

Using Virtual Reality to Engage in Dementia Care

EUROPEAN AGEING NETWORK

CONFERENCE 2018

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Centre for Dementia Learning
Dementia Australia**



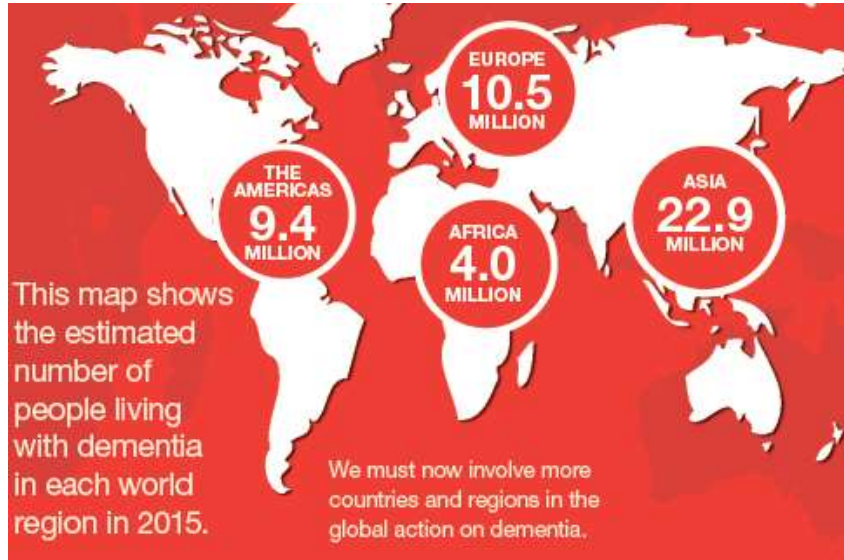


The new voice of Alzheimer's Australia

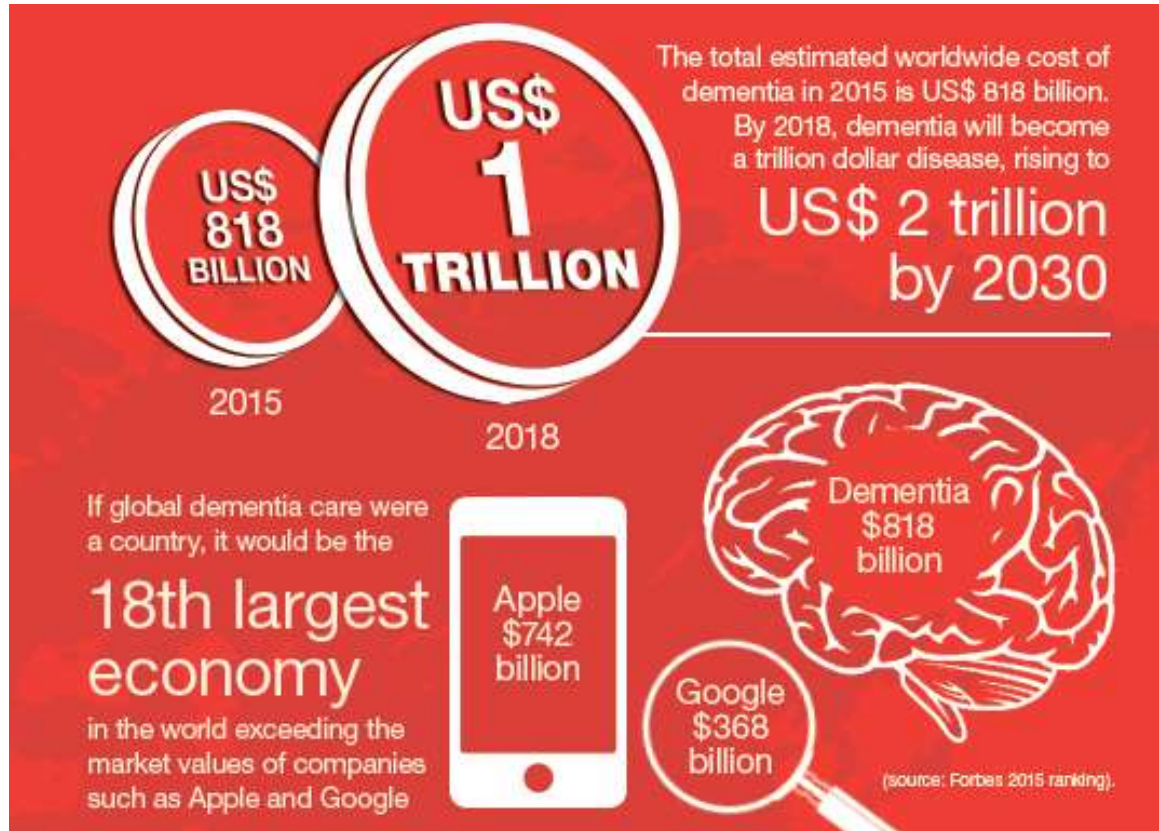
We have officially changed our name to Dementia Australia. With more than 100 types of dementia – Alzheimer's disease being one – our new name reflects that, as the peak body, we are here for people, of all ages, living with all forms of dementia, their families and carers.

“Is there a future for long term care in Europe?”

Dementia in Europe



Impact of Dementia



No Cure for Dementia



Centre for Dementia Learning

Our aim:

To create unique learning experiences which touch, move and inspire participants and organisations to transform their dementia practice.



Traditional Training



A group of people are seated in a dark room, looking towards a large, brightly lit virtual environment. The virtual room has pink walls, a striped armchair, and a large, glowing hand projection on the wall. The ceiling of the real room has several large, red, circular light fixtures. The text "Perc Walkley Dementia Learning Centre" is overlaid on the image.

Perc Walkley Dementia Learning Centre



Virtual Dementia™ Experience

Multi-Sensory
Environment

“ Came with a bit of a negative attitude, left with a can’t wait to get to work and try and implement a lot of things..... Made you think about how someone with dementia sees the world!”

Course Participant

Health Awards

2015 Microsoft Imagine Cup-



i-Awards - 2014



MEDIA INTEREST



Does VR work?



‘This sense of self-other merging in the virtual environment transfers to the physical world and translates into actual helping behaviour, even when the other person is a complete stranger.’ S.J. Ahn et al.

SWIN BUR NE

SWINBURNE
UNIVERSITY OF
TECHNOLOGY

Swinburne University of Technology Research hours Learning Evaluation

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Research support

Position Lab



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Faculty of Health, Arts and Design

FIGHT ALZHEIMER'S SAVE AUSTRALIA



Evaluation of the Virtual Dementia Experience Report

Prepared for:
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Manager Business Development
Alzheimer's Australia VIC

Prepared by:
Dr. Wendy Double
Liam McGuire
Dr. Sured Bhar

17 June 2018

Evaluation Approach:

- 96 participants
- 40- VDE; 56- Workshop
- 2hrs- same room, facilitator
- 86 Females, 10 males
- Average age 46
- 7 years in aged care
- 54% Australian born- 19 other nationalities

Results

1. Knowledge of Dementia Enabling Environments- VDE participants identified more dementia-friendly changes
2. VDE participants showed a 3 fold increase in Empathy
3. Both groups reflected on care practice and training
But, VDE participants responded from the perspective of a person living with dementia

Virtual Dementia Experience - for Medical and Pharmacy Students



MONASH
University

Article

**Qualitative evaluation of how
a virtual dementia experience
impacts medical and
pharmacy students'
self-reported knowledge
and attitudes towards
people with dementia**

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Dementia

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Impact of a Virtual Dementia Experience on Medical and Pharmacy Students' Knowledge and Attitudes Toward People with Dementia: A Controlled Study

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Mobile Tech

Oculus Gear and Cardboard



2016

ENABLING

EDIETM



EDIE Evaluation

- AAV Training sessions – 180 Participants
 - Enabling EDIE – headset VR which
 - VDE™ – wall-based VR -sensory experience of dementia
 - Standard training — classroom based education
- Procedure
 - Pre-test, post-test, follow up design.
 - Short structured interviews at post test and follow up -Self report questionnaires.
- Does EDIE improve:
 - knowledge of dementia, attitudes towards dementia, empathy and understanding of care needs of people living with dementia?
- Results available shortly

EDIE Awards

Simulation Australasia 2017
Project Innovation Awards

ITAC 2017

Best Aged Care Software
Development and/or deployment



Dementia Friendly Home- 2016



THE DEMENTIA- FRIENDLY HOME

Tap anywhere to begin



Jim the AVATAR 2017



AI AVATAR: Baby X

- https://www.youtube.com/watch?v=__zoM97fauA



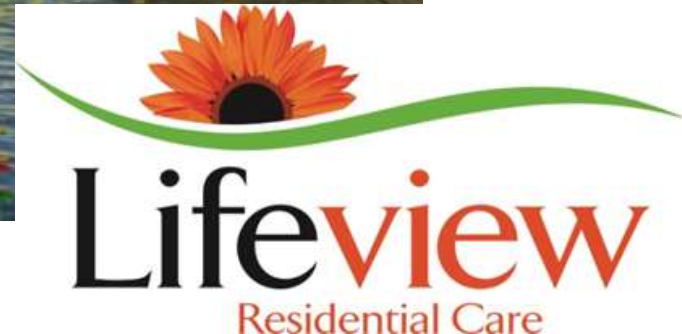


Tech To Engage & Assist People Living with Dementia

2014 - AVED- Applying Virtual Environments for the person living with Dementia



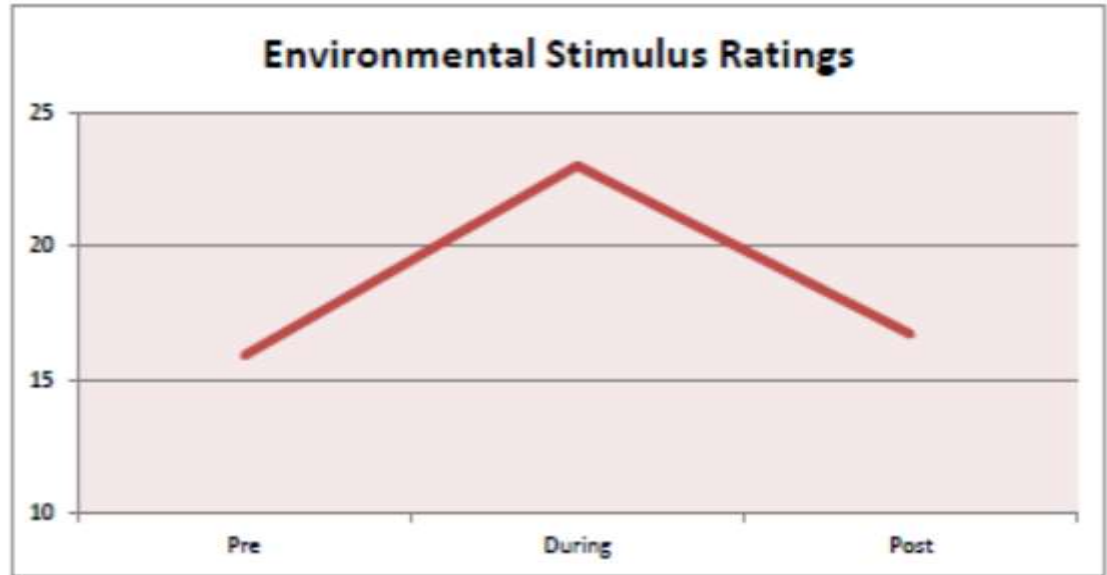
The Virtual Forest - 2016



The Forest — Enviro Stimulus rating

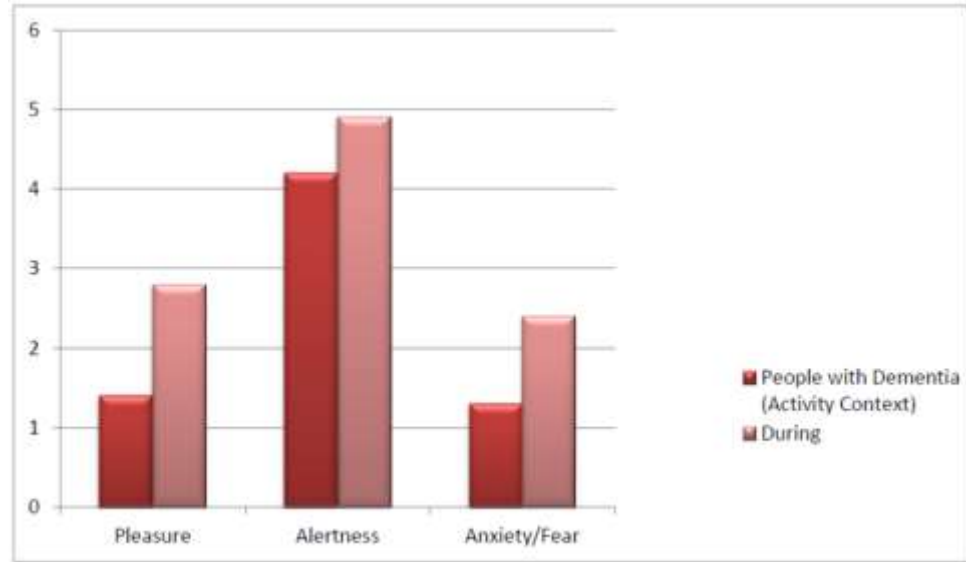
Main Objectives:

- Engagement
- Enjoyment



The Forest – Observed Emotions

- **Pleasure** ↑
- **Alertness** ↑
- **Anxiety** ↑



A Better Visit

Develop a tablet based program designed to ensure family visits are interactive and meaningful for both parties



Co-creation and investigation of social interactions



Augmented Reality

Virtual Reality – an artificial world, mock scenes that mimics real life

Augmented Reality – existing world with layers of computer-generated visual and/or audial information applied in real time

Augmented Reality



Thank you



**dementia
australia™**



dementia.org.au

National Dementia Helpline

1800 100 500



For language assistance
call 131 450