The potential of touch-screen computer technology to facilitate enjoyable activities with people living with dementia

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Dementia the Challenge

Around 822,000 people in UK live with dementia. 64% live at home with informal care.

Chronic and progressive brain disease typically presents as decline in short-term memory.

Psychological problems manifest due to biological disruptions causing loss of initiative, independence & wellbeing.

A cure is not imminent. Psychosocial interventions enable people to live as well as possible with the condition.
People with dementia are increasingly exposed to technologies to assist and enable in a number of life domains including:

- Memory function & recall
- Cognitive stimulation, rehabilitation
- Safer walking
- Therapeutic modalities
- Activities of Daily Living
- Carer reassurance
Why touch-screen technology?

- Non-stigmatising, positive self image
- Contemporary, popular
- Intuitive, no prior knowledge required
- Holistic, adaptive & flexible
Two thirds of people with dementia are also living with depression.

Most frequently identified unmet need is something enjoyable to do during the day.

Interventions using technology focus on safety & security concerns and carer reassurance.

Important as these aspects are, wellbeing depends on more than feeling safe & secure.

Research focus remains on deficits & losses associated with the condition.

Neglecting all that is retained and enjoyed and done well.
CIRCA

The Computer Interactive Reminiscence & Conversation Aid

- Innovatively designed interactive multimedia experience
- Supports joint reminiscence and conversations through pictures, video and audio
- Generic material appropriate for a range of preferences and tastes
- Designed specifically with people living with dementia
The Computer Interactive Reminiscence & Conversation Aid
Living in the moment also developed by the CIRCA team

- Series of bespoke computer games presented on intuitive touch-screen interface
- Focus on independent interactions, individuals actively engaged not passively immersed
- Designed specifically with people living with dementia
Living in the Moment
An evaluation of various applications presented on existing touch screens

Focus on independent play with familiar and novel games in residential setting

90% participants initiated gameplay independently

88% reported enjoyment
Familiar games not necessarily more appropriate than novel, both may be considered depending on the individual.

People with dementia can play touchscreen games independently and the potential for enjoyment high.
Intervention using existing ‘off the shelf’ technology with people with varying levels of cognitive impairment and applied in different settings

Focus on supported interactions, personalised to small groups’, dyads or individuals expressed needs and requirements

Some enjoyed the increased social interaction, others enjoyed the opportunity to gain new knowledge

Participation was interactive and enjoyable for the majority.

Indicates that people living with dementia lack opportunity not desire to interact with contemporary ICT’s
Key messages

- Touch screen technology can benefit people living with dementia

- Appropriate in various settings with people with varying levels of cognitive impairment

- Interactions can be independent or supported

- People with dementia are able in their technology interaction given the opportunity

- Researchers, formal and informal carers, professionals need to explore creative ways to promote and enable participation
Thank you for listening

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