

## A Conceptualization of the Relationship between Frontline Service Robots and Humans in Service Encounters and the Effect on Well-Being

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**Abstract :** This paper presents a conceptual model of human-robot interaction within service encounters and the effect on the well-being of both consumers and service providers. In this paper, service providers are those employees who work alongside frontline service robots. The significance of this paper lies in the knowledge created which outlines how frontline service robots can be effectively utilized in service encounters for the benefit of organizations and society as a whole. As this paper is conceptual in nature, the main methodologies employed are theoretical, namely problematization and theory building. The significance of this paper is underpinned by the shift of service robots from manufacturing plants and factory floors to consumer-facing service environments. This service environment places robots in direct contact with frontline employees and consumers creating a hybrid workplace where humans work alongside service robots. This change from back-end to front-end roles may have implications not only on the physical environment, servicescape, design, and strategy of service offerings and encounters but also on the human parties of the service encounter itself. Questions such as 'how are frontline service robots impacting and changing the service encounter?' and 'what effect are such changes having on the well-being of the human actors in a service encounter?' spring to mind. These questions form the research question of this paper. To truly understand social service robots, an interdisciplinary perspective is required. Besides understanding the function, system, design or mechanics of a service robot, it is also necessary to understand human-robot interaction. However not simply human-robot interaction, but particularly what happens when such robots are placed in commercial settings and when human-robot interaction becomes consumer-robot interaction and employee-robot interaction? A service robot in this paper is characterized by two main factors; its social characteristics and the consumer-facing environment within which it operates. The conceptual framework presented in this paper contributes to interdisciplinary discussions surrounding social robotics, service, and technology's impact on consumer and service provider well-being, and hopes that such knowledge will help improve services, as well as the prosperity and well-being of society.

**Keywords :** frontline service robots, human-robot interaction, service encounters, well-being

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