Technology Use for Ageing in Place

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That awkward moment when you realize that your toddler can you use the latest technology better than you.


SONY
Discman
Digital MEGA BASS

- Technology is a mediator
- Support is just as important as the device
- Choice, voice and control

https://quotefancy.com/technology-quotes

- McKell Institute (2015). *Positive disruption: healthcare, ageing and participation in the Age of Technology.*

Technology has the potential to improve lives of older adults in the community

Technology use & research is fragmented and under-developed

- Barnett, K. et al. (2017). *Developing a Technology Roadmap for the Australian Aged Care Sector: Literature Review.* A report prepared for the Aged Care Industry IT Council (ACIITC).

Background…

- Berridge, C. et al. (2014). Technology-based innovation for independent living: Policy and innovation in the United Kingdom, Scandinavia, and the United States.

Understanding the needs and perspectives of technology amongst older people is critical.

Technology is successful if older adults' **needs and wishes are prioritised**, the technology is **acceptable** and **beneficial**

- Peek, S. et al. (2016b). What it takes to successfully implement technology for aging in place: Focus groups with stakeholders

- Peek, S. (2014). Factors influencing acceptance of technology for aging in place: A systematic review. .

How technology is used by older adults is unclear

Everyday technology is being used in creative ways to enhance care needs

- Gibson, K. et al. (2018). *Personalisation, customisation and bricolage: how people with dementia and their families make assistive technology work for them.*

- Lovarini, O'Loughlin & Clemson (2018). *Older Adults and Digital Technologies*

Technology contributes to a sense of self, and evolves as people age.

International collaborations

UK PROJECTS: TECHNOLOGY USE IN THE HOME

- **AKTIVE 2014:** 'Everyday life analysis' of 60 older people at risk of falls or with memory problems
- **SENSE 2014-2016:** 38 older adults with dual sensory impairments; most had care or family support.

INTERNATIONAL COLLABORATIONS (UK, Australia, Canada, New Zealand, China):

- **Older workers and caregiving**; & **Sustainable Care** (Yeandle, O'Loughlin, Fast, Parsons, Ka Lin); Worldwide Universities Network/CEPAR funded.
- **Sustainable Care Connecting People and Systems** (PI Yeandle; CEPAR international partner); UK Economic and Social Research Council funded project

Current Projects

- Qualitative Study 'Older adult's use of technology to successfully age in place' (Lovarini et al)
- PhD study (Borilovic) 'Evaluating the use of technologies to support older Australians to age in place'

* Both linked to UK Sustainable Care project Work Packages:

1) Achieving sustainability in care systems: the potential of technology
2) Technologies to support working carers: connecting people and systems

The journey so far…

2014:
AKTIVE study
England

2014-2016:
SENSE study
England

2017:
ACIITC;
Technology Roadmap for the Australian Aged Care Sector.

2018:
NACA (National Age Care Alliance);
Position Paper; AT for Older Australians

2018:
Lovarini, O'Loughlin & Clemson;
Older Adults and Digital Technologies

Phase 1
2018:
Patomella, Lovarini, Lindqvist, Kottorp & Nygard;
Technology use to improve everyday occupations in older persons with mild dementia or mild cognitive impairment: A scoping review

Phase 2
Current:
Seeding Grant (Lovarini)
Qualitative grounded theory study of older adults.

Current:
PhD (Borilovic)
Evaluating the use of technologies to support older Australians to age in place

CEPAR affiliated
Sustainable Care work packages.
International.

Phase 1 (completed)

Patomella, Lovarini, Lindqvist, Kottorp & Nygard

Technology use to improve everyday occupations in older persons with mild dementia or mild cognitive impairment: A scoping review

FINDINGS:

- 14 studies; Most conducted in Europe (n=10); Mix of technologies evaluated (n=12)
- Small positive effect on some activities in some studies
- BUT:
  - Rationale for technology selection unclear
  - Little involvement of older people in technology selection
  - Goals and preferences of older people unclear
  - Lack of intervention tailored to the needs of the older person

Phase 2 (underway)

Seeding Grant

Table 1. Participant Characteristics

Participant characteristics	N (%)
	n=15
Age 70-75 years	3 (20%)
Age 76-85 years	6 (40%)
Age 86-95 years	6 (40%)
Female	9 (60%)
Male	6 (40%)
Living in a house	14 (93%)
Living in a convent	1 (7%)
Living alone	7 (47%)
Living with partner	5 (33%)
Living with partner & child/ren	2 (13%)
Living with carer	1 (7%)
	n=14
Home care package level 1	0 (0%)
Home care package level 2	5 (36%)
Home care package level 3	2 (14%)
Home care package level 4	7 (50%)

AIM:

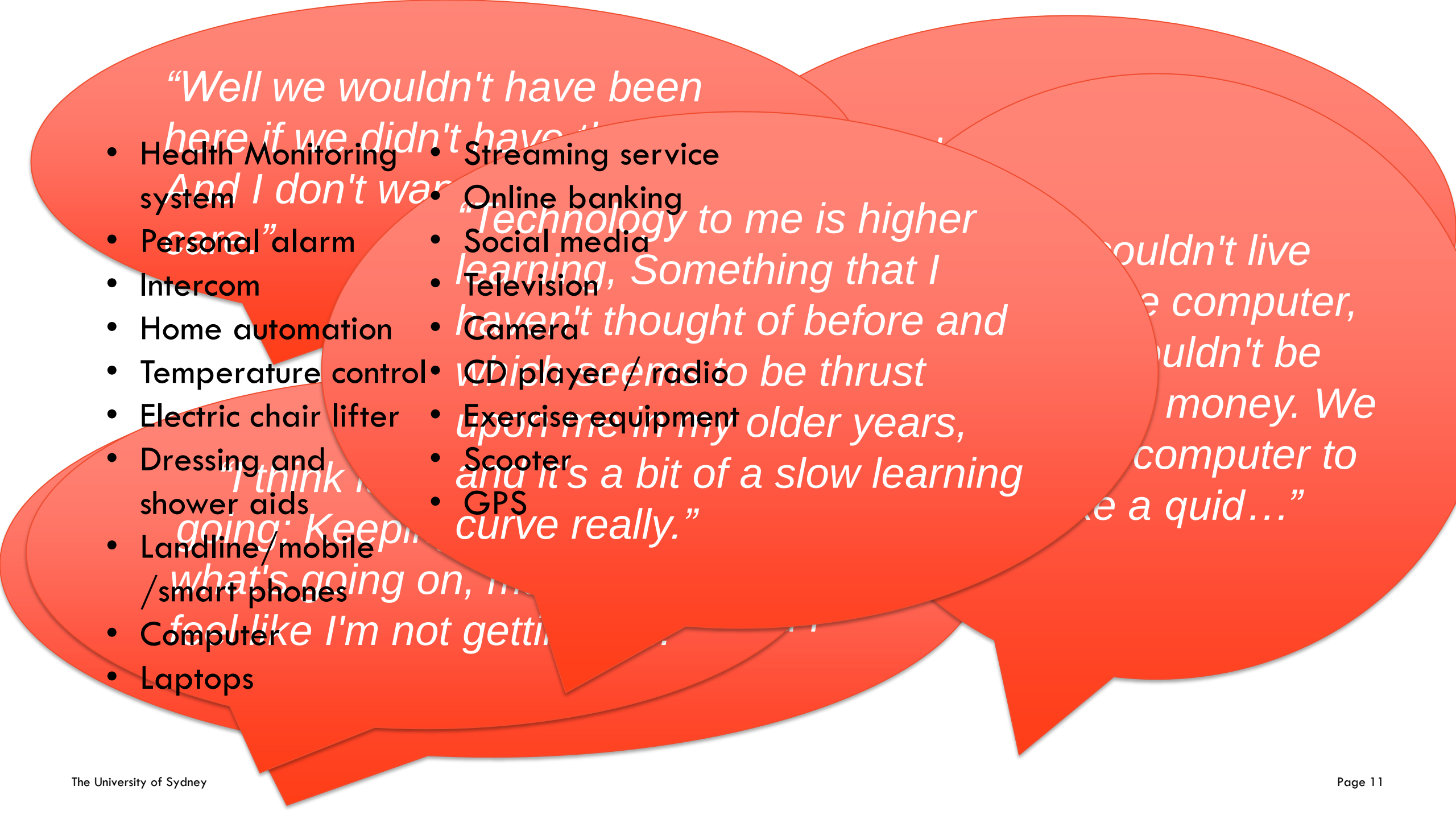
To explore the experiences of older adults in using technology to gain an understanding of the benefits, challenges and impact of technology use.

METHODS:

Interviewed 15 participants (60% female) aged 70+ years, living in their home and using technology focussing on health, housing, daily living, communication, leisure, mobility or transport. Participants were recruited through a home care service provider. Study data were collected and analysed using grounded theory methods.

Preliminary analysis shows 5 themes…

1) Meaning of technology
2) Uses of technology
3) Impact of technology
4) Challenges of technology
5) Supports of technology



- Health Monitoring system
- Personal alarm
- Intercom
- Home automation
- Temperature control
- Electric chair lifter
- Dressing and shower aids
- Landline/mobile /smart phones
- Computer
- Laptops
- Streaming service
- Online banking
- Social media
- Television
- Camera
- CD player / radio
- Exercise equipment
- Scooter
- GPS

Where to next?

- What is the best process to ensure technology can help older Australians confidently age in place?

PhD study (Borilovic)
Evaluating the use of technologies to support older Australians to age in place

- Three part project:
  - Contextual case study, scoping review, pilot RCT
- Occupational therapy perspective
- Linked with UK Sustainable Care Work Packages:
  - *Achieving sustainability in care systems: the potential of technology* &
  - *Technologies to support working carers: connecting people and systems*

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