

12 - 14 June 2026

Tokyo , Japan

Learning and Adaptation to Gerontechnology in Long-Term Care Services: Perspectives of Middle-Aged and Older Caregivers

Yi-Fen Wang

National Tainan Junior College of Nursing, Taiwan

Abstract

As long-term care (LTC) undergoes digital transformation, middle-aged and older caregivers face unique challenges adopting new technologies. Through 26 qualitative interviews across various LTC settings, this study explores the psychological transitions and informal social learning strategies of caregivers aged 40–70. Findings reveal a five-stage adaptation trajectory: (1) Initial resistance driven by digital anxiety and fear of disrupting human-touch care; (2) Friction caused by digital gaps, such as physical and cognitive interface barriers; (3) A shift toward informal social learning and intergenerational peer mentoring over formal manuals; (4) The development of adaptive practices, such as customized workarounds (e.g., voice-to-text, visual SOPs); and (5) Eventual operational reliance, where technology becomes an indispensable "safety net" once its practical utility is proven. The study concludes that successful gerontechnology implementation depends heavily on institutional "socio-technical" support. Developers should prioritize intuitive interfaces and video tutorials, while management must foster a blame-free environment encouraging peer mentoring. These insights offer a practical framework for sustainable digital transition in aging societies.

Keywords: Digital Anxiety; Digital Transformation; Intergenerational Collaboration; Smart Technology; Socio-Technical System