



Dementia Centre

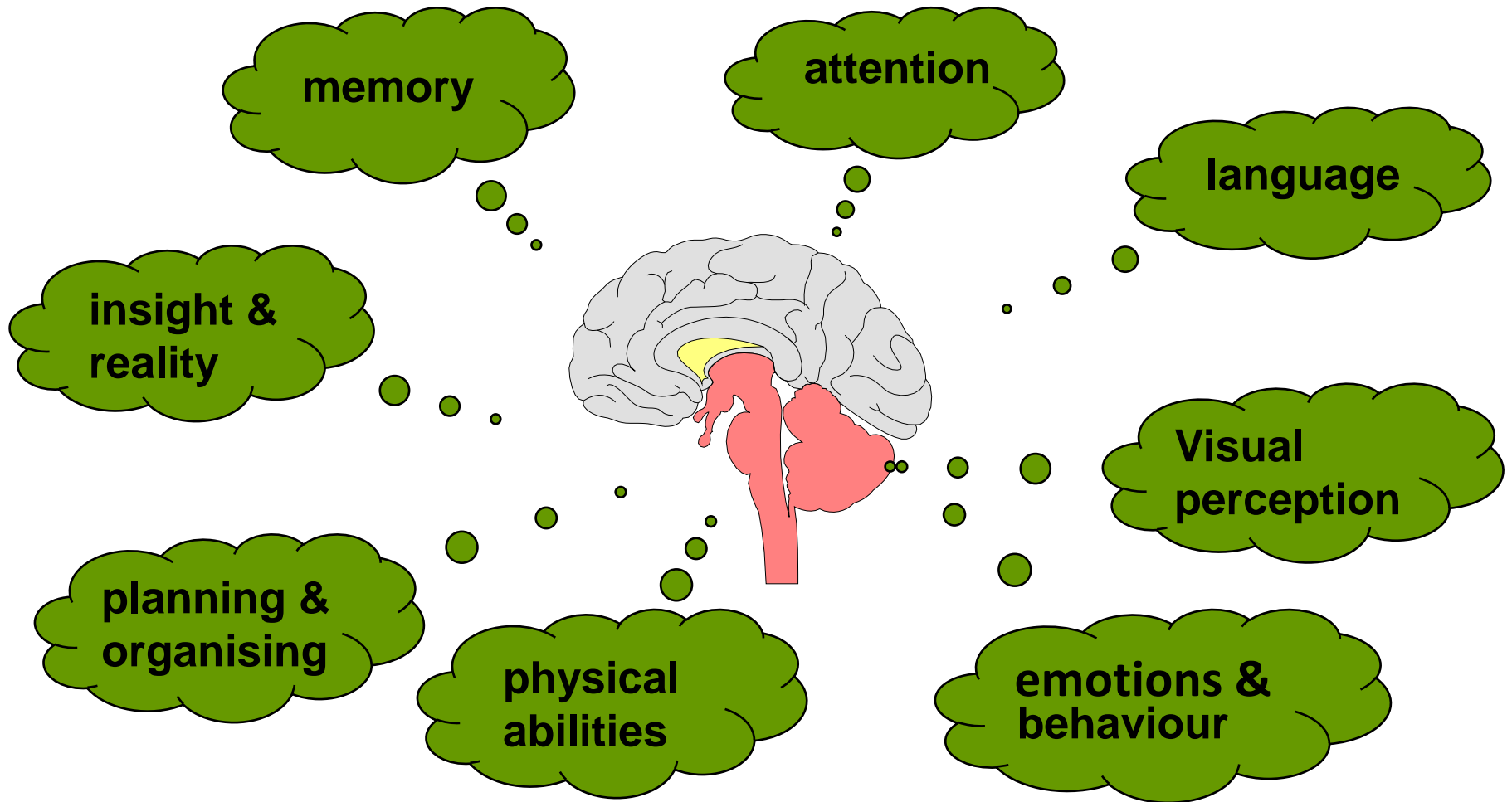
A great place to live:
Designing for older people and
people with dementia



HammondCare

An independent Christian charity

Dementia: Common changes



The impact of ageing

Vision

- Acuity – 75% of people over the age of 70 have problems
- Reduction in visual field
- Downward gaze
- Reduced light & adaptation
- Colour - Contrast + Range

Hearing

- Clutter & auditory distraction
- Discomfort

Physical

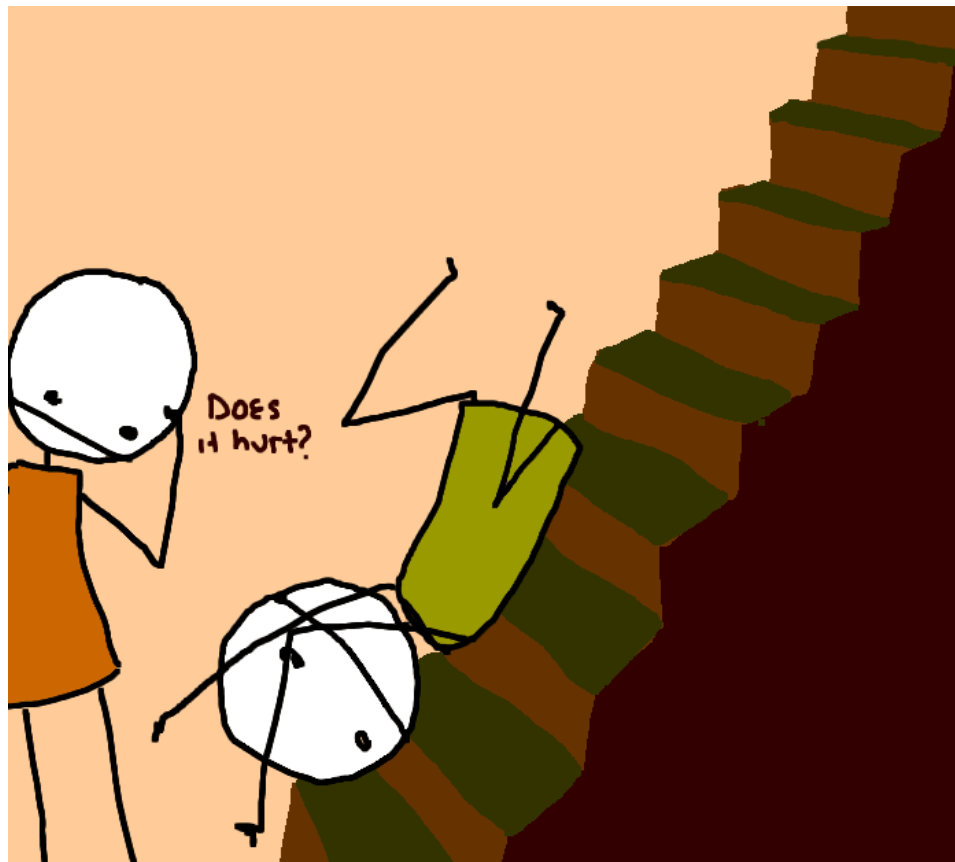
- “Arthritic” conditions
- Reducing endurance
- Reducing sensation in feet
- Reducing lung capacity
- Skin & subcutaneous fat changes

“the disabilities that people experience are a result of the relationship between what’s happening in the brain and their social and built environment.”

Emeritus Professor Mary Marshall

What happens when we get design wrong?

Slips, trips & falls



Getting lost



Overstimulation... agitation... aggression

CartoonChurch.com



I AM FINDING IT DIFFICULT
TO CONCENTRATE BUT I
AM NOT SURE WHY

Boredom... depression



Excess disability



Confusion through Trickery



Confused & unsupported staff



Design Principles

- Maximise independence
- Compensate for disability
- Enhance self esteem and self confidence
- Demonstrate care for staff
- Be orientating and understandable
- Reinforce personal identity
- Welcome relatives and community
- Allow for control of stimuli

(Judd, Marshall & Phippen, 1999)

Design Features

- Small size
- Domestic and home like
- Scope for ordinary activities
- Unobtrusive inclusion of safety features
- Different rooms (*spaces*) for different functions
- A safe outside space
- Single rooms big enough for personal belongings

Small size

- Strong yet conflicting evidence to support this feature

Small number of residents (density)

- 5 – 15 people
- better ADL, cognitive, emotional & social functioning, less behaviours, more opportunity for individualised care and attention

(McAllister & Silverman, 1999; Reimer et al 2004; Torrington, 2006; Kane et al 2007; Smith et al 2010; Van Zadelhoff et al, 2011)

Smaller spaces (scale)

- People in smaller units tend to be less anxious and depressed, have higher levels of social interaction, way finding & behavioural management

(Annerstedt 1997; Kovach et al 1997; Kuhn et al, 2002; Reimer et al 2004; Schwarz et al 2004; Suzuki et al 2008; Marquardt & Schmieg, 2009;)

Design Features

- Small size
- Domestic and home like
- Scope for ordinary activities
- Unobtrusive inclusion of safety features
- Different rooms (*spaces*) for different functions
- A safe outside space
- Single rooms big enough for personal belongings

Domestic and home-like

- Domestic settings have been associated with less aggression, better motor functioning, lower use of tranquilizing drugs and lower levels of anxiety (Annerstedt, 1993,1997)
- Well controlled study showed residents chose to spend time in a domestic themed corridor, compared to an institutional corridor (Cohen-Mansfield and Werner 1998)
- Little evidence that home like environment *in itself* has positive results – it is the use of elements of home that counts!

Design Features

- Small size
- Domestic and home like
- Scope for ordinary activities
- Unobtrusive inclusion of safety features
- Different rooms (*spaces*) for different functions
- A safe outside space
- Single rooms big enough for personal belongings

Rooms for different functions

- Good evidence for a variety of spaces as helps with creating familiar environments that provide good cues
- residents with more privacy, and ability to personalise space have less aggression and anxiety, increased social interaction and decreased depression (Zeisel et al 2003)
- Better independence in ADLs and lower rates of wandering (Hong & Song 2009)
- help way finding and reduce misidentification e.g. residents in other people's rooms (Gibson, 2004)

Design Features

- Small size
- Domestic and home like
- Scope for ordinary activities
- Unobtrusive inclusion of safety features
- Different rooms (*spaces*) for different functions
- A safe outside space
- Single rooms big enough for personal belongings

Safe outside space

- Growing evidence in health literature of access to gardens is therapeutic and healing
- Being outside positively influences vitamin D (Holick 2006) but conflicting evidence for impact on circadian rhythms (ie no better than light boxes) (Calkins et al 2007)
- Decrease in aggression (Mooney & Nicell, 1992) and agitation (Detweller et al 2008)
- Increase in positive effect (Mather et al 1997)
- Some studies demonstrate lack of access to outside increase anxiety agitation and aggression (McMinn et al 2000)

Design Features

- Small size
- Domestic and home like
- Scope for ordinary activities
- Unobtrusive inclusion of safety features
- Different rooms (*spaces*) for different functions
- A safe outside space
- Single rooms big enough for personal belongings

Single rooms big enough for personal belongings

- Good evidence for this feature
- more privacy in rooms that are individualised, lower scores of agitation, anxiety and aggression (Zeisel et al, 2003)
- Reduced psychotic symptoms and Improved sleep (Morgan & Stewart, 1998)
- Reduce un-cooperative behaviour (Low et al 2004)
- Provide a person with opportunity to control levels of stimulation (Morgan & Stewart, 1998)

Design Features

- Good signage and multiple cues where possible
- Use of objects rather than colour for orientation
- Enhance visual access (consider 'aural' access as well)
- Control of stimuli especially noise, glare and excessive temperature

How do you achieve good design?

- Access expert advice based on evidence
 - NOT MYTHS!
- Know the people you are going to care for
- Know your “non-negotiables”
- Know your regulations/building code

How do you achieve good design?

- Plan long to plan well
- Plan in 3 phases:
 - Master site
 - Layout
 - Detailed design – the specifics
- Document rationales
- Learn from what works well and what didn't

Contact us

dementiacentre.com.au

dementiacentre@hammond.com.au
+61 (0)2 8437 7355



Dementia Centre



facebook.com/thedementiacentre



twitter.com/dementia_centre



youtube.com/thedementiacentre