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Effects of Self-Disclosure and Transparency on Conversational Agents in a Healthcare-Related Decision Support System

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Abstract : The increasing application of conversational agents in healthcare and the demand for applications that enable patients to take informed decisions is changing the way patients access healthcare and take decisions. Promising results related to the acceptance of CAs in healthcare have been accomplished. In that regard, understanding how to design CAs in a way that patients trust their recommendations and decisions constitutes an important area of research. Our study examines self-disclosure and transparency as drivers of trust to enhance the medical assistance of CAs for patients. Accordingly, we examined the effects of self-disclosure and transparency on patients trust and service satisfaction by conducting an online experiment with 136 participants. Our results show that the expression of both self-disclosure and conversational agents transparency leads to an increased perception of trust but does not necessarily improve the service satisfaction. Therefore, developers should implement self-disclosure and transparency to create a trustworthy environment.

Keywords: conversational agent, transparency, self-disclosure, healthcare

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