Cell Phone Software to Aid Senior Citizens in Recalling Names

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Research Framework and Design Space

What cognitive process? Reminding, reminiscing, recognizing, communicating, ...

For whom? Individuals with AD or MCI, "normally aging" senior citizens

Who is actually the "user"? Person with cognitive impairment, caregiver, family member

What design approach? User-centered design (UCD) Participatory design (PD) Patient-centered design

What technology to employ? Mobile computing, ubiquitous computing, streaming media, ...


What have we learned? "Cognitive prosthetics" are also psychosocial interventions — identity, communication, social stimulation

Multimedia Biographies

DVDs for 6 AD and 6 MCI patients + family members

Outcomes: Engagement, reminiscing, enjoyment, family interaction, legacy for family, increased caregiver understanding/empathy

Sponsor: Bell University Labs and NSERC

Re-experiencing with SenseCam

For patients with AD or MCI: 1) Image streams from Microsoft SenseCam vs. 2) Authored slide shows

Conjectured Outcomes: 1) Improved ability to recall personal experiences, 2) More family interactions

Cognitive Gaming Website

Cognitive/social stimulation via competitive/collaborative gaming for normally aging seniors, and a research tool for mental fitness studies

Conjectured Outcomes: Increased cognitive reserve, and social stimulation

Tech for Isolated Individuals

Social TV with text and voice communications

Seniors living alone, home-bound caregivers, patients in long hospital stays

Conjectured Outcomes: Increased social interaction, decreased loneliness

Other Collaborators

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