

# Individuals' adherence to recommendations for the treatment of diseases depending on medical doctors' use of artificial intelligence

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## **Abstract**

The study's goal is to find out whether and how individuals are more likely to follow a recommendation when a medical doctor uses artificial intelligence (AI) to derive a diagnosis and give a recommendation (vs. when no AI is used or when AI replaces the medical doctor). Hypotheses build upon Social Presence Theory and consider two parallel mediators: social presence and process innovation. An experiment was conducted with US residents ( $n = 467$ ) and skin cancer detection was used as a case. The results show that, when humans are involved, social presence is high (compared to technology only), and this leads to higher adherence intentions. When AI is involved, process innovation perception is high (compared to human assistance only), and this leads to higher intentions to adhere. The combination of agents (human plus technology) increases process innovation and does not harm social presence. The total effects argue for the inferiority of the sole use of AI.

**Keywords:** *Health care; patient decision-making; social presence*

**Track:** Services Marketing