The Use of Technologies to Reduce Social Isolation in Older People

Alan Gruner
Benetas currently provides the following services to the Melbourne metro area and rest of Victoria:

- 837 Community Care packages
- 702 Residential Care places across 11 facilities.
- 200 Independent Living Units
- 4 Day Care/Respite centres and satellite programs
- ‘Benetas @ Home’ - a direct care service for package or private clients employing over 200 PCWs.
Benetas’ Research and Advocacy Program

- Research and advocacy plan with priority areas
- Form partnerships with research bodies eg universities, national ageing research institute
- Engage research consultants
- Use research findings for advocacy, policy development and service improvement.
Social Isolation

- Lack of engagement with others
- Loss of sense of belonging
- Linked with significant health concerns, physical and mental.

- Older people particularly at risk
  - Frailty, loss of mobility
  - Access to transport, loss of vehicle licence
  - Loss of spouse and friends
Social Isolation

- A growing interest in recent years in the design of technologies for older people, but main focus has been on health and safety
  - Tele-health.
  - Smart homes - sensors
  - Personal alarms

- A small trial project to investigate the possibilities offered by emerging information and communication technologies for reducing social isolation for older people

- Teamed with Melbourne University (funder) to conduct the trial
DON'T WORRY. TECHNOLOGY WILL SAVE YOU.
Touch-screen technologies

- Touch-screen devices are relatively easy to use. Preferred by older people.

- Inbuilt cameras, onscreen keyboards, and mobile broadband connectivity.

- Excellent potential as social communication tools.
Engagement through Media Sharing

- New iPad application (Enmesh a closed platform: Closed social network - participants and managers.

- the Enmesh application was designed to address concerns about trust and privacy.

- Enabled older people to record and exchange photographs and messages.
Engagement through Media Sharing

- Simple interface. Opening the application, users were shown a dialog box that enabled them to take a photograph, write a caption, or enter a text message.

- Captions and messages were recorded using the iPad’s onscreen keyboard. Users could then press ‘send’ to upload the photograph or message to the shared display.
Engagement through Media Sharing

- The shared display showed all the messages that had been uploaded: everyone in the group could see everyone’s sent messages and photographs.

- Images and photographs moved down the screen in a cascading motion.

- Display showed newer messages more frequently and older messages in a random order.
Hey Sonya. Great pictures!

View from my home office. Not as green but still some trees.
taken by Frank Vetere

Time love care? That might be it! :)

Sonja Pedell

View from my home office
taken by Sonja Pedell

taken by Sonja Pedell

Plant needs a little TLC
Start by Frank Vetere

Serenas
Engagement through Media Sharing

- Users could manipulate the way the messages appeared.

- Whenever participants manipulated an image on the screen the changes could be seen by others who were simultaneously viewing the display.
Study participants

- Seven clients of our community aged care program who were considered to be (or at risk of being) socially isolated.
- All were living in their own home and had the physical and cognitive capacity to participate in the study.
- Two male and five female participants. Five of the participants were aged over 85 and two were in their seventies.
- Two care managers also took part in the study.
Trial Operation

Phase 1: Introduction
- During the Introduction phase (2 weeks), participants used Enmesh to connect to their care manager only.

Phase 2: Socialising with other participants
- After two weeks, participants met each other at a morning tea, and the Enmesh application was set up so that all participants were connected to each other.

Phase 3: Extending use
- At a second morning tea event, participants were introduced to the iPad Internet browser “Safari” and encouraged to use it to look up information to share with the rest of the group.
Data collection

• Participants were interviewed three times during the ten-week trial.

• Interviews were also conducted with the care managers who participated in the trial.
Data analysis

- The interview transcripts were examined and key themes were identified.

- The analysis focused on
  - identifying the key benefits and challenges that participants experienced
  - evidence of the impact the trial had on participants’ experience of social isolation.
Findings

1. Alleviating isolation

Quotes from clients:

“The study has been very successful with me. I had a very bad time of depression […] It has made a lot of difference. Not the actual act of taking pictures, but the act of being able to communicate with others who are doing the same thing.”

“I forgot about myself while I was doing this. You forget about yourself and your aches and pains.”
Findings

1. Alleviating isolation
   - Participants enjoyed interacting with each other.

For example:

- Challenge of solving the puzzle of the unknown flower.
- Sharing a photograph of her empty fridge with the caption, “What’s for tea?”
Findings

1. Alleviating Isolation

- The three face-to-face meetings valuable for helping participants to build rapport and get to know each other.

- “I think that was quite good [to meet the other people]. It became a person where otherwise it was only a face.”
Findings

2. Photo sharing provided a “window” into participants’ lives
   ✤ Shared details about their daily lives and surroundings with other people.
   ✤ This enabled others to view a “window” into their world.

“He more or less showed his life. And I could relate to him via my husband, because they had a similar life.”
Findings

2. Photo sharing provided a “window” into participants’ lives

- One care manager said:

“it allowed me to get a bit of an idea about how they were without actually having to pick up the phone. It captured just a little snapshot, what they were doing during the day. If anyone had even a slight lowered feeling or depression or whatever it would just give me a slight better insight into themselves and how they viewed the world and what it was they were looking at.”
Findings

3. An opportunity to learn and extended interests

- Also learning to use the iPad itself was seen to be a valuable experience.

- One care manager noted:

  *They all seemed to have enjoyed the use of such a new technology. They all thrived on some aspects of it and in particular it gave them a lot of confidence. That was noticeable for all of them.*
Findings

3. An opportunity to learn and extend interests

- Participants used the iPads to look up information on the internet (e.g., information about plants, books, locations).

“I was able to show [where he was born] on Google maps. That was particularly interesting for the family who have never been there. The place does not exist anymore, only a record.”
Findings

4. Trust and privacy

- The closed platform of the Enmesh application gave participants a sense of security: they knew their photographs and messages could only be seen by other members of the group.

“I have no secrets. Not too much worried. I am in control of the content.”

“*I don’t really have anything that is important enough to hide anyway - you can wipe this all off can’t you? I don’t worry about those sorts of things so much.*”
5. Challenges

- Struggled to think of photographs and messages to share.
- Did not elicit any responses from other participants.
- Participants also varied greatly in their sharing activities.
- In some cases participation waned over time.
- But no participant dropped out
Findings
5. Challenges

- Some usability problems with the iPad.
- Its weight, difficulty with photo taking and lack of holder.
- The onscreen keyboard.
- Misunderstanding of the technology

I thought I might endanger air traffic when I accidentally set the iPad on ‘airflight’ mode.
Further research and development

- Technologies can offer opportunities to extend older people’s social networks.

- Social isolation cannot be alleviated by technology alone.

- The importance of meeting face-to-face.

- Role of care managers
Further Research and Development

- This trial involved the development and evaluation of a socio-technical system.

- The next stage. Three year ARC-Linkages project.
Follow up

- All participants given an iPad for themselves (donation by Benetas)

- Connected to broadband and instructed in the wider use of the iPad

- Follow up with participants has shown they continue to use their iPads.
Project team
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