Understanding Electronic Wearable Adoption in the Context of Healthcare Stigma and Discrimination

Byron M. Lowens

Abstract

As we immerse ourselves deeper into the digital age, health care is not untouched by its transformative impact. Today's era is marked by a digital health revolution, where technology offers promise in redefining health and wellness. At the forefront of this revolution are electronic wearable devices. From fitness trackers to advanced monitoring tools, these gadgets have empowered individuals to gain insights into their health like never before. They promise real-time data, informed health decisions, and personalized health interventions. However, the intimate nature of the data collected raises significant privacy concerns The potential for data breaches could lead to stigmatization, particularly for sensitive information related to mental health, sexual activity, chronic conditions, fitness, and dietary habits. These concerns are even more pronounced in marginalized communities, where historical and socio-economic factors intensify the risk of discrimination. In this study we seek to:



Investigate privacy risks associated with wearable device adoption.



Explore privacy perceptions among different population subgroups, focusing on African Americans, and Hispanic/Latino/Latina individuals.



Understand factors influencing (non)adoption and examine the link between privacy concerns and their manifestations.

Methods







Employing a mixed-methods approach, we recruited a sample of 179 participants via the Prolific research platform. Participants responded to a series of survey questions concerning health data collection, adoption of electronic wearables, sharing of personal information from these devices, and their understanding of privacy practices of companies that collect personal data.

Preliminary Findings



High rate of wearable adoption among participants.



Non-adopters express concerns about personal data selling, mistrust in data-handling companies, and health information security.



Emphasis on the need for enhanced health data privacy among at-risk pupulations

SCHOOL OF INFORMATION
UNIVERSITY OF MICHIGAN

Contact: bmlowens@umich.edu

This research is supported by The National Science Foundation under Grant no. 2127309 to the Computer Research Association for the Computing Research Association for the CIFellows 2021 Project..