Artificial Intelligence in Social Work Practice

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Introduction

Although present in organizational contexts and potentially complimentary to professional outcomes, intelligent tools have not been widely embraced by social work. A growing literature has recognized the ubiquity of artificial intelligence and thus the critical need for social work to integrate these tools throughout the diversity of professional practice. Integrating disability studies, social work, and artificial intelligence methods, this poster presents the benefits of using AI in social work, and then illustrates, and evaluates a model of practice using extant data in which an intelligent AI robotic companion is used to further amplify social work intervention.

Literature

How is AI being used in SW

- **Not much**
- Primarily to automate administrative tasks, and a small number of SW researchers are using it for big data analytics[7]

Potential applications to micro social work

Improved accessibility to:

- services to individuals with impairments
- assistance with learning
- suicide risk prediction[5]
- substance overdose prediction[5]
- rural services[1]

Improved integrated healthcare:

- early diagnosis and intervention,
- management of chronic conditions.
- surveillance and analysis of client mood, behavior, and environment[5]
- AI enhanced services-virtual assistants
- Immediate feedback and guidance to client in private setting
- Stigma reduction through privacy[6,7]
- Surveillance and AI assisted caretaking

Macro System Social Work:

- Policy analysis
- Program Evaluation
- Community Organizing[5]

Exemplar – Elli Q

Elli Q is an intelligent robot intended to connect individuals who live alone to the world outside of their homes and thus to flourish and remain in their home communities.

"It focuses on what matters to individuals: memories, life validation, interactions with friends and families and promotes overall good health and well-being."[2]

Selected Features

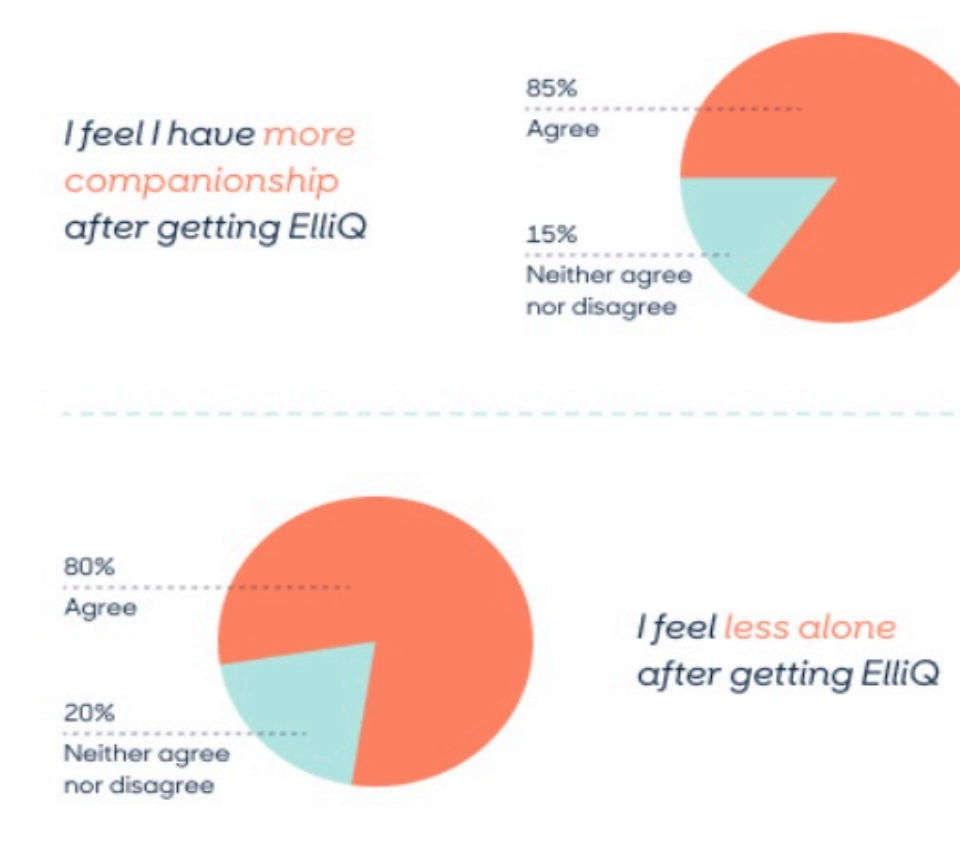- Physical exercise videos through Intuition's partnership with Silver Sneakers
- Health content through a collaboration with the Mayo Clinic
- Access to transportation support with Uber Health
- Daily conversation and inspiration
- Regular check-ins and notifications to a loved one if there is a need
- Health and wellness goal setting and tracking
- Reminders for events, appointments, and more
- The ability to send and receive text messages and to conduct video calls
- Memory recording and sharing
- Music, jokes, trivia, news, and engaging activities
- Remote photo update of Elli Q's built-in picture frame

Evaluation Results[1]

60 adults who had Elli Q for a mean of 221 days participated through answering the UCLA loneliness scale and open-ended questions.

Mean number of interactions = 20/day

I feel I have more companionship after getting ElliQ — 85% Agree, 15% Neither agree nor disagree

I feel less alone after getting ElliQ — 80% Agree, 20% Neither agree nor disagree

Findings

- Relieves loneliness
- Promotes interaction, engagement, health behaviors
- Provides cognitive stimulation

Ethical dilemmas[3]:

- Is a robot really a companion?
- Is the user deceived into believing that this companion is sentient.

Implications and Future Directions

For medically disabled and elder isolated individuals

- Extends community interaction into the home
- Promotes a sense of companionship
- Acts as a "memory" for scheduling regular health and wellness behaviors
- Promotes cognitive competence
- Connects individuals to family and friends
- Simulates a "roommate"
- Brings humor into a solitary environment
- Prevents institutionalization

For micro through macro social work

- Its potential as a "human extender" has significant positive implications for social work, given the scarcity of practitioners especially in rural home and community settings
- Provides in home surveillance and monitoring
- Has a predictive function so that any issues can be identified and addressed before they reach a crisis or emergency

AI for all social work roles and contexts should be explored and taught.

Research and evaluation collaboration with disability studies, aging studies, and computer science and engineering.

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