

# THE POWER OF CONNECTION: EXPLORING THE ROLE OF IDENTIFICATION IN THE EMOTIONAL RELATIONSHIP BETWEEN HUMANS AND ROBOTS IN THE HOSPITALITY INDUSTRY

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## ABSTRACT

### RESEARCH AIM

Identifying market trends is critical for companies to remain competitive, and using technologies such as Artificial Intelligence and Robotics is transforming all business industries and society, impacting experiences and relationships among people. The hospitality industry, which traditionally relies on Human-Human Interactions, is also undergoing technological transformation, with AI and social robots presenting significant potential for growth and new ways of interacting. However, technologies should enhance the hospitality experience and not threaten customers' sense of hospitality. Thus, understanding how robots can improve hospitality services and increase customer satisfaction while maintaining a hospitable environment is crucial.

Previous studies have investigated various research domains related to robotics in the hospitality industry, including the design and adoption of robots, human field, robot manufacture, business functions related to tourism, servicescape, external environment, and education, training, and research organizations. However, very few studies have focused on the customers' perspective and sentiments on service robots or the robot-human interactions and customer service experience. To address the gap, this study aims to investigate the interactions between social robots and humans in hospitality and understand the possible contributions of the customer-robot emotional relationship on customers' feelings of wellness. Specifically, this study proposes to explore whether humans can develop feelings of identification with a social robot in the hospitality field and whether the identification that consumers perceive between themselves and hospitality social robots can influence the creation of a close relationship between both parties, similar to human-human interaction, and the creation of customer well-being.

### THEORETICAL BACKGROUND

The theoretical background of this paper is based on Fournier's Brand Relationship Theory (1998),

which suggests that humans can form relationships with brands similar to social relationships. Belk (2016) further supports this idea by claiming that humans can extend themselves to non-human agents, including brands and devices, and form relationships with them. In the hospitality industry, social robots are increasingly being used to represent a brand, which can facilitate customer identification with the brand. Customer-brand identification is crucial in forming strong relationships between the two parties, as it helps fulfill customers' self-definition needs (Bhattacharya & Sen, 2003; Bock et al., 2020; Rather, 2018). When a brand selects a representation similar to the customers' ideal self, it allows for more significant interaction between the two parties.

Chang and Chieng (2006) adapted Fourniers's brand relationship quality model to the restaurant setting and considered six relationship dimensions designed by Functional Exchange, Love, Commitment, Attachment, Self-Connection, and Partner Quality. These dimensions are related to Customer-Brand Identification (i.e., Self-Connection), and Chang and Chieng's study was considered for this research's proposed conceptual model. Consumers with a meaningful relationship to an object or brand are likelier to humanize it and develop favourable actions and beneficial feelings toward it (Fournier, 1998; Belk, 2016). This meaningful relationship can also lead to long-term well-being for the customer. Therefore, understanding the relationship process between social robots and humans and the influence of identification on attachment, connection, and commitment in the hospitality industry is crucial in assessing the possible contributions of the customer-robot emotional relationship on customers' feelings of wellness.

## **METHODOLOGY**

This study employed a quantitative approach to test the conceptual model. The measurements of the constructs were based on previous research. The study uses four questionnaires, each featuring a short video of a hotel social robot with varying levels of anthropomorphism. The survey was conducted using Qualtrics and distributed via Amazon Mechanical Turk with a location filter to target USA residents exclusively. Of 412 responses, 400 were eligible and analysed using IBM SPSS 25 Statistics to calculate the sample profile and SmartPLS 3 to test the model. The sample profile showed that 97% of participants were average, experienced, or very experienced users, with most having previously interacted with a service robot in hotels, restaurants, airports, or hospitals. The sample comprised 47.5% male, 51.75% female, and 0.75% identifying as other. Most participants were 26 to 57 years old, with over half having a bachelor's degree and being employed.

## CONCLUSIONS AND IMPLICATIONS

This study contributes to the theoretical understanding of the relationship strength between humans and robots in the hospitality industry and how it can promote customer well-being. By integrating the concepts of customer-robot identification, customer-robot relationship, and customer well-being into a unique framework, the study reveals the potential for social robots to be perceived and interacted with similarly to human social beings. The incorporation of the concept of well-being into the model provides a contribution to the study of Robotics from a marketing perspective.

From a managerial perspective, it is essential for brands, sellers, and manufacturers of social robots to acknowledge the importance of personalizing the customer experience. The study suggests that customers expect social robots to be emotional, reliable, and empathic, as if they were human partners. Therefore, careful strategies must be developed to manage customer-robot relationships, especially in the post-pandemic world where customers desire deeper interactions and a human touch. Human staff should not be replaced but rather work together with emotional robots to provide customers with improved experiences. In this regard, the study highlights the potential for social robots with feeling intelligence to bring several advantages to both human workers' wellness and clients.

*Keywords: Social robots; Hospitality industry; Customer-Robot Identification; Customer-Robot Relationship; Customer Well-Being.*

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