

The Role of Technology in Supporting the Mental Health Needs of Aging Adults

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Disclosures

- Sara J. Czaja and Philip D. Harvey are Scientific Officers of I-Function
- Research presented is supported by the National Institute on Aging

How can Technology Help Meet the Mental Healthcare Challenges of Population Aging

- **Enhance:**

- Opportunities for engagement in new learning activities
 - Protective effect for cognition and mood
- Opportunities for social connectivity and engagement
 - Social connectivity is extremely important to mental and cognitive health
- Awareness of and Access to mental health care and services
 - Community resources
- Access to Digital Mental Health Interventions
 - Support aimed at protecting & promoting psychosocial well-being
- Opportunities for innovative assessment tools
 - Ecological Momentary Assessment: Activity patterns, mood state

Older Adults and Technology

- Perceive IT as valuable and are willing to use it (*e.g., Czaja et al., 2008, 2014, 2018, 2021*).
- Are more likely to adopt technology if it is perceived as valuable and contributing to quality of life (*e.g., Sharit et. al., 2018, Moxley et al., 2023*).
- Can learn to use new technologies (*Kelley et Charness, 2007; Czaja et Sharit., 2012, Czaja et al., 2018, Czaja et al., 2021, Harvey et al., 2021, Czaja, Harvey et al., in prep*).
- Are less comfortable with IT and have less IT efficacy (*e.g., Czaja et al., 2006; 2008, Lee et al., 2019*).
- Adhere to self-paced, at-home technology-based intervention protocols (*e.g., Harvey, Kallestrup & Czaja, in prep*).
- There remains an age-related digit divide (*Pew Research, 2022*).

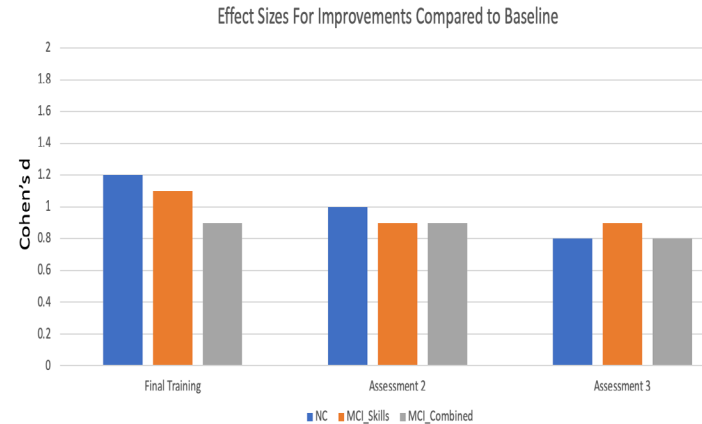
FUNSAT Training Program

Four Modules and Six Functional Tasks

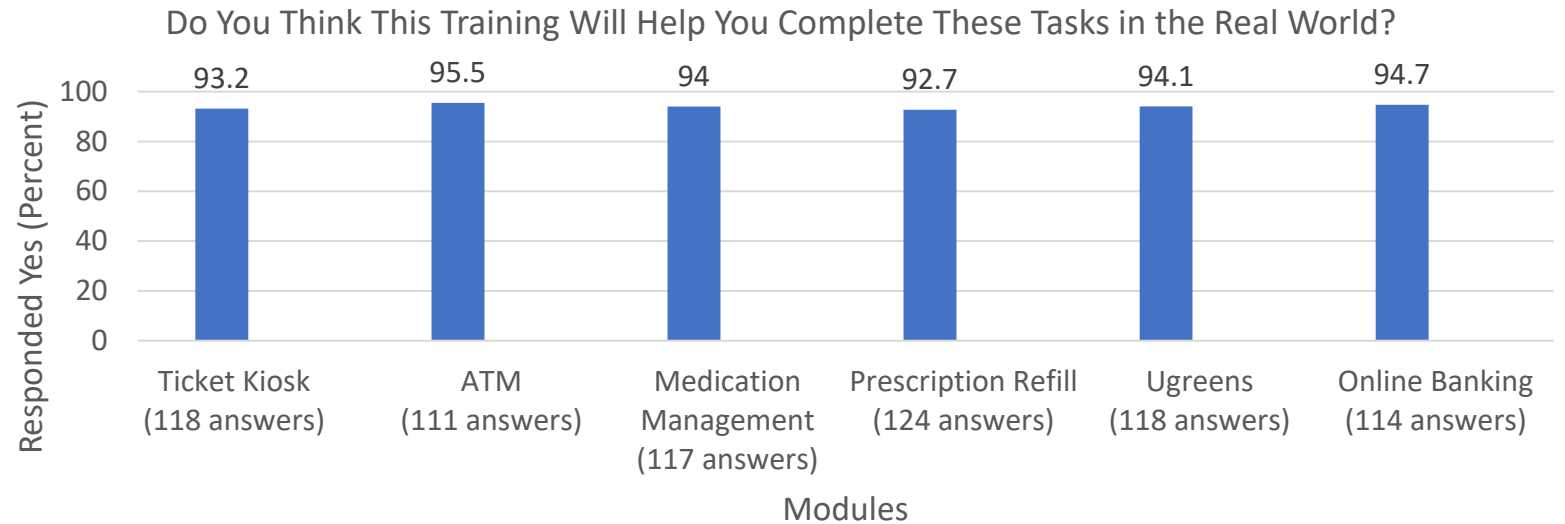
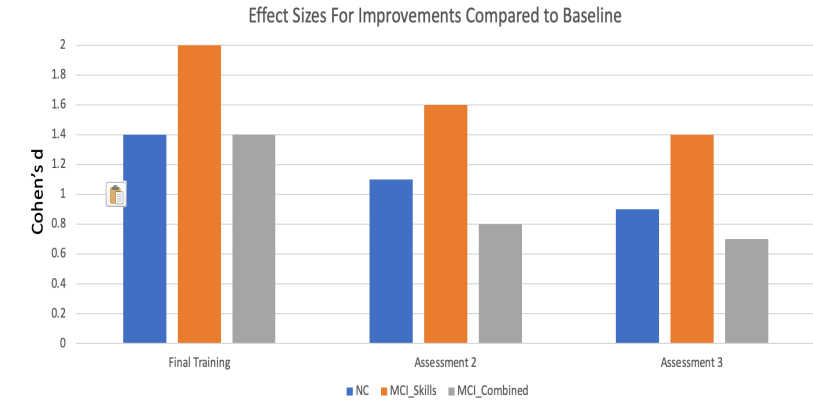
- ***Ticket Kiosk***
 - Metro/Bus
- ***Money Management***
 - ATM
 - Online Banking
- ***Medication Management***
 - Medication Labels & Organizer
- ***Online Shopping & Prescription Refill***
 - Prescription Refill
 - Ugreens

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Training improvement: ATM Task



Training improvement: On-Line Banking Task



Social Engagement

Improving Social Support for Older Adults Through Technology: Findings From the PRISM Randomized Controlled Trial

Sara J Czaja, PhD, Walter R Boot, PhD, Neil Charness, PhD, Wendy A Rogers, PhD, Joseph Sharit, PhD Author Notes
The Gerontologist, Volume 58, Issue 3, June 2018, Pages 467–477, <https://doi.org/10.1093/geront/gnw249>

Findings :

Successfully trained all participants on PRISM.

Significant Increase in:

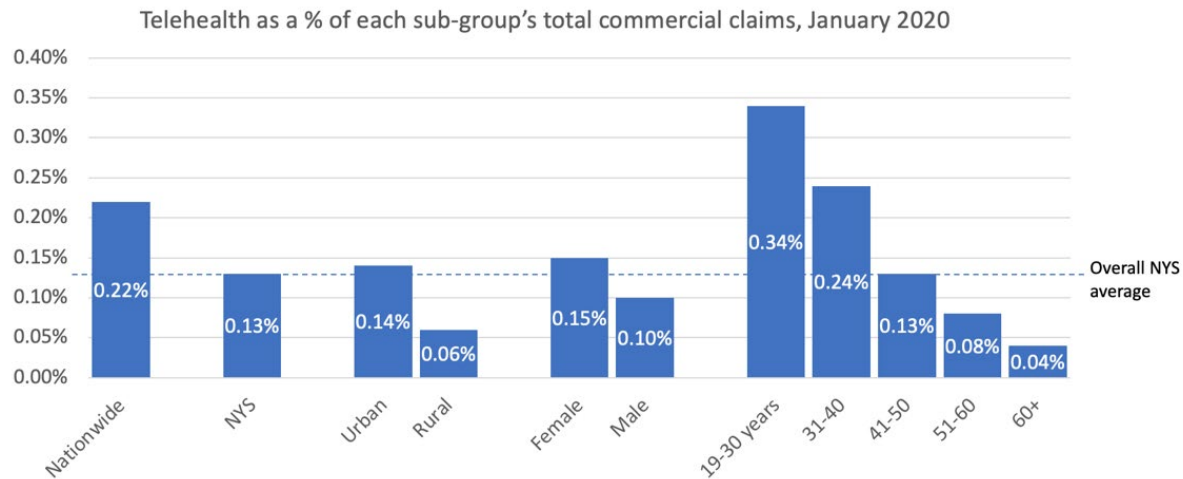
- Social Support
- Emotional well-being
- Computer Efficacy and Proficiency

Significant Decrease in:

- Loneliness

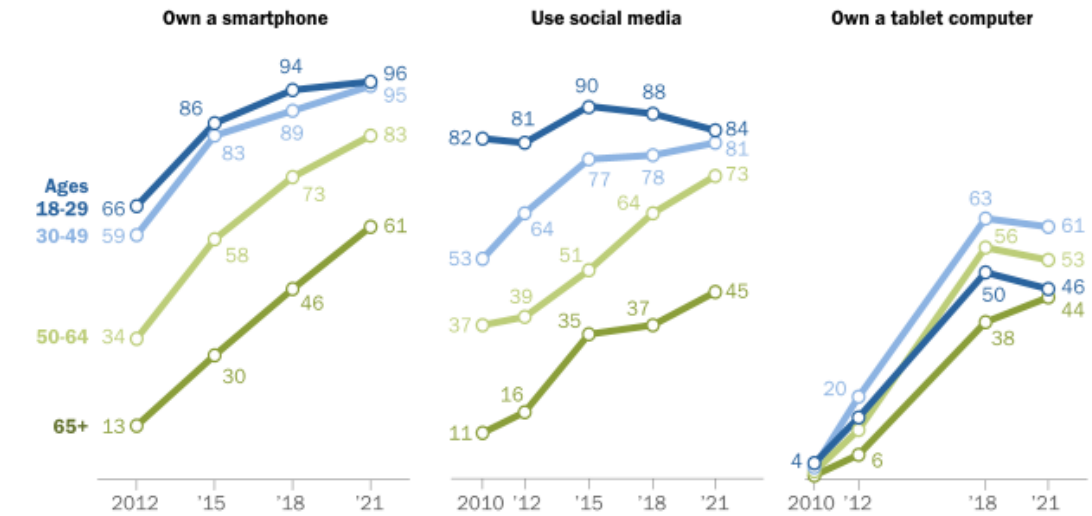


Digital Divide



Smartphone ownership and social media use among older adults continue to grow

% of U.S. adults who say they ...



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

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Adoption Extends beyond Hardware Access

Policy Issues:

- Ensure equitable access to technology, training and technical support programs
- Cost and reimbursement issues
- Cyber Security & Information sharing

Research Issue:

- Robust studies of effectiveness with diverse populations
- Identification of strategies for matching technology apps with needs of older adults and families
- Measurement and big data issues
- Strategies for implementation and sustainability
- Interface design Issues

Design Issues

- Usability issues
- Integration across technology platforms
- Pushing the technology platform – e.g., engagement, sustainability



Thank You!