

## Research Reading Notes

### A Systematic Review of the Use of Technology for Reminiscence Therapy

Amanda Lazar

[http://heb.sagepub.com/content/41/1\\_suppl/51S.full.pdf+html](http://heb.sagepub.com/content/41/1_suppl/51S.full.pdf+html)

- ICT (Information and communication technology) has the potential to support RT (reminiscence therapy)
  - permitting individuals to stay in their local communities while communicating with others at a distance
  - engaging multimedia
  - allowing for multiple users
  - interacting through dynamic methods
  - aid caregivers by reducing RT session prep time and opportunity for remote sessions
- Purpose of technology
  - accommodating for deficits: using technology to ease participation
    - gaming devices, touch screen, and prototype devices for motor impairments
    - headphones and magnifying of images for hearing and vision impairments
  - compensate for memory deficits
    - gather materials from users' daily activities - audio recording, GPS, cameras
    - alleviate caregiver strain originating from repeatedly providing details to help patient recall facts
  - taking advantage of continuing abilities: using technology to harness strengths
    - sensory awareness, musical responsiveness and emotional memory have been labeled "continuing abilities" in dementia
    - ex: photographs, background music, narration, panning and zooming in reminiscence video slideshows
    - Personalized photos: materials gathered from family members
      - more interest and less distraction
      - adverse reactions to disturbing photographs (wartime photos, lost family members)
    - Generic photos: materials that were from the general era in which one grew up in
      - prompted more storytelling from individuals
      - potential for emotional distress if they do not recognize themselves in pictures

- Gathering issues for RT is a challenge → technology can bridge geographic distance and address transportation barriers
  - family members can upload personal materials
  - archives for generic photos
  - remote RT (caregiver and patient in different location)
- tailoring
  - own log-in
  - USB sticks to store personal reminiscence materials
  - challenges: remembering to carry around USB stick or recall password for patients and overwhelmed staff
  - automatically detecting reactions of users to reminiscence content using brainwave sensors
- evaluating progress and use
  - logging to report speed with which people with dementia learned games
  - useful data for health professionals to adjust interventions
  - potential privacy issues with tracking

## **Involving Family Members in the Implementation and Evaluation of Technologies for Dementia**

Amanda Lazar

[http://www.researchgate.net/profile/Amanda\\_Lazar/publication/274085897\\_Involving\\_Family\\_Members\\_in\\_the\\_Implementation\\_and\\_Evaluation\\_of\\_Technologies\\_for\\_Dementia\\_A\\_Dyad\\_Case\\_Study/links/55256e350cf24b822b40424c.pdf](http://www.researchgate.net/profile/Amanda_Lazar/publication/274085897_Involving_Family_Members_in_the_Implementation_and_Evaluation_of_Technologies_for_Dementia_A_Dyad_Case_Study/links/55256e350cf24b822b40424c.pdf)

- Problem
  - Despite the well-documented benefits of activities, many assisted-living facilities and memory care units do not offer sufficient activities for individuals with dementia
  - Using technology may be one way of fostering activities during family visits
- Methods
  - 6-month evaluation of a technology designed to engage individuals with dementia in activities in MCU (memory care unit)
  - Contexts:
    - weekly sessions with researcher
    - activity room with staff
    - activity group for individuals with memory issues
  - Groups enrolled:
    - residents
    - family members
    - staff

### **Additional Readings**

- Value Sensitive Design and Information Systems  
[http://link.springer.com/chapter/10.1007/978-94-007-7844-3\\_4](http://link.springer.com/chapter/10.1007/978-94-007-7844-3_4)
- Technology Studies to Meet the Needs of People With Dementia and Their Caregivers  
<http://jag.sagepub.com/content/28/1/5.short>
- Digital family portraits: supporting peace of mind for extended family members  
<http://dl.acm.org/citation.cfm?id=365126>