatbot features with consumer preferences to foster a perception of brand personality that resonates with consumers.

The choice of chatbot type holds implications for various consumer behaviour outcomes, such as trust and purchase intent. Depending on the selected chatbot type, the level of influence on these outcomes may vary. Therefore, understanding the nuanced effects of different chatbot types on consumer behaviour outcomes is key for informed decision-making in brand management strategies. In view of this, prior to integrating new chatbot designs, brand managers are advised to consider which type of chatbot, and subsequently, brand personality perception, predominantly contributes to the desired consumer behaviour outcome. By discerning these factors, brand managers can tailor chatbot design features accordingly.

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49. The Role of Generative Artificial Intelligence (GAI) in Retailing

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Type of manuscript: Extended abstract

Keywords: generative AI; retailing; marketing; phygital customer experience

Extended abstract
The recent advancements in Artificial Intelligence (AI), with emphasis on generative AI have reshaped and continue to reshape the retail industry (Kshetri et al., 2023). It not only changes the way retailers interact with customers but also reshapes customer experience by facilitating the personalization of the customer journey (Dwivedi et al., 2023; Baabdullah, 2024). In this context, retailers are increasingly turning to generative AI-powered customer experience solutions to build a brand and improve customer satisfaction, loyalty, and retention in both digital and physical settings (Ameen et al., 2020). For instance, many retailers already introduced chatbots in their website to provide 24/7 consumers assistance. Thus, with the capabilities of generating high-quality, contextually relevant, and easily customized content able to mimic and even replicate human-created work (Banh & Strobel, 2023), generative AI has been perceived as a promising tool in retailing for gaining competitive advantages and enhancing overall customer experience in both physical and digital settings (Kshetri et al., 2023). Indeed, generative AI can: i) understand and predict consumer behavior and preferences (Pantano & Scarpi, 2022); ii) facilitate the personalization of the customer journey, such as providing customized product recommendations (Dwivedi et al., 2023); iii) provide automatic customer service with human-like responses through generative AI chatbots (Pizzi et al., 2021); iv) generate personalized marketing contents, products, and services (Kshetri et al., 2023).
While generative AI brings significant benefits to the retail industry, numerous retailers have struggled to implement them effectively, particularly in bridging the gap between physical and digital customer experiences (Grewal et al., 2023). This is due to the lack of a comprehensive understanding of the impact of generative AI on customer experience in the 'phygital' (a fusion of 'physical' and 'digital') setting (Batat, 2022). The term 'phygital' has been defined as 'the transformation of physical stores in the digital era' (Batat, 2024). It involves the complete redesign of traditional concepts to provide a new customer experience while also incorporating digital tools to enhance sales support (Banik & Gao, 2023).
In the phygital setting, retailers are increasingly turning to generative AI-powered customer experience solutions to build a brand and improve their customer satisfaction, loyalty, and retention (Ameen et al., 2020). It is reshaping customer interactions (Dwivedi et al., 2023), while it might elicit either positive or negative emotions in consumers (Pantano & Scarpi, 2022) and putting consumers' privacy at risk (Scarpi and Pantano, 2024). Similarly, scholars are debating the extent to which automated service impacts consumers' social presence (Flavian et al., 2024), or if it creates a new retail environment, losing the social aspect of shopping. Accordingly, Mariani and Dwivedi (2024) suggest that the rapidly changing and continually evolving landscape of

generative AI necessitates new comprehensive and integrative frameworks and guidelines. These are crucial for understanding how to create personalized customer experiences across both physical and digital channels, while protecting consumers from any risk.

Indeed, numerous generative AI solutions have been employed across different components of the retail sector, including product, customer behavior, location, and channel management, significantly transforming customer phygital experience. These innovations have notably reshaped the customer phygital experience, resulting in both positive and negative outcomes, thereby presenting both opportunities and challenges for retailing.

Accordingly, the aim of this theoretical work is to provide a comprehensive understanding of the impact of generative AI on phygital customer experience. This is achieved by proposing a framework and highlighting the opportunities and challenges in various components of retailing, including: (i) customer behavior (encompassing consumer in-store experience, purchasing behavior, and shopping as a social experience); (ii) product/service (from development to information delivery and stock-out); (iii) retail location and planning, and (iv) channel management (Figure 1).

Figure 1. The role of generative AI in phygital customer experience
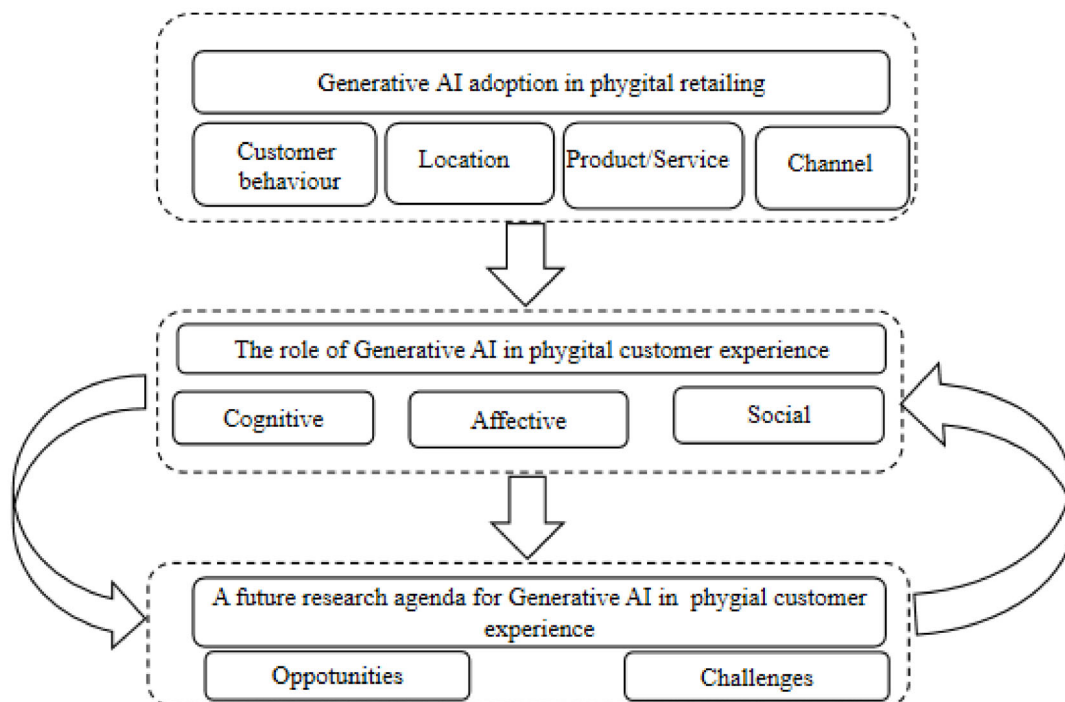
The present paper makes several contributions to AI, retailing, and consumer research. First, our findings contribute to the literature by providing a comprehensive understanding of AI retail and consumers applications, with emphasis on generative AI in retailing compared to "traditional" AI solutions. Second, to the best of our knowledge, this study represents the initial attempt to present a conceptual overview of generative AI in retailing by investigating its role in customer phygital experience and highlighting the associated opportunities and challenges. This helps raise awareness of

constraints while also supporting future efforts in developing generative AI-powered solutions in retailing and marketing.

This paper is organized as follows: First, we discuss the adoption of generative AI in phygital retailing. Following this, we examine how generative AI tools influence phygital customer experience. Finally, we conclude with a summary of the study and propose a research agenda for future research by highlighting the opportunities and challenges faced retailers.

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