How to make a Sensory Room for people living with dementia

A Guide Book

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Guide book background

This guide is an outcome of the research project *The Multi Sensory Environment (MSE) in dementia care: the role of design* (2013-14) which is funded by the Arts & Humanities Research Council (AHRC). The collaborative project partner is Care UK, one of the largest social and health care providers in the UK.

Contents

Introduction

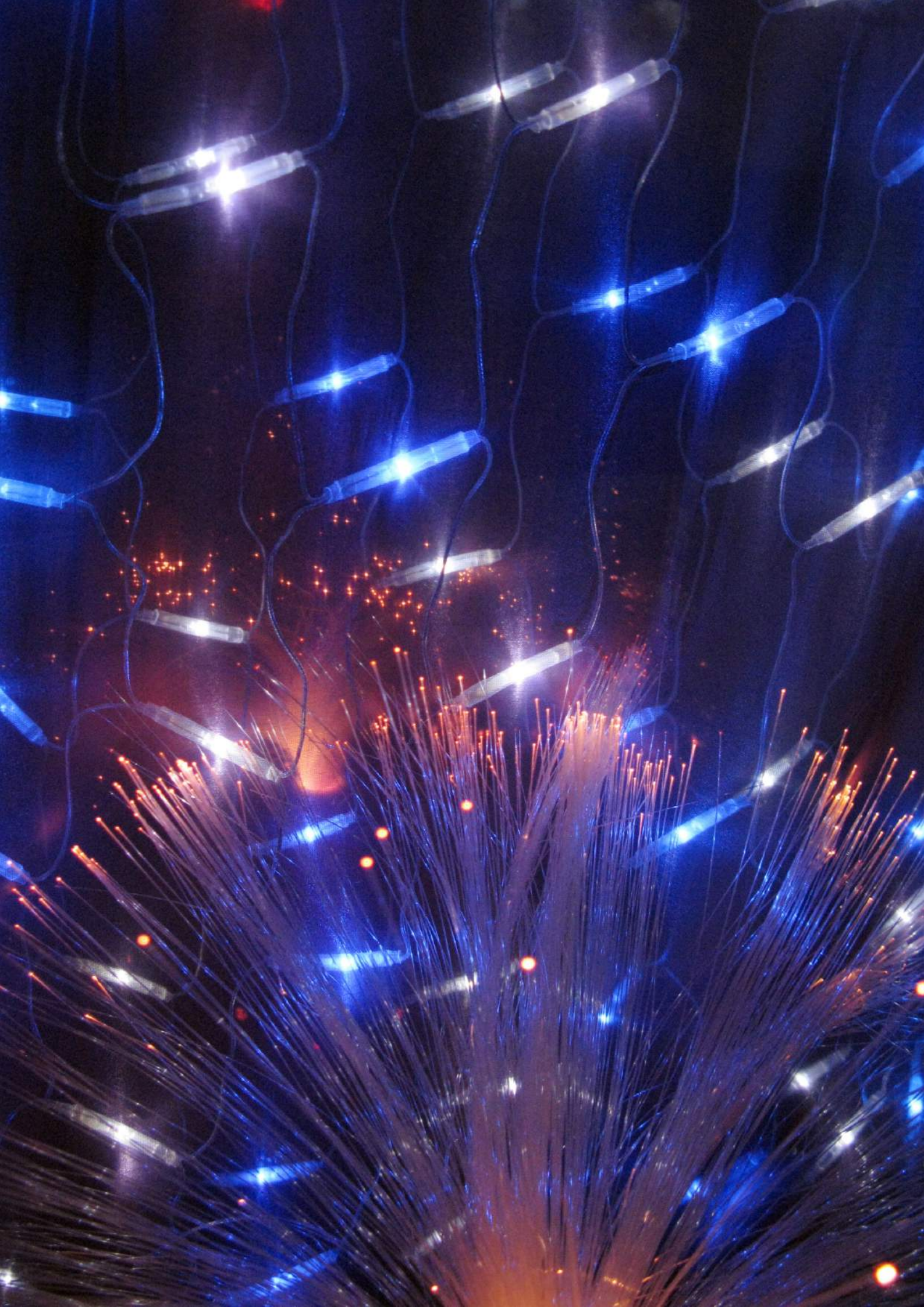
This guide offers advice on best practice regarding the engagement of residents living with dementia in daily activities that support their health and sense of wellbeing.

Our aim is to equip carers, care workers and staff in care homes with ideas and materials in order to provide multi sensory spaces and stimulation appropriate for people living with dementia (in particular mid and late stages). We also offer guidance on the design of sensory spaces to meet the specific needs and preferences of individuals, their families and care homes.

You might find that not all of the suggestions will be suitable for the person you care for, for your home or your particular group of residents. However, we hope that you can draw inspiration from **How to make a Sensory Room for people with dementia - Design Advice** when creating your own multi sensory environment to suit both the needs of your residents and your daily work requirements.

The guide has been developed on the basis of a research study carried out in sixteen care homes in South England in 2013. The study looked into multi sensory facilities and environments currently offered by these care homes. This involved observation of sensory sessions and conversations with staff including managers, activity coordinators and care staff. Examples of good practice and useful suggestions were recorded in order to compile this good practice guide. Comments from many of the care homes are also documented in the section on **What care practitioners said**.

Practicalities & top tips refers to questions we were frequently asked during the study. In addition, at the end of this guide you will find useful further reading including a list of key documents that helped to inform us prior to developing this guide.



People with dementia and their needs

The term ‘dementia’ describes progressive disorders affecting the brain such as Alzheimer’s disease, vascular dementia and dementia with Lewy bodies. These conditions present problems with thinking, mood, behaviour, and the ability to take part in everyday activity and leisure.

If no suitable activities are provided and people living with dementia have nothing to do, they might become increasingly isolated, frustrated, bored and unhappy. This is reflected in people walking around and searching, or becoming agitated and emotional distressed. The absence of activities also affects their ability to maintain everyday skills such as self-care.

Medication such as neuroleptics and other sedatives are often used to control these problems. Although medication achieves short-term results it frequently causes side effects such as drowsiness, which makes the problem worse as it reduces independence. Given these risks, good clinical practice should first exclude the possibility that these problems have a physical cause (e.g. infection or pain) and engage in non-pharmacological approaches before considering medication. Stimulation and activity suitable and appropriate for the individual will help keep the person active and included - which also helps both to maintain function and cognition, and to manage and moderate mood and behaviour. As with medication, activities must be tailored to meet individual needs.

However, choosing the most suitable type of activity for people in the mid to late stages of the disease is challenging. Given those people may not be able to participate in hobbies enjoyed in the past, it may be the sensory side of that activity that needs to be supported.

For example, a woman who enjoyed baking may experience pleasure being able to knead dough and/or to taste the finished product, despite not being able to complete the activity as a whole. Identifying these parts is critical in constructing an activity and an environment that is suitable and desirable for the individual. This form of sensory activity may also provide a level of stimulation, which increases awareness and attention due to the simplicity of the task. Matching the sensory demand of the activity with a well-designed environment will help the person with dementia to take part.

For residents with specific medical requirements a relevant health care professional needs to be consulted before following the advice in this guide.

Getting the activity at the right ability level:

Getting the level of sensory stimulation right requires an understanding that interest and enjoyment might be best achieved by breaking the activity down into several steps (see table below).

Early stage of dementia	Mid-stage of dementia	Late stages of dementia
Activities that focus on the whole task	**Activities that focus on the individual steps of the activity**	**Activities that focus on the sensory part of the activity**
Following a recipe to bake a cake	Kneading dough, Whisking the eggs, Sieving flour	Tasting freshly baked cake, Smell of cake baking
Potting bulbs for spring	Filling flower pot with compost, Pushing bulbs into the compost, Watering the planted bulbs	Rubbing fingers through compost, Sorting bulbs into piles
Making a birthday card	Cutting out template, Matching tissue paper colours, Sticking cut out shapes onto birthday card	Scrunching tissue paper Sorting templates

Table: Breaking activity down into sensory steps

An appropriate assessment such as the *Pool Activity Level (PAL) Instrument for Occupational Profiling (2012)* will help in identifying what level the person with dementia is functioning at and will give guidance on how to structure the sensory activity at the right level.

What is multi sensory stimulation?

Everyone needs sensory stimulation in order to comprehend the world around them. The only way we can get information into our brains is through our senses; sight, sound, touch, taste, smell and movement. If we have too much stimulation we can become easily overwhelmed (e.g. being in a noisy, busy shopping centre for too long). If we have too little we lose interest in our surroundings and lose the ability to do things (e.g. people with no stimulation will often sleep to pass time and miss out on activity). Today it is recognised that deprivation of sensory stimulation and appropriate activity has a devastating impact on our wellbeing and health.

Older people in particular who are limited in their physical and cognitive abilities, need to be offered and helped to engage in activity that provides multi-sensory stimulation, as they may not be able to access this kind of stimulation by themselves. The right level of sensory stimulation helps to relieve stress and boredom; to engage in activity also involves an act of communication that enhances the feeling of comfort and wellbeing.

Stimulation of the senses includes **sight, touch, taste, smell, sound and movement (**proprioception – where our body is in space, and vestibular awareness – how fast we are moving and in what direction).

How much stimulation a person can cope with depends on whether they are a sensory seeker or a sensory avoider. A sensory seeker can cope with higher levels of stimulation with multiple stimuli. If they are not getting enough stimulation they may well create their own - for example, dismantling the TV, going into other people's rooms.

If they are a sensory avoider they may find the environment too stimulating so try and get away from it - for example, trying to leave the building or challenging another resident who is calling out. Therefore a Sensory Room should include a "Sensory Tool Kit" (examples listed in the box on the right) to provide both intense and gentle stimulation.

Examples of sensory stimulation for each of the senses applicable in dementia care (the "Sensory Tool Kit"):

Sight: light, images, colour, material of various optical qualities (e.g. shiny, reflective, transparent)

Touch: materials and objects featuring various surfaces, texture and feel, temperature, breeze, vibration

Taste: drinks (hot or cold), stimulating food/snacks (e.g. citrus fruits, sherbet or peppermint), textured foods (e.g. popcorn and jelly)

Smell: aromatherapy scents and smell pots diffuser, lavender bag, everyday items, various material, food, flowers, animals, skin and fur

Sound: music, sound-scape, environmental themes (birdsong, sea waves), instruments, every day items (cutlery, textiles)

Movement: different seating position, rocking chair, bean bag, laying down, stimulating head and arm movements

The benefits of a Sensory Room in dementia care

The Sensory Room, also called Snoezelen or Multi Sensory Environment (MSE), is a space for enjoying a variety of sensory experiences and where gentle stimulation of the senses (sight, sound, touch, taste, smell and movement) can be provided in a controlled way. Stimulation can be increased or decreased to match the interests and therapeutic needs of the user. Such spaces, and how they are equipped, offer a range of activities that can either be sensory stimulating or calming in their effects.

The concept originated in The Netherlands in the early 1980s. Initially, the MSE was used for leisure activities involving adults with learning disabilities. Nowadays it is also successfully applied in relation to other user groups including people with cognitive and physical impairments such as autism, acquired head injuries, stroke, and those with limitations of movement, vision and/or hearing. The MSE offers the opportunity for an activity that is free from cognitive demands in a space that can be used by care workers as well as family members and informal carers.

The conventional MSE, as provided by industry suppliers, contains a variety of equipment to stimulate the senses such as: bubble columns, solar projector casting themed images, coloured optic fibres (for stimulating sight), CD player/sound system (sound), optic fibres to stroke and plait (touch), aroma distributor (smell), waterbeds and vibrating chairs (movement), equipment featuring switches (interaction).

Figure 2 - 3: Examples of Multi Sensory Environments: the ‘White Room’ at Worcester Snoezelen, UK (top) and the Snoezelen room for people with severe cognitive disabilities in De Hartenberg Centre, Netherlands (below).

Although little is actually known about how or why MSEs / Sensory Rooms work, research studies and anecdotal evidence have shown that people with dementia find them enjoyable and relaxing. After spending time in a Sensory Room, residents in the later stages of dementia show positive changes in mood and behaviour, and also an increase in attention to their surroundings. Staff feel that these improvements help with their relationship with the residents and their daily work.

Though it seems that these environments and activities have the potential to improve a person's abilities and wellbeing, it has also been reported that Sensory Rooms do not always live up to expectations and staff stop using them.

The reason for this might be that often, when setting the space up, little thought is given to the design itself and how this environment is going to be used. As a consequence, such spaces do not always work for people with dementia and their care workers because aesthetics and functionality of the spaces are not satisfying and appropriate.

The deficiencies of Sensory Rooms currently existing in care homes might be:

The equipment and set up is not age appropriate: it looks too alien (rather like the interior of a "space ship" or like a "light show") in a home for older people making it difficult for the residents to connect with.

The imagery and items applied are too childlike and juvenile in their aesthetic.

The space is cluttered with distracting and unnecessary accessories or furniture visual focus therefore missing.

Insufficient multi-sensory stimulation: not enough variety of sensory experience is offered and there is often too much emphasis on visual stimulation with even the risk of visual over-stimulation.

The success of these spaces is very much influenced by what staff think the room is for, how it is understood and consequently used by care workers - not just in times of a resident's distress but also as a means of positively enhancing peoples' lives.

Having a clear assessment procedure and guidelines on how to use the room will help staff and carers using it in an appropriate manner. A number of assessment tools are available to do this including the *The Pool Activity Level (PAL) Instrument for Occupational Profiling (Pool, 2012)* and the *Sensory Profiling Tool* (ROMPA).

What care practitioners have said

"The whole situation of being in a care home might feel very bizarre to some residents. We ask them to share living space with many other people who are not used to living together. It's a matter of trying to normalise the situation."

"For some the Sensory Room is the only activity they like, they wouldn't do anything else such as play ball or puzzles, just want to come in here and relax."

"A better working environment has a huge impact on staff attitude and creates an immediate benefit."

"Raising awareness amongst the staff how much the environment contributes to the person's wellbeing, is really underrated. It's not just about the design. The level of noise and the staff approach needs to be addressed as well."

"The room could be used more often if it was set up properly, if it had other things in the room, different feelings of chairs, things to lay on, things to cuddle – a more integrated space."

"We've got residents who display challenging behaviour because I believe it is too noisy. If we've got many people in the lounge it is overwhelming. If residents get agitated and start shouting staff could bring them to the Sensory Room and calm them down. That's why we want this room."

"It is about providing pleasurable experience for someone who cannot do anything else."

"One resident doesn't communicate and she has her eyes closed all the time. But when she lies down on the water bed, she opens her eyes and watches the colours."

"I have seen long term benefits if the programme is repeated. One client had sensory sessions twice a week and you could see some benefit building up over time (2-3 months). His verbal aggression just diminished."

"The Sensory Room is useful because it enables carers to offer activity and therapy: You can make somebody's day for 15 min."

"The Sensory Room helps with the behaviour of residents and subsequently it becomes easier for staff. Staff is giving some special time to residents, taking them to a special room away from the routine."

"It shouldn't be just the activities team who is using it with the residents, some of the care assistants could very easily use the Sensory Room to good effect, especially when they are doing 1:1 work – and families and relatives."

"More natural things need to be included, such as a glowing artificial fire which will give the residents a more comfortable feeling. You will get a reaction because that's what they know."

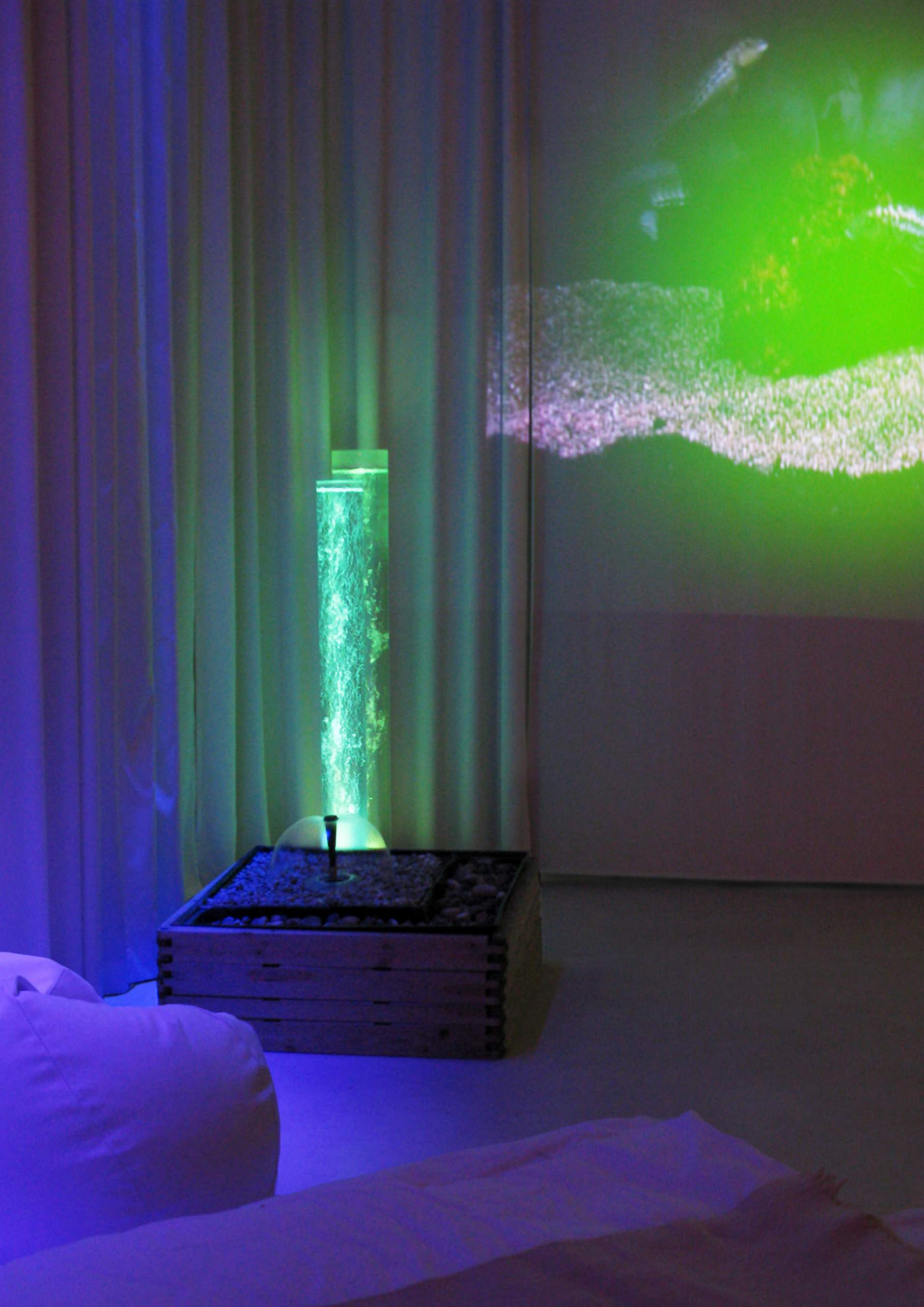
"You shouldn't have to come out for lunch. If people like it there they shouldn't have to break for ordinary functions like lunch. But Sensory Rooms are never set up like that."

"You need to make the residents feel safe and comfortable so that they are able to calm down and open up: it's not mad stimulation you need it's calmness."

"I am struggling with raising the awareness amongst staff regarding what the purpose of a Sensory Room is. Very often I set it up very nicely and come in the next day and find that awkward chairs have been put in and the room is used for storage. It is ok if staff takes breaks here but I don't want to clear out empty cups etc."

"The Sensory Room was wrongly set up: it had a desk in it, was too small. It had a curtain that made it look like a doctor's office. Whoever set it up had no idea what they were doing."

"It needs to be a warm, soft and safe space."



How to make a Sensory Room for people living with dementia - Design Advice

Multi sensory stimulation should not be limited to a particular space, it should be provided throughout the home in common areas (including garden) and also residents' bedrooms.
First of all, the care home should look like a home and less like an institution. A stimulating but comfortable environment can be created through a considered and appropriate use of colour, wall paper, attractive furniture, art work / images, appropriate decoration, sensory corridors, and the introduction of nature through aquarium, pets, water features, plants and small trees.

Figure 5 - 7: Example of a stimulating home environment at Amy Woodgate House, a care home owned and run by Royal Borough of Kingston upon Thames. The interior design and environment was developed by project architect ECD Architects together with the care home manager, members of care home staff, and relatives of residents.

For people with dementia a sensory stimulating environment may facilitate interaction between them and their carer enhancing communication on a verbal and non-verbal level. Increasing sensory awareness also supports information processing and raises awareness of the general environment. Sensory stimulating surroundings help working out where you are by the sensory cues around you, for example: 'It is steamy, I can smell soap, I could be in a bathroom' / 'It is hot, I can smell onions, there are plates and cutlery – it must be lunchtime').

Figure 8: Bringing outside in through life size photographic wallpaper and garden furniture, in Roihuvuori Centre for the Elderly, Helsinki, Finland.

Figure 9 - 10: Example of using colour and tactile material for furniture to make the shared living space more stimulating and interesting at Lady Sarah Cohen House, a nursing home in North London.

However, the provision of a generally stimulating and comfortable environment does not necessarily eliminate the potential need for a specific multi sensory space - whether it is a semi-open area or corner embedded in the general living environment or a multi sensory room where it is possible to close the door for focused activities and sensory sessions.

Where possible a multi sensory space should always be accessible to residents at any time - whether it is a room (door should be open or unlocked) or a sensory area. This ensures that residents can use the space on their own whenever they want to, giving them choice and control. It also makes for a more cost effective approach which does not rely on staff having to take the residents to the space.

The room/area should be set up in such a way that it is safe for the residents to access if unsupervised. Potentially harmful items or expensive equipment should be stored/locked away or secured in such a way that it cannot be dismantled or broken by the residents. Ideally the room/space should be located near the lounge where care workers can easily support the residents using the multi sensory space.

Exploring the environment will always come with an element of risk. Each sensory experience should be assessed to allow each individual to challenge and explore. This level of risk will be different for each resident and it is the team's responsibility to ensure personal autonomy and dignity are maintained whilst high risk exposure is reduced. Using guidelines such as those in the PAL with help reduce risk whilst maintaining an appropriate level of engagement.

When constructing a multi sensory space the following factors should be considered to make it successful and effective:

- **Feeling comfortable and safe**
- **Meaningful and familiar**
- **Multi sensory experience**
- **Stimulation and relaxation**
- **Control and interaction**
- **Age appropriate and usable**

The following sections give ideas and guidance how these features can be achieved through appropriate set-up, and selection of appropriate items, equipment and technology.

It also provides advice on colour and art work suitable for people with dementia. At the end of the advice section an example can be found how a dysfunctional Sensory Room can be transformed - with few interventions - into a multi purpose lounge where residents like to spend their time.

Feeling comfortable and safe

The space you want to create should be an environment where residents feel comfortable, safe and secure. It should be an intimate, contained and quiet space with minimized or zero capacity for disturbance or distraction, neither visually nor through loud noise or other people walking in and out. Providing a soft, warm and cosy atmosphere is vital.

Using low-level sensory stimulation will activate the parasympathetic nervous system: inducing a state of calm. This will help the residents to relax and will reduce stress and anxiety, and subsequently enable them to better focus on activities offered.

Textiles, fabrics and other soft materials:

Soft blankets

- To be put on resident's lap or wrap themselves in.
- To provide soft touch to furniture which has a non-textile surface.

Soft cushions and soft toys

- For residents to touch and cuddle.
- To make seating more comfortable.

Plain textile curtains

- To cover ceiling and walls (from top to bottom) giving the space a softer and warmer feel and look, and softening sound and noise.
- To cover shelves/storage facilities for items and equipment not always in use (DVD/CD player, microwave, instruments, tactile objects).
- To divide a larger room and create a smaller space for more intimate or 1:1 sessions (partitions).

Figure 11: Example for soft, tactile toy/ muff: Twiddle™Muff.

Figure 12 - 15: Examples of the use of textiles and fabrics in Sensory Rooms designed by Sari Hedman in Kontula, Riistavouri and Roihuvuori Centre for the Elderly, Helsinki, Finland
(including figure on next page)

Ensure fire safety

Make sure measures are taken to ensure fire safety in terms of keeping appropriate distance when using textiles and electrical equipment and lights. Today most lighting technology uses ‘cold’ LEDs which prevent the equipment from getting hot. They are safe to use with fabrics. Equipment which need ventilation such as projectors must not be covered / or given enough space to avoid over-heating.

Appropriate Lighting

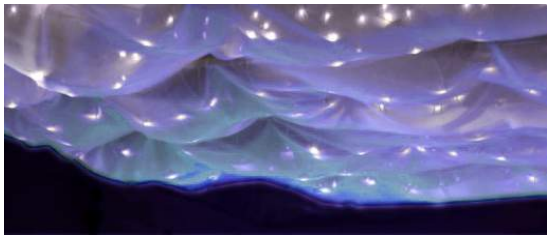


Figure 16 - 19: Wall awash with colour: two examples of flood lighting (top and bottom left); Example of wall washer light - neutral in look (top right); Example of a cloud ceiling with sparkling LED (bottom right).

Soft, indirect light for general lighting:

- No over-head lighting or at least this should be diffused by using sails or translucent textiles covering ceiling.
- Wall mounted lights neutral in look e.g. wall washers.
- Colour washed walls and ceiling - immersing the space in soft, coloured light that can be changed according to user's preferences.
- Creating atmospheric, indirect lighting by using sparkling net behind some fabric for the ceiling or a wall (see image)

Dimmer switch:

- To facilitate soft and slow transition from light to darker environment - to avoid the fear of darkness, start with the main room lights on then slowly darken.
- To control and adjust the level/intensity of light accommodating individual preferences or activities offered: balancing light and dark (if too dark it might be disorientating and uncomfortable for the individual).

Daylight

- Needs to be softened and filtered through blinds or textiles.
- Make use of natural daylight if available instead of artificial light only – important to achieve a balance between artificial and daylight if possible.
- Depending on the location of the room and window (e.g. facing South) blackout blinds might need to be installed for controlling the level of day light – to be combined with translucent plain curtains or blinds to filter incoming light (see drawing).
- Blinds and curtains should properly cover the window to avoid uncontrolled and disturbing 'light spillage' (as seen in image).

Figure 20: Example of what should be avoided - using printed curtains which allow light to spill through.

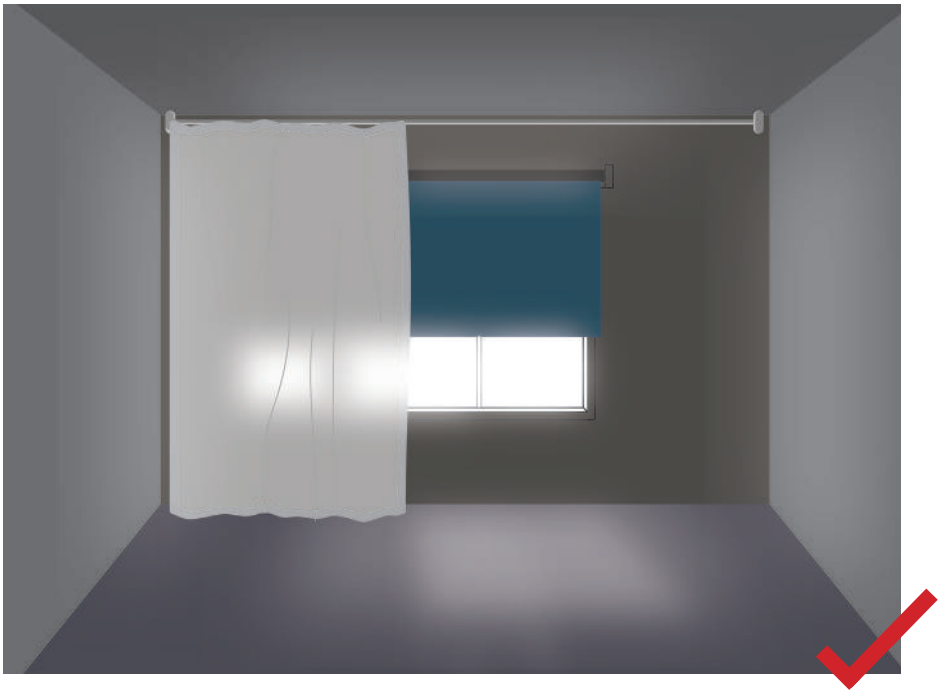


Figure 21: Illustration of the use of blinds combined with translucent curtain allowing the option to let filtered daylight in.

Selective stimulating lights creating visual focus points

- Coloured and **slowly** colour changing, free standing, hanging or wall mounted lights within easy view of the user (e.g. fibre optic curtain, bubble wall, illuminated balls or cubes, LED net or chain).
- Illuminated, colour changing, hand-held items/equipment (e.g. fibre optic strands, glowing balls or other shapes, fibre optic lamp).
- Projections (video projector, star projector)

Figure 22 - 24 : Fibre optic lamp to be held by user (top left); example of mounted bubble wall by TFH – quieter and safer alternative to free standing bubble tube, as it will not fall over (below left); fibre optic strands (right).

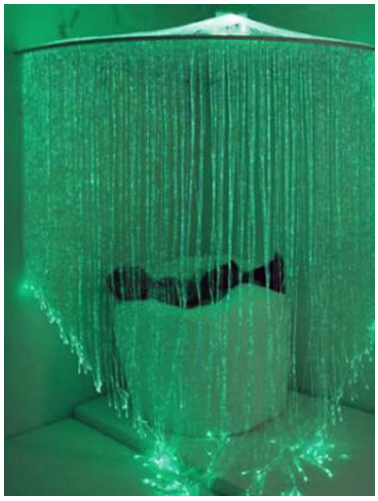


Figure 25 - 26: Shimmering fibre optic curtains create an interesting spatial feature (left: moveable curtain at Worcester Snoezelen's White Room) or even semi enclosed space if applied with a curved comb (ROMPA) (right).

Figure 27 - 28: Two views of colour changing lamp with matt translucent surface (left); glowing cube changing colour to be placed on floor (right).

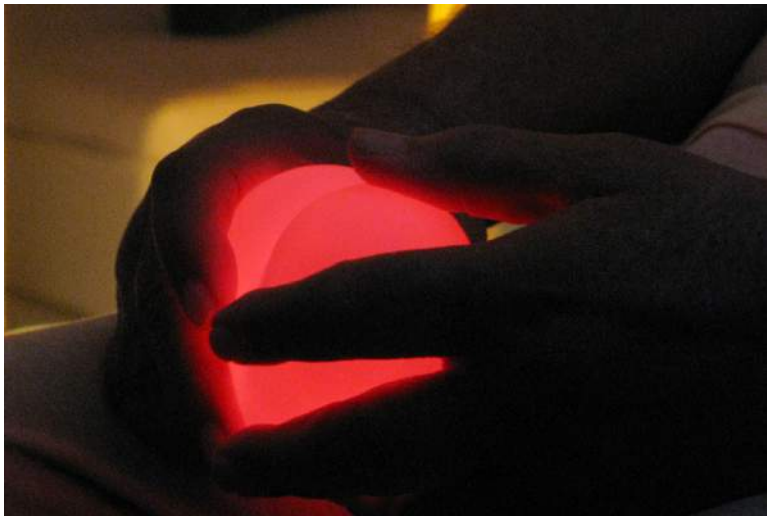


Figure 29: Glowing heart – example of an illuminated, programmable, tactile item to be held by user.

Avoid

Very dark spaces as residents might fear darkness or become confused if they cannot see very well. The room should only be as dark as necessary for facilitating stimulation through selective lights.

Glares and flickering lights.

Lights and reflections moving around the room on surfaces, walls and floor (e.g. reflection created by moving disco/glitter ball) or irritating shadows as these can be misinterpreted as insects or little animals. This may be confusing or frightening for people with dementia.

Over stimulation through too many selective stimulating items / lights: use only two at the same time.

Decorative lights. The space should be kept visually neutral and calm to allow flexibility in terms of colour and intensity of light. Such decorative lights may be useful in other parts of the home such as corridors or lounges but not in the Sensory Room.

Figure 30 - 31: Examples of decorative lights which should be avoided in the Sensory Room.

Contact with nature

Bring the feeling of outdoors inside and include natural elements:

- Water features
- Suitable plants, e.g. edible ones such as herbs, or just dry twigs
- Stones, shells, pine cones
- Salt lamp: salt rock of natural shape and texture, illuminated from inside
- Make use of access to garden if be possible

Figure 32 - 33: Plants and twigs to introduce nature into the Sensory Room in Roihuvuori Centre for the Elderly, Helsinki, Finland (far left and below)
Figure 34: Example of a salt lamp of natural shape and texture.

Easy access

No stark contrast between multi sensory room and rest of home:

- Create comfortable atmosphere and place familiar items in the sensory room,
- Avoid the room looking like a cold ‘light show’ or ‘space ship’ which might be confusing for older people with dementia (see also advice under “meaningful and familiar”)
- Place some multi sensory equipment/items (e.g. bubble wall, tactile items) into general living areas such as lounge or corridors.

Sensory clues directing residents to the sensory space:

- Place more sensory art work particularly around the area leading to the sensory room (see also advice under “Art work”)
- Have music playing in the room to attract people to space.

Gradual transition from light environment of the lounge or corridor:

- See advice under above section “Appropriate lighting”

Visual contact with rest of home

- Although there should be minimal distractions it is often helpful to retain some visual contact with the rest of the home so the individual does not feel isolated.
- Through an open door covered with a muslin curtain, chain curtain or optic fibre curtain which is non-interfering.

Figure 35: Fibre optic curtain at the entrance to the Sensory Room at Kontula Centre for the Elderly, Helsinki, Finland

Over-stimulation

Provide a visually calm space with a visual focus:

- De-clutter the space, remove unnecessary decoration,
- Store away all items and equipment not used for the session which could be visually disturbing (see section “Practicalities/storage” in this guide)

Limit visually stimulating equipment:

- ‘Less is more’ - provide visual focus by using only a few stimulating items at the same time,
- People who are sensitive to stimulation may find it overwhelming if too much equipment is on at the same time.

Eliminate disturbing noise:

- Use quiet equipment: lighting equipment or projectors can sometimes be very noisy (sometimes to the extent that the music or sounds played cannot be heard) because of the need of powerful ventilators – technology employing ‘cold’ LEDs is quieter as they do not need as much ventilation.

Figure 36: Example of a visually over-stimulating room.

To help maintain focus on an activity the space should not be filled or cluttered with too many sensory items and /or other objects that are likely to over-stimulate and distract attention. People with dementia find it difficult to filter relevant stimulation when there is competing stimuli.

Comfortable furniture

Soft, tactile surfaces/material:

- Soft fabric - impervious to fluids - for upholstery (available e.g. from *Panaz upholsteries* or *Pineapple furniture*).
- Blankets or sheep skin to cover sofas and armchairs if made of vinyl.

Comfortable and relaxing positions:

- Offer foot rests (e.g. stools) so feet and legs can be comfortably placed in higher position.
- Opportunities for lying down (e.g. couch, floor matt).
- Rocking chairs - the linear movement of rocking back and forth reduces arousal and helps the person to relax.

Serving snacks and drinks

- To enhance the sense of comfort and ‘break the ice’; to prepare users to relax or engage (see also information included in section on “Multi sensory experience”)

Pleasant climate

Comfortable room temperature:

- A fan might be necessary, particularly in Summer, as equipment and people’s bodies generate heat.

Good air quality and sufficient oxygen level:

- Regular airing of the room: open window or apply air conditioning unit.

Meaningful and familiar

Apart from stimulating the senses your Sensory Room / multi sensory space should be equipped and designed in such a way that it can provide familiar, personal and appropriate experiences that are relevant to the resident's life and stage of dementia. Everyday objects, e.g. set of keys or a little bell, and/or tailor-made objects, e.g. textile books or sensory cushions, can trigger off memories or start a conversation.

The design should create opportunities for exploring and engaging in appropriate activity giving the person a sense of purpose. Making the room feel familiar will help with transition into the room and residents will be more motivated to go into the space and join in the sensory activities.

Appropriate use of technology:

Technology needs to be multi-sensory and age appropriate.

- This includes the way the equipment is presented to a person with dementia.
- The equipment should be accessible, appropriate and offer a range of possibilities for engagement. A balance is needed between hi-tech and low-tech equipment – the choice between high-tech and low-tech may be more about accessibility and preference.
- Consider what are individual likes and dislikes as a degree of personalisation helps to meet each individual person's needs ("bespoke high-tech"). Low-tech options may help with orientation; for example, familiar items that also have a strong sensory component. High-tech options may help with people with more severe dementia, as the stimulus is more intense and easier to detect.

There should always be a mix of natural things and technology.

- Modern technical sensory equipment can be made more accessible, less technical and easier to connect with when combined with something natural and familiar, e.g. combining modern lights with textiles such as sheer fabrics or nature such as dry twigs.

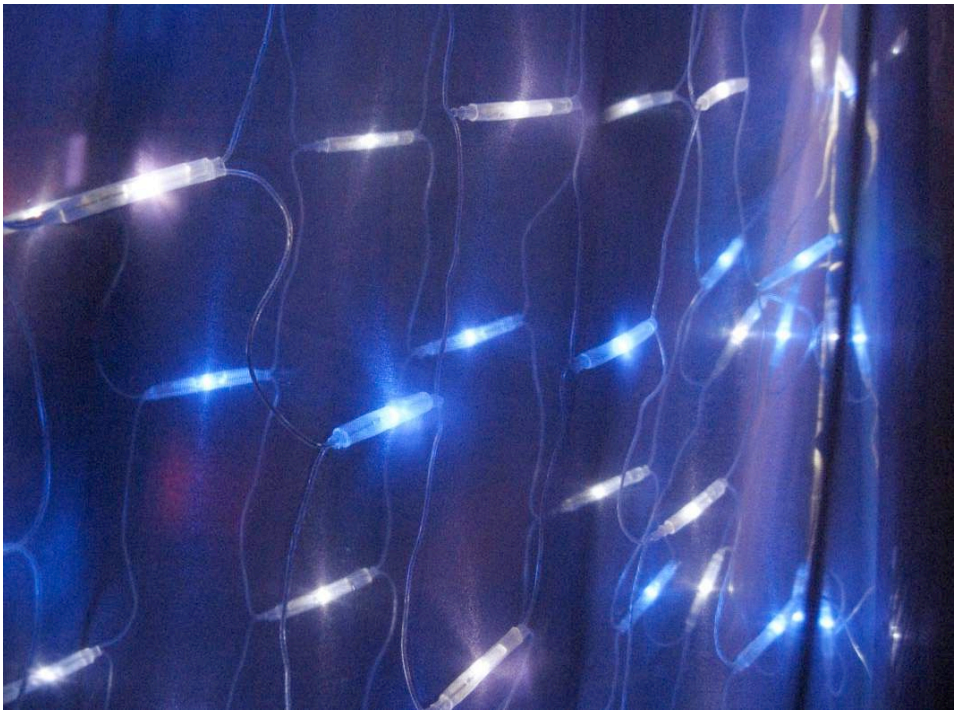


Figure 37: Sheer textiles covering LED lights adding a tactile feel as well as diffusing and softening the light.

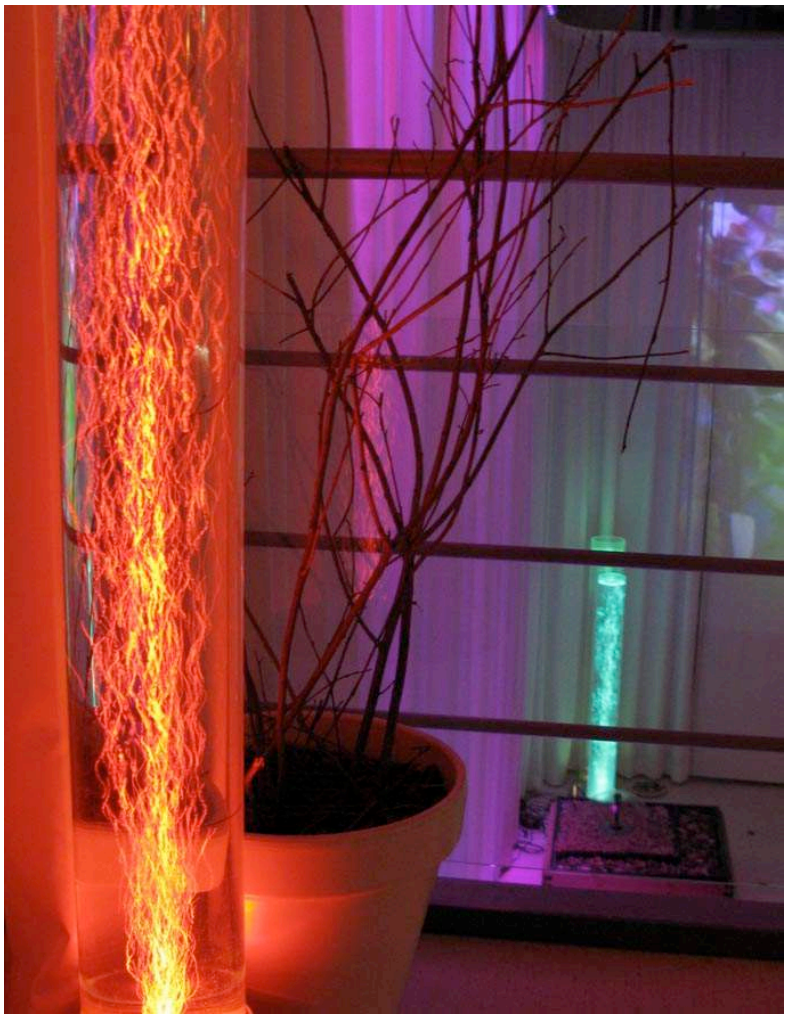


Figure 38: Twigs next to a bubble tube makes the equipment appear more natural and accessible – as seen Riistavouri Centre for the Elderly at Helsinki, Finland.

A mix of the new and the familiar

Everyday and/or old items and familiar imagery

- Projecting familiar imagery of a glowing fire, nature, landscape, children or old photographs with street scenes, using DVD player and data projector.
- Everyday objects and tools (e.g. from the kitchen for women or from the workshop for men), old clothes (e.g. an old wedding dress, hats) with familiar and interesting tactile features.
- Objects from nature e.g. shells, conquers, fur, fruits and vegetables.

Playing old songs and music

- Attracting residents to the room – music can then change slowly into more modern calming music and sound-scapes once session has started (if necessary).

Figure 39 - 40: Hats and bags are rich in tactile and visual qualities. Such items can be placed throughout the home in the general living areas - in easy reach for residents and also in a familiar place such as wardrobe or coat hooks.

Offering appropriate tactile stimulation

- Tactile objects which have a relevance to the individual encourage touch and other forms of engagement; whereas, items presented in an abstract manner - without context - tend to be less effective.

Figure 41: The German Shepard fake fur – padded, framed and placed in the corridor – has been extremely successful with residents in Highbury New Park care home in North London. The item was bought at the local market.

Figure 42: In these examples tactile stimulation is offered in a way that makes it more difficult for the individual to understand and connect with. Also there is too much going on around the tactile pieces making orientation and focus very difficult.

Preparing the room for individual sensory session

- Having a few familiar, maybe personal items on display - this will help the individual to settle and relax before engaging in activities.
- Setting up the room in advance according to personal preferences or the residents' level of dementia.

Cultural relevance

- Cultural and ethnic background of the individual needs to be considered - this will help the person settle and provide a reference point for reminiscence, habits and routines.

Multi sensory experience

All the senses need to be addressed! This includes **sight, touch, sound, smell, taste and movement**. Our study has shown that the visual sense is often overvalued, in some cases even over-stimulated. In contrast, the provision of tactile stimuli is limited as there is not enough variety of material and objects to touch and explore. Similarly there is often not enough stimulation of hearing, smell and taste. Stimulating the vestibular (moving in space, orientation and balance) and kinaesthetic sense (position and movement of arms and legs) is mostly neglected.

A good solution here is to use equipment, items and material that are multi sensory in design. For example, music instruments or scented cushions made from various materials provide a wider opportunity to explore visual, tactile, audio and olfactory (smell) stimulation and encourage movement. Many kinds of food are also multi sensory such as fruits, colourful cake or sorbet providing not just taste but also texture and colour.

Meaningful multi sensory and reminiscent experiences can be created by combining various stimuli addressing different senses under a particular theme. For example a walk on the coast: the sound of waves and seagulls, a breeze, a video showing the sea and the beach, sand and some shells to touch. This can create a virtual environment bringing the experience of the seaside indoors.

Sight

Light and colour

- A selection of 1-3 gently animated lights provided by equipment such as bubble walls, programmable lights, fibre optics, LED nets, star/cosmos laser projectors, hand held illuminated objects (more information and images under “Comfort and feeling safe” and “Meaningful and familiar”)
- Kaleidoscope, crystal ball, crystals – such objects can also be used in day light.
- Bright objects and stained glass that can be placed in the window reflecting the rays of the sun (can be used throughout the home)

Avoid

Overly bright lights and lights that move or flash quickly.
Such lights can cause confusion and over-stimulation.

Too many different stimulating lights at the same time - a visual focus needs to be provided.

Films and Videos

- A data/home cinema projector connected to a DVD player could be used rather then one of the traditional Sensory Room projectors with rotating image wheels as it offers more flexibility in terms of what can be shown (a range of different images and videos). Personal video recordings could also be shown to facilitate reminiscence. The projector can be permanently installed on the ceiling and should feature low noise and low heat.
- Old films and feature movies with simpler plots could be used to help prompt memories. Other sensory components could be used in conjunction with the movie to help enrich the sensory experience e.g. provision of stuffed toys such as a cat when the film features a cat, actual dancing when the actors are dancing, snacks replicating foods being shown on the film.
- Films showing natural themes and simple life scenes such as playing children accompanied with familiar music or music written specifically for the movie – contain no or minimal narration, do not require undivided attention.
- Scenes from nature can include: landscapes, water and sea, forests, flowers, fish swimming underwater, animals, and glowing fire.
- Films featuring abstract, calming, non-memory provoking images (e.g. slowly animated shapes and colours - no negative memories or thoughts can be triggered) and music promoting relaxation.

Figure 43: Examples of films with natural themes – stills from “Meadow” (left) and “Rhossili”, two 60 min films by CalmFilms (calmfilms.com).

Projections on fabric

- Projections - in particular more abstract imagery - can become more interesting and stimulating if projected onto textiles, either a single curtain or layers of transparent fabric such a muslin, adding a tactile and spatial element to the projected image.
- The image is duplicated when projected onto several layers as it is caught on each layer separately.

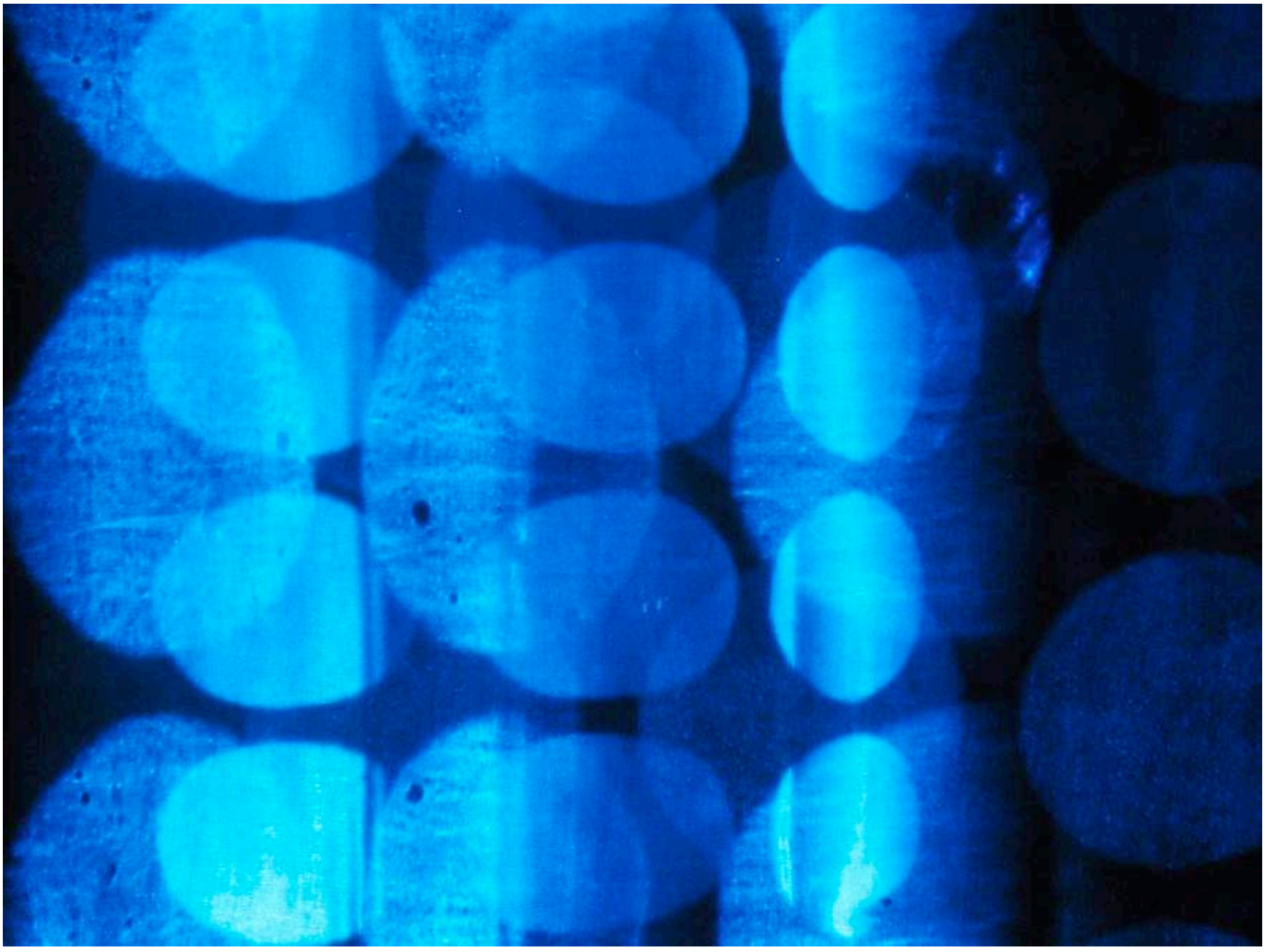


Figure 44: Projection onto fabric transforms the image into a more spatial and tactile experience.

Material of different optical qualities catching the light in different ways

- Shiny textiles, e.g. satin, velvet, and other glossy surfaces, e.g. foils.
- Transparent and sheer textiles, lace – creating interesting effects and colour mix when layered.
- Wooden items with carved/3D texture, latticework, meshes.

Figure 45: Cushions with covers made from visually interesting textiles such as velvet and satin with simple prints.

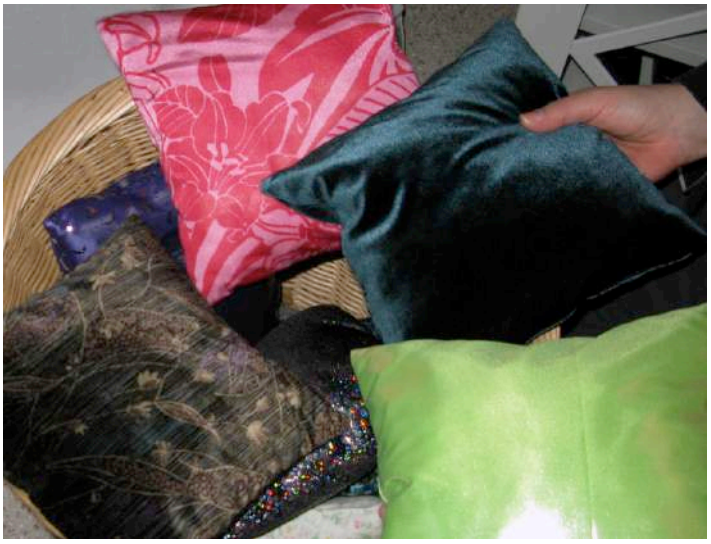
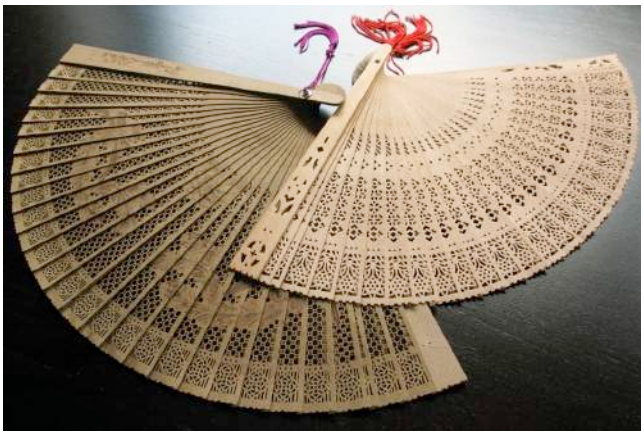
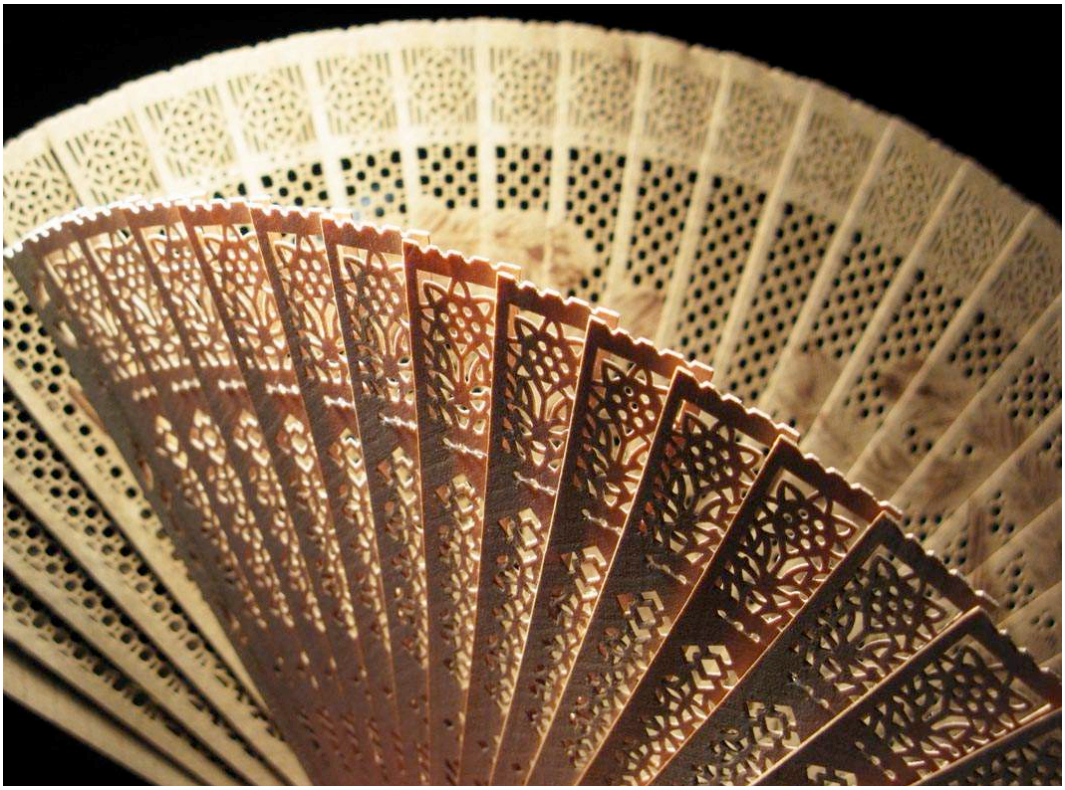


Figure 46 - 47: Fans from fragrant sandalwood with laser cut decoration that reminds of lace or latticework – playing with these fans is stimulating vision, touch, smell, hearing and movement. These fans can be easily purchased via the internet at low cost.





Food and natural things found outdoors

- Colourful fruits and vegetables, cakes.
- Flowers, colourful fishes.
- Shells, pine cone, etc (more below under “Touch”)

Motion

- Blowing bubbles
- Objects that move in the wind, e.g. wind chimes, ribbons or curtains from light weight and sheer fabric.
- Films with slow moving animated shapes and colours.

Touch

Active tactile stimulation: objects, items and equipment offering a variety of tactile experiences such as:

- Different material/texture and surface quality: textured/ smooth, soft/hard, etc
- Different shapes
- Everyday familiar things
- Moving objects
- Temperature: warm or cold
- Climate: breeze
- Wet, dry, sticky

Passive tactile stimulation: providing massage (hand, feet, neck, head) and foot bath in combination with scent, e.g. massage oils such lavender and melissa.

Natural objects and everyday things with interesting reminiscent surface qualities

- Shells, conkers, feathers, leaves, stones, dried plants, wood
- Sand, seeds or dried beans to run fingers through
- Polished wood
- Things made of leather like leather balls
- Things from the kitchen or workshop safe to use
- Set of keys, little bells
- Ceramic and stone tiles
- Sand paper
- Variety of textile pieces and fabrics samples, e.g. satin, silk, corduroy, fleece, denim
- Crocheted blankets, soft cushions, soft toys
- Sheep skin and fur

Most of these objects feature multi sensory qualities (tactile, smell, visual, sound) and, if safe to use and not too fragile, can be placed in rummaging boxes or baskets throughout the home.

Figure 48 - 49: Shells, stones, bark and dried plants providing not only tactile but also visual and reminiscent stimulation.

Keep smaller, 'bite-sized' objects out of reach as some people in later stages of dementia might put things in their mouth.

Sensory cushions and blankets, sensory books – made from various textile material, with zips, ribbons, buttons, pockets

- Can be purchased or self-made – although they are like toys they should be age-appropriate in their aesthetic in terms of colours, material and images applied, **NOT** patronising or child like – see examples below.
- Tailored to the individual's preferences making the experience of a multi-sensory session more personal and familiar.
- Sensory blankets with pockets: some people just like to hold the corner and some people like to put their hands in the pockets, hide things inside them.
- Tailored to gender of advantage: for women more floral motifs and brighter colours, for men toned down, darker colours.

Figure 50: Examples of sensory cushion especially designed for people with dementia stimulating vision, touch, hearing and movement - distributed by PSS, a charity that provides care, health and community services in UK.

Figure 51: Sensory cushions at Lady Sarah Cohen House nursing home in North London: the colouring is harmonious and sophisticated yet interesting and stimulating – very successful and age-appropriate.

Sensory armchair covers and pockets

- Comfortable and calming to allow residents to self-soothe without drawing attention to themselves.
- Provides instant sensory and reminiscent stimulation.
- Can be self-made - similar to sensory cushions.
- Deep pockets with plenty of space to hide objects, images, etc.

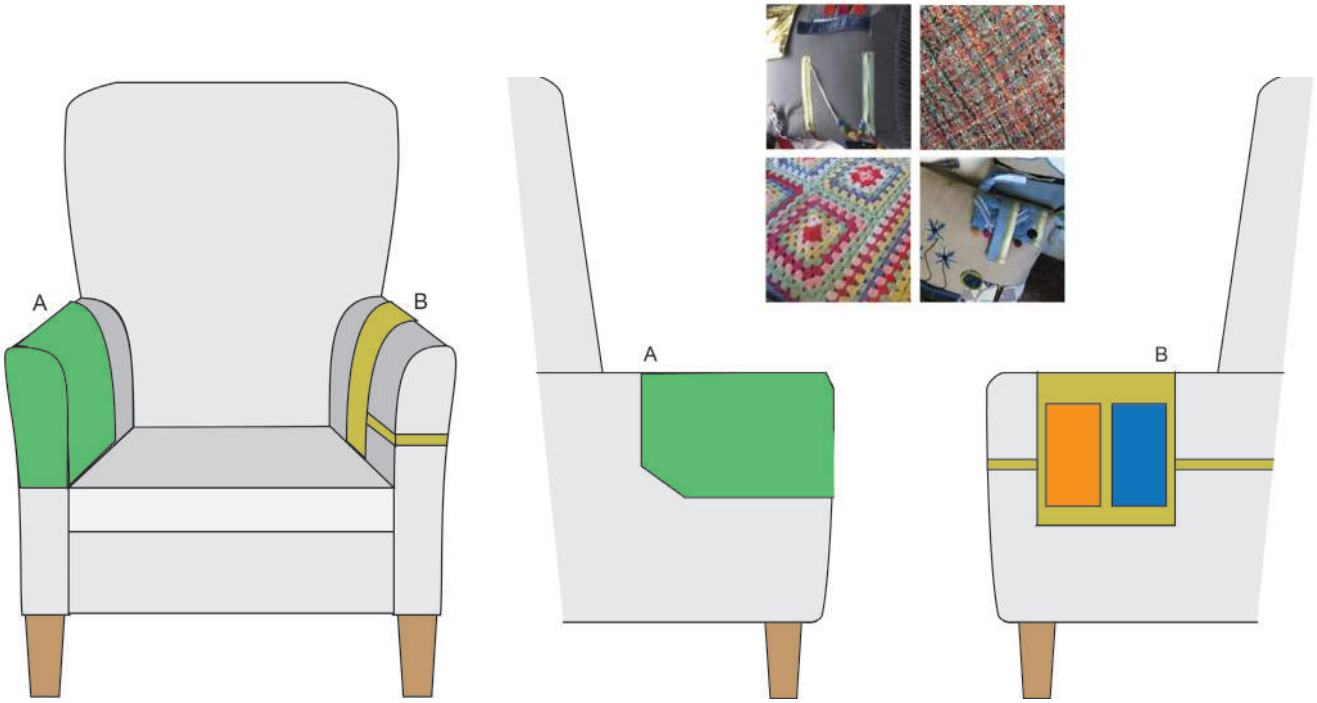


Figure 52: Similarly to sensory cushions, sensory armchair covers can have buttons and ribbons attached, or feature a patchwork of various textile materials and techniques such as crochet and knitting.

Tactile activities

- Playing with different media: sand, water, jelly, flour, fragrant play dough.
- Making art work: the process of making is multi sensory and can involve finger-painting, tearing and crunching paper, sticking, sprinkling, mixing etc.

Figure 53: Example of art work where the process of making is a multi sensory experience: oil, beads, sequins and buttons are mixed on foil and then sealed (seen at Worcester Snoezelen)

Small vibrating items: cushions or tubes

- Stimulate interaction and learning.
- Can provide fun experience and social interaction when used in group or 1:1 session.
- Should be switchable to give the user control when to start and end vibration.

Figure 54: Vibrating tube and cushion, supplied by e.g. ROMPA.

Avoid

Vibrating furniture, as it is less suitable for people with dementia as they have difficulties understanding what is happening and could become distressed.

Figure 55: Wheat cushions again can be stimulating on a multi sensory level providing the experience of warmth, stimulating feel, visual and tactile stimuli if decorated with interesting prints or embroidery, and smell if scented.

Experiencing different temperatures: warm and cold

- Applying wheat cushion or cherry stone pillows which can be either heated in a microwave or chilled in the freezer.
- Providing hot water bottles wrapped in soft and tactile cover.
- Footbath
- Serving cold or hot drinks, ice cream or warm snacks.

Climate

This can be considered as part of thermoregulation as well as orientation, in essence another sense. It helps us to orientate to our environment and can stimulate reminiscence which can lead to increased wellbeing and increased awareness. For example, a warm room with sounds of the seashore might suggest being on holiday.

Sound

Auditory stimulation is very effective for mood enhancement, relaxation, and cognition. It includes a wide range of sounds, ranging from natural sound (e.g. birdsong, waterfall, urban environment) to generated sound such as music. Both can be enjoyed life or played back through a sound system.

A multi sensory space should provide both, a good sound system with CD player as well as items that produce life sounds such as musical instruments or water features.

Relaxation

Natural sounds (e.g. wind chimes) and recordings of ambient sound-scape such as rain fall, wind blowing through trees, ocean waves, or calm ‘new age’ music are helpful for relaxation.

Stimulation

Classic music, music from a specific era or a resident’s personal choice to stimulate cognition and reminiscence.

Played in the background while other activities are going on can improve mood, and even memory, and helps the resident to engage.

Musical Instruments

Auditory stimulation does not have to be passive only. Musical instruments, particularly percussion instruments, are very effective in encouraging active participation, social interaction and even physical activity and movement.

They also can provide stimulation on a multi sensory and reminiscent level if beautifully embellished (e.g. rain sticks) or of interesting shape, texture and material (e.g. bells, violin).

Sing-along and rhythm sessions

Percussion instruments can also be found or easily made from things around the house (water bottle filled with dry rice, boxes can be drums etc) and be used for stimulating sing-along and rhythm sessions.

Figure 56 - 58: Examples of rainsticks - hollow tubes partially filled with small pebbles or beans that have small pins or thorns arranged on the inside. When the stick is upended, the pebbles fall to the other end of the tube, making a sound reminiscent of rain falling. If made of transparent material one can see the movements of the beads. Rainsticks can easily be self-made and detailed instructions can be found on the internet.

Figure 59: When running the stick from the frog's mouth over the knuckles at his back a sound similar to a croaking frog is created stimulating hearing and memory.

Figure 60: The music box stimulates hearing, touch, vision and movement. Make sure the look and decoration of the box is age-appropriate and not too juvenile.

Figure 61: An Ocean Drum encourages hand and arm movement. Beads inside roll over the bottom like water rolling over the shore. Different speeds produce different sounds. Stopping and starting suddenly creates crashing wave sounds.

Figure 62- 63: Beautifully decorated musical instruments stimulating cognition and active participation.

Smell

Olfactory stimulation can be facilitated through a wide range of actions and activities. Smell can be actively stimulated through a bespoke smelling session or aromatherapy session, or just be in the background providing a pleasant and fresh atmosphere when entering the sensory space.

Bespoke smelling sessions

- Preparing smell pots: small box with lid and some cotton wool, filled with spices such as cloves or cinnamon, herbs such as mint leaves, lemon juice or zest, etc.
- Important: knowing about individual preferences of residents and past experiences to tailor smelling session towards it.

Scented room/space

Aroma diffusers and blends of essential oils (aromatherapy) are an effective way of creating a general 'background' smell in preparation for a sensory session or to differentiate the area or room from the rest of the home.

- Lavender for calming and relaxation
- Lemon and mint for refreshing, uplifting and stimulation
- Bergamot for balancing and calming

Hand massage

- Using scented massage oils, such as lavender.
- Care does need to be taken when applying oils and lotions to the skin. Check for any adverse reactions before proceeding

Scented bags

- Small fragrant bags attached to blankets or cushions or even placed in small 'handbags' or pockets attached to armchairs.

Figure 64: Small scented bags with colourful bobbles placed inside another bag to be explored.

The smell of everyday things

- Wood, sandalwood, silk, sheep skin
- Fresh herbs
- Fruits – in particular citrus fruits when peeled and cut
- Chocolate, coffee
- Peppermint tea
- Spices
- Animals

Continued throughout the home and the day

Stimulating smell should not be limited to the sensory area/ space but should be applied throughout the home and the whole day.

- Using scented soaps and lotions for personal care.
- At meal times odour of fresh bread or cookies filling the house.
- Fragrant items placed in the lounge (e.g. fragrant flowers if possible)

Taste

The sense of taste is often under-used as a sensory component of a multi sensory experience, however, it is a powerful way of understanding what is happening around us. Taste can provoke memories as well as emotions. Taste is also highly personal so it needs to be ensured that staff have a clear understanding of likes and dislikes of the individual.

Texture is also an element that provokes response. For example, soft creamy textures can be soothing (sucking chocolate). Residents may also have strong responses to certain textures so, again, care needs to be taken. Examples of different tastes and textures are given below.

Figure 65: Examples of treats that can be served in the Sensory Room for gustatory stimulation.

Taste

- Drinks with unusual flavours, e.g. elderflower cordial
- Treats: chocolate, sherbet, ice-cream
- Peppermint
- Marmite

Ensure you have a range of salt, sweet, sour, bitter and umami/savoury.

Texture

- Crisps and raw vegetables
- Yoghurt, jelly
- Prawn crackers, pop corn

Ensure you have a range of different textures such as crunchy, soft, melting.

Stimulating the sense of taste is not about eating and feeding. The goal is to provide stimulation: small tasters and snacks for comfort and enjoyment to encourage residents to respond and reminisce. Offer something that people would see as a luxury or a treat, not the everyday taste. A sensory session can also be used to encourage residents to have more fluids within this time.

Care needs to be taken with participants who have specific dietary needs or swallowing difficulties. A health care professional might need to be consulted for further advice.

Movement (vestibular and kinaesthetic sense)

The vestibular sense is the sense that provides us with information about our movement in space. It is responsible for spatial orientation and balance - for creating an awareness of the location of our heads and bodies in relation to the ground.

The kinaesthetic sense (also called ‘proprioception’) is the sense of the position and movement of our arms and legs in relation to one another. It tells us where our body parts are located at that moment, and how much strength we need to exert when completing various task.

Both senses are addressed by movement and different body positions. Moving our bodies can either stimulate or relax. Spinning or random movements tend to be stimulating whereas linear movements are relaxing, for example, we rock a baby to help it sleep but dancing energetically is stimulating.

In a Sensory Room or multi sensory space stimulation of both senses can be facilitated through:

Different seating positions and something to lie down on

- Reclining chairs, bean bags, sofas, foot rests
- Matt on the floor, sofa bed, chaise longue

Be aware that most residents don't like the water bed as due to the constant movement, this can make them feel unsteady.

Opportunities of movement

- **Linear movement for calming: rocking chair** - rocking back and forth reduces arousal and helps the person to relax.
- **Circular movement for stimulating:** head movement and reaching out beyond sitting position.

In respect to circular movement, moving the head, arms or legs can be encouraged through the positioning of equipment and items so that residents have to reach out to access or operate equipment and items, as well as through activities offered. Interactive equipment can play an significant role in stimulating arm movement.

Stimulating and encouraging movement is particularly important for residents in wheelchairs as they may not normally experience much movement.

Figure 66: Rocking chair at Kontula Centre for the Elderly, Helsinki, Finland: elongated base prevents the chair from tumbling over.

Ensure health + safety

Rocking chairs need to be fitted with a locking mechanism to facilitate better moving in and out of chair.

Stimulation and Relaxation

A Sensory Room should be seen as a sensory toolbox with a number of different items to stimulate the senses at different levels of intensity. For example, bright lights to stimulate and soft low level lighting to relax. The person setting up the room also needs to remember that what relaxes one person may stimulate another. A person who is sensitive to stimulation is likely to respond quicker. By completing an in depth personal life story staff will be aware of what things stimulate or relax each resident.

The selection of each piece of sensory equipment or item should then be based on that person's interests and needs. Outcomes from each sensory session need to be recorded alongside what has been stimulating or relaxing so that other staff will know which pieces of equipment or item and/or which sensory activity work best at either stimulating or relaxing.

By having a Sensory Room/Space it is possible to create either a relaxing or a stimulating environment. Below are some suggestions of relaxing and stimulating pieces of equipment.

What is stimulating?

Sight: lights of high intensity, colour red, reminiscent images and objects

Sound: loud music, tempo that is heart beat rate or faster, sing-along tunes, abstract sounds

Touch: textured objects, spiky balls, random contact

Taste: citrus fruits, peppermint, sour sweets, sherbet

Smell: citrus smells, peppermint

Movement: random movements, spinning

What is relaxing?

Sight: low level, slow changing lighting, fairy lights, Christmas tree lights

Sound: quite music, tempo that is heart beat rate or less, continuous background music, natural sounds (seashore, bird song)

Touch: deep pressure such as hand massage, stroking, soft fabrics such as fur, velvet, silk or fleece

Taste: milky foods such as chocolate, milk pudding or yoghurt

Smell: lavender, smell of baking cakes or bread

Movement: linear rocking such as a rocking chair, gentle rocking in time to music

Control and Interaction

Interaction and engagement at the right level for the individual is important as it promotes brain activity and helps the person maintain interaction skills such as learning and communication.

Doing things for yourself also increases confidence and feelings of self worth. Hence residents using the Sensory Space/Room should be allowed and encouraged to choose sound / music, colour and intensity of light, imagery etc. themselves. It is about giving somebody the opportunity and empowerment to choose what to explore and at somebody's own pace.

Being able to control the stimulation give a sense of mastery over the environment. This facilitates the user to modify the amount and type of stimulation they receive and help prevent them becoming over-stimulated.

Low tech

Control and interaction can be provided and encouraged on various levels, for example on a low tech level by offering the user to play with simple musical percussion instruments, music boxes or interactive tactile cushions.

High tech: integrated switches

On a more high-tech level (for example interactive lights) control and interaction can be achieved by using an appropriate switching system and/or fitting age appropriate switches to the equipment which can easily handled by this user group.

Here it is important that the user is made aware of the opportunity to select and choose and how to use the switch as it might not be as obvious as with low-tech items. Choice can also be introduced as the activity progresses.

Figure 66 - 69: Examples of switches to control sensory equipment 1) Grasp switch: can be held in the palm of the hand and activated by squeezing the rubber hand grip, supplied by SpaceKraft. 2) Wireless switch: User can focus on task not the leads on the table. Turn-taking and sharing is as easy as passing this brightly coloured switch around. 3) Shape switch: slim-line red square to be pressed. 4) Soft koosh switch: simple yet wonderfully tactile. 2 – 4 supplied by ROMPA.

Switches can also encourage social interaction and sharing. In particular, smaller vibration pieces such as vibrating cushions or tubes are useful as they are easily controllable for the user and can be shared.

Controls can be adjusted to adapt the complexity of the activity from simple to difficult. This could be simply changing the colour of the bubble wall or tube or a more complex activity such using an iPad control to change the colour and theme of the whole room.

Switches can be of various material and making to suit the needs of the person, such as tactile encouraging touch, to squeeze, tiny touch sensitive, movement sensitive for non-tactile person who might not want to press a switch.

Age appropriate and usable

Choosing sensory equipment can be challenging as many of the items that are of the right sensory level are often aimed at children. It is important to select equipment and items that give the right level of stimulation but are not perceived as juvenile or childish, in particular in respect to the aesthetics. Also, here the feelings and views of family and relatives of the residents need to be considered if space and equipment appear not age appropriate. However, images should not be as complex that the person with dementia cannot understand them (see also section “Art work”).

Figure 70 - 71: Successful examples of age appropriate toys for adults: the movement of the glitter or the iridescent coloured ribbons suspended in clear liquid creates an enchanting display of light and colours which can be fascinating for people of all ages.

Dignity

The way care workers interact and communicate with the person with dementia is critical in maintaining dignity: if the interaction is appropriate and the piece of equipment is targeted at the right level of ability then dignity is maintained. Focus on what kind of stimulation it provids and reflect on how it might make you feel.

A validation approach can also be used when presenting items or equipment by talking about what that type of stimulation might remind you of. For example, the optic fibre spray is twinkling: it reminds me of Christmas lights, how did you spend Christmas with your family?

Staff need to be clear about what is to be achieved by the piece of equipment: for example is a nursing chair appropriate for older people? This type of chair providing a linear rocking action (suitable for relaxation) might be considered for the Sensory Room as its design reduces the chance of the individual falling out. However, if it is referred to as the nursing chair this could be perceived as inappropriate.

Figure 72: This is sold as ‘Construction box for people with dementia’ – targeting men in particular. However, due to its bright colours and simplified details it looks too much a toy for a young child rather then an older adult and should rather not be offered to maintain dignity.

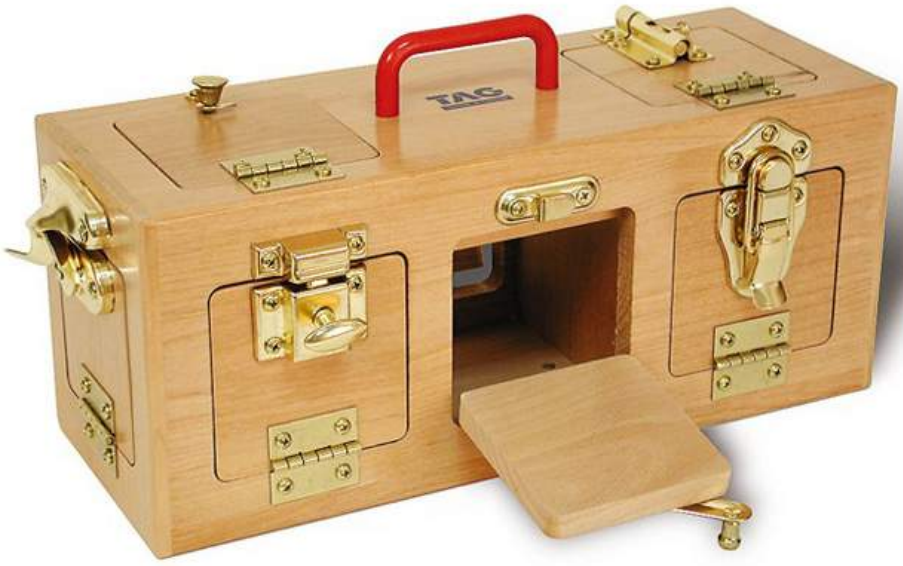


Figure 73: A more appropriate and dignified example of an item which can keep men with dementia occupied and stimulated. The aesthetic, the material and colouring of this lock box reminds more of real things the individual might have experienced in his life.

Figure 74: Example of a nursing chair as it can be currently purchased on the high street. It gives the advantage of safety, in particular when getting in and out, but might be perceived as inappropriate if referred to as ‘nursing chair’ in a home for older people with dementia.

Usability

Apart from the issue surrounding aesthetics and connotation, the usability of sensory equipment and items is of high importance too.

A multi sensory space needs to be set up and designed in such a way that sensory equipment and items to be explored are in easy reach or/and sight for the residents. As many of the residents might be bound to a wheelchair ‘eye level’ for them is lower then for a person walking or standing. For similar reasons a person might not be able to bend down. So items placed on the floor would be out of reach for them.

Also, equipment should be ergonomically designed to suit the abilities of older people with physical limitations and not able to grab and hold things easily anymore. This is particularly important if integrated switches are employed for user control.

Colour

Keep room neutral and light

- Off-white or beige for walls, ceiling and furniture
  This provides flexibility as you can vary the mood and tone of the room or parts of the room through coloured light which can be programmed to change or chosen manually by the resident or the person accompanying him/her.

Use brighter colours for accentuating and drawing attention

- Coloured items, cushions or blankets stimulating engagement and helping with identifying seating furniture.
- Colouring certain parts of the room (e.g. through coloured light) to draw attention to this area.

Stimulating and calming colours

- Red is physiologically stimulating and increases brain activity – however, red can sometimes also be associated with fire by people with dementia of which one needs to be aware of.
- Calming colours: green and blue.

Warm and cool colours

- Cool colours: blue and violet – make a smaller room appear slightly larger.
- Warm colours: red and orange – make a room appear warmer and slightly smaller than it actually is.

Dark/light contrast for better visibility and clarity

- Contrasting floor against furniture and walls to help better visibility and visual discrimination

The ‘Ageing Eye’

As we age a yellowing and thickening of the lens in the eye occurs. As a consequence colours are perceived differently.

- Violet is perceived as grey.
- Vivid colours appear less saturated.
- Reduced ability to see colour contrast.
- Reduced ability to discriminate blue colours as they appear more like green.

Avoid patterns or visual barriers

- Sudden visual changes of the flooring can be perceived as barrier catching the attention of the person with dementia who has then to make a decision to cross. This can be challenging.
- Similarly, patterns might be seen as obstacles or might be confusing as they might be perceived as different heights (e.g. stripes and chequered patterns may be perceived as steps or holes).

Art work / sensory art

Art work in the Sensory Room?

- Art work should not necessarily be placed within the multi sensory space to avoid unnecessary distraction and cluttering.
- Having sensory art work outside of the multi sensory space/area though can facilitate a better transition from low key stimulation to more intense everyday stimulation, and draw people's attention to the room encouraging them to enter, complementing the Sensory Room.

Less complex yet stimulating

- More appropriate as it is less challenging.
- Certain level of abstraction, simple sceneries, yet recognisable.

Multi sensory driven

- More stimulation through tactile features (even if it is not to be touched) and various optical qualities such as shiny and glimmering.
- Sensory art can be made by residents: The actual making of it can be a multi sensory experience.

Providing focus points

- Placed in corridors and living areas helps people to orientate and navigate within the home.
- Can be used to give the area or room a 'name', e.g. "room with the beautiful picture" which helps to create a destination.

Figure 75 - 76: Examples of appropriate art work: The texture in the flowers and background add a tactile feeling to the image making it more interesting and interesting (left); The boldness and vivid colours of the flowers as well as the spatial effect in the photograph create an stimulating and captivating effect (right).

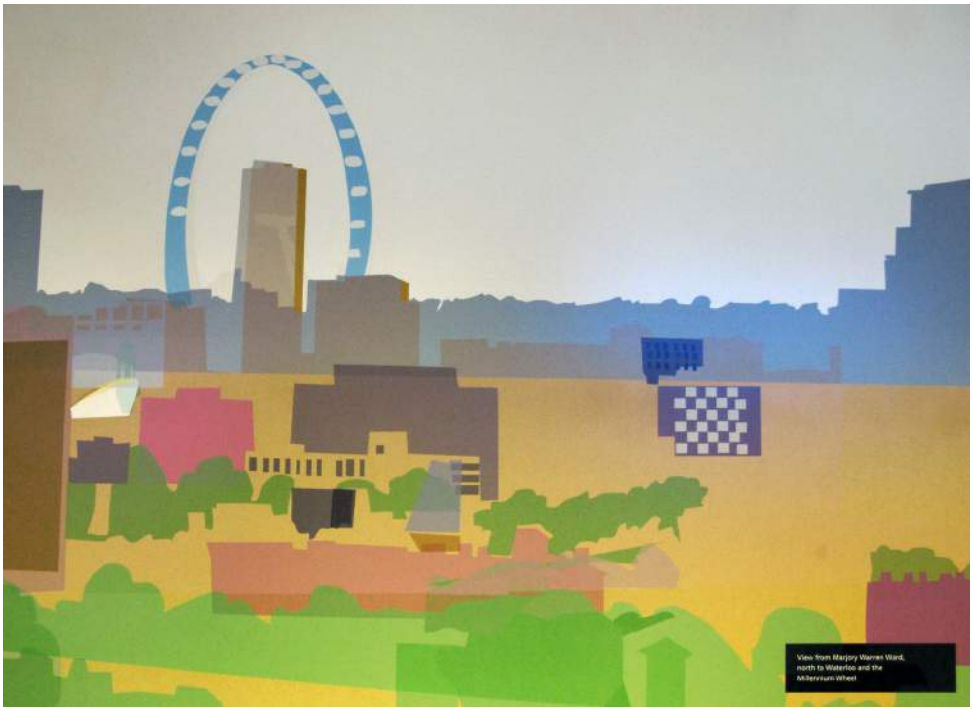


Figure 77: Art work by Martin Jones (Artinsite), one of the paintings produced for the Marjory Warren dementia ward at King's College Hospital London. Showing a certain level of abstraction yet being recognisable as London landscape, Jones' works are liked by the patients, staff and visitors alike.

Figure 78 - 80: Examples of sensory art where residents contributed to the making.

Example of a transformed Sensory Room: before and after

BEFORE (October 2013):

The room is cluttered with furniture and various items, some of them broken or dysfunctional. Also it seems that the room is frequently used as a space to temporary store/put excess furniture. The whole appearance is uninviting and extremely distracting and confusing as no visual focus is provided. The room is locked and only used with the activity coordinator.

However the room has good potential as it is very spacious and light, and has direct access to the garden. Also, there is a adjacent store room which could be used to store additional items and equipment for multi sensory stimulation not always needed.

Figure 81 - 83: The Sensory Room before the transformation.

AFTER (June 2014):

The room has been transformed into a pleasant multi functional lounge which is of reminiscent character on one side (left image) and features sensory equipment on the other. Liked for its stimulating, yet calm and soft atmosphere a destination has been created regularly frequented by the residents. The door to the room is kept open inviting the residents to stay and from here to stroll into the garden. The store room is in use to store away extra items and furniture if not needed.

The wallpaper image adds a homely feel to the space on the left where activities with the residents such as cake decorating take place. The new furniture and curtains have an elegant appearance and the colouring of the furnishing has been matched with the colours of the image. Both gives the room a modern yet age appropriate feel.

Figure 84 - 85: The room after the changes.

A new sound system has been added (not seen in photos) replacing the low quality transportable CD player. Having music of good sound quality yet moderate volume playing is another attraction for the residents to spend time in the room.

The reduced arrangement of the space on the right attempts to create a visual focus with the bubble column which is a positive move considering the cluttered room from before. Yet, the space is lacking warmth, comfortable, soft feel and stimulation on a multi sensory level. With some additional interventions this space can be improved and transformed into a successful sensory experience (see “Our Advice” below).

Our Advice

In order to improve the room further we advise the following:

Change the head lights (currently the same as in the corridor: bright yellowish lights, no dimming):

- Install wall washers and head lights which produce a diffused and soft light.
- Install dimmer for adjusting brightness according to activity taking place.

‘Hide’ the sound system (currently placed on a desk next to the door):

- Store in lockable cabinet which should visually blend in with surrounding walls making it ‘invisible’ to further de-clutter the space and to make the room safer for residents.
- Spread out the loud speakers in different corners of the room fixed up on the wall: improving the sound quality and audibility without having to increase the volume.

In respect to creating a more successful multi sensory space:

Remove any unnecessary items left over from previous installations (such as the box on the wall next to bubble column and cables hanging down)

Fill up the water of bubble column and check out if the light is working correctly (it should reach to the top of the column)

Change the furniture

- Replace current chairs with more comfortable armchairs and/or sofa or even rocking chair facing towards bubble column.
- Remove small table if it is not absolutely necessary as it becomes just another obstacle for residents.

Add more tactile items

- Place soft cushions, blankets, sheep skin, tactile armrest covers on furniture and even floor.
- Cover walls that surround the bubble tube with textile curtains from top to bottom - to give this area a softer and more natural feel (as suggested in image below).

Install curtain to partition the space to create a more intimate sensory corner with blocked off light from window, other part of the room can still have day light and access to garden

- Curtain can be double layered (mixing opaque fabric blocking out lights with see-through textiles) to make it more interesting on a visual and tactile level (see image below)

Add another stimulating light, as for example

- Fibre optic lamp (which can be stored away if too much)
- LED net behind sheer textiles
- Colour washing wall lights

Install projector (on the ceiling) and DVD player – provides more flexibility regarding visual stimulation as a range of imagery can be shown, including sequences of old films, scenes from nature, landscape, children playing, and slowly moving abstract shapes and colours.

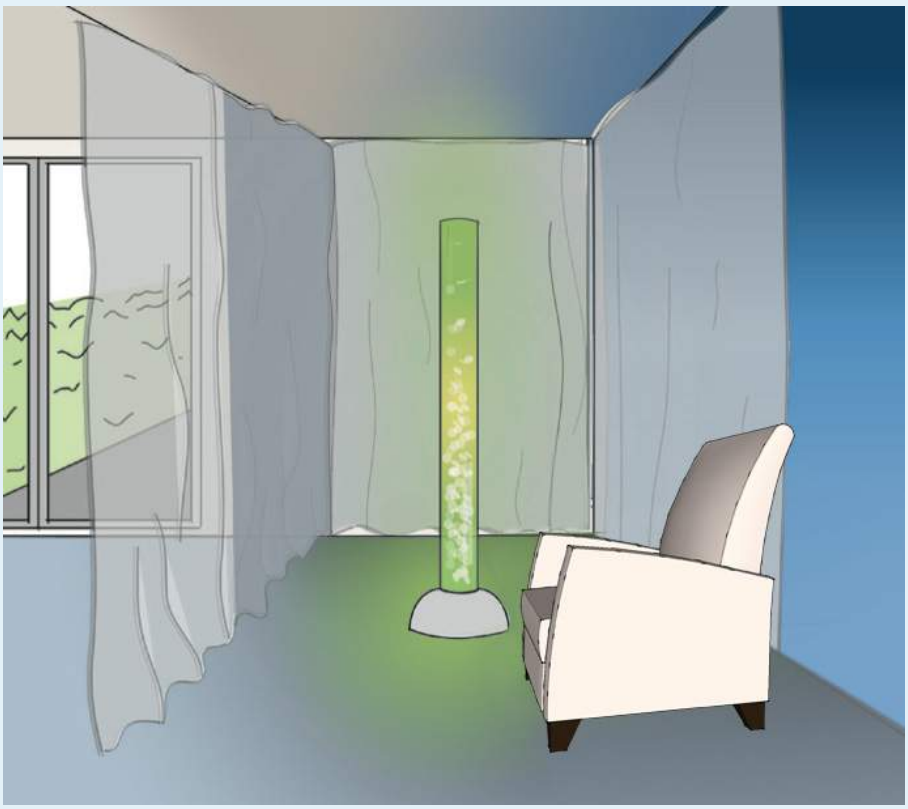


Figure 86: Example with colour washed wall (blue) on the right hand side.

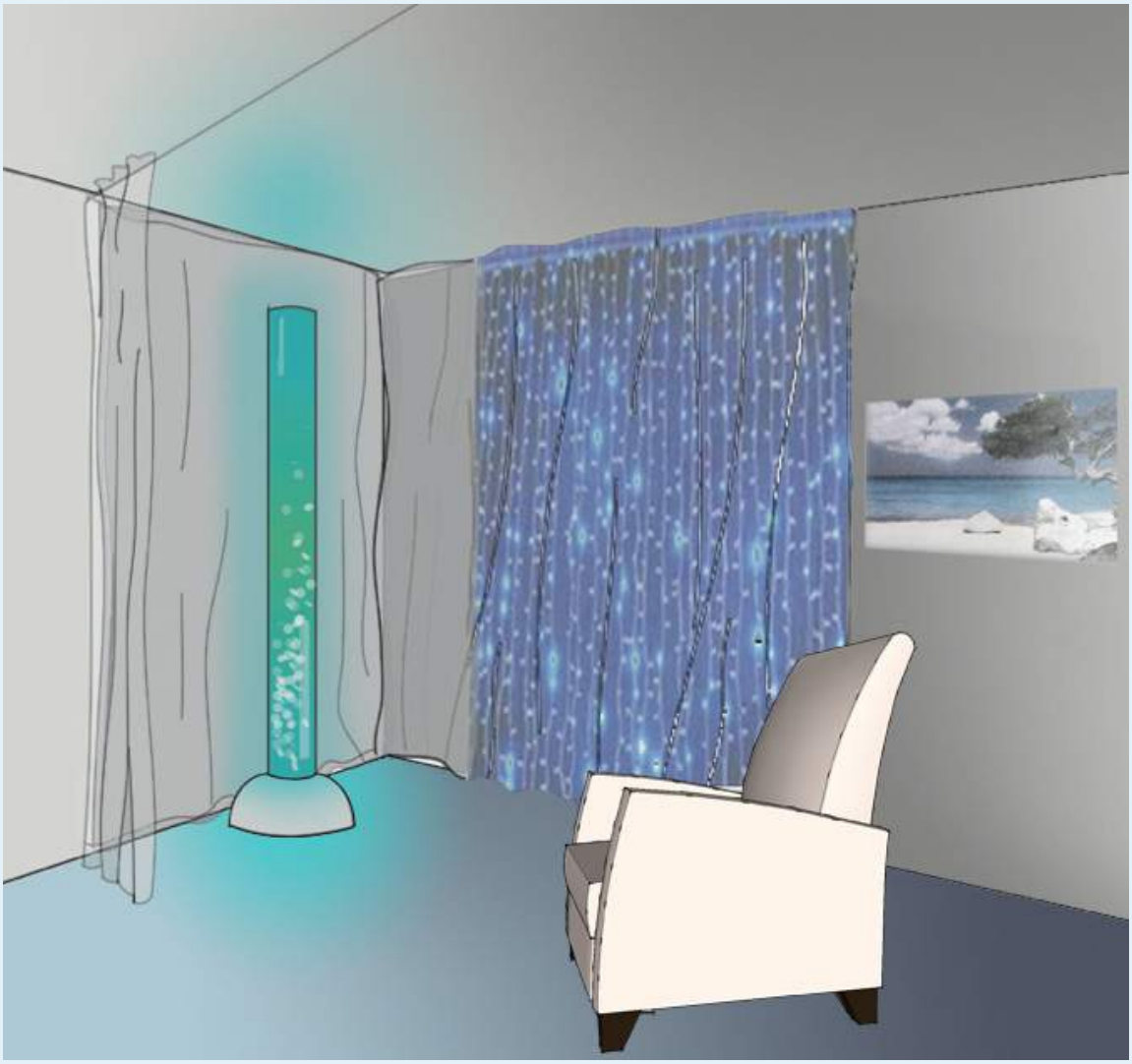


Figure 87: Example with LED net behind a sheer fabric.

Practicalities / top tips

“Instead of saying that we cannot have it. It is about how we can alter the environment to compensate for.“

How do I get started?

Start by assessing your resident with for example the PAL occupational profiling tool and download the guidance for running a sensory session. Build up your sensory toolbox using ideas from the advice section. Make sure you have something to stimulate sight, sound, touch, taste, smell and movement. Find a quiet space and start with one or two pieces of equipment following the PAL guidelines.

What size should the room be?

Your sensory space should be big enough for 4 - 6 people, not too small to avoid claustrophobia and the feeling of being locked in. Curtains can be used to divide the room and to create a more intimate spaces within a larger room for 1:1 sessions. A bigger space will always give you more options and flexibility then a smaller space. It can be helpful, for maximum use of space, to have a multi-purpose/mixed use space.

Where should my sensory space be located?

It should be in easy reach for the residents as well as staff, if possible next to living areas or other places where staff can easily observe the residents without having to go with them. This allows individuals to access a quiet space on their own when the main living area is too noisy. Direct access to a garden is of great advantage as it can be included in sensory sessions encouraging residents to go outside.

If I don’t have a spare room, what can I do?

Find a quiet corner where you can set up a multi sensory area, or create a sensory trolley you can take to a resident’s room. A ‘sensory trolley’ can contain a range of sensory items that can be used and set up in a resident’s room such as a fibre optic lamp, soft toys, textiles, tactile cushions, music instruments, projector, things to smell or taste.

How do I store my sensory equipment?

Even if you have a dedicated sensory space it is a good idea to keep your sensory items and smaller, more fragile equipment stored away, for example in a locked cabinet or on shelves behind curtains. A lockable space also allows safe unsupervised access to the Sensory Room.

Keeping excess sensory equipment as well as the sound system or microwave out of sight is safer, but also, more importantly, prevents the person becoming over-stimulated by too many distractions and cluttering. People with dementia find it difficult to filter relevant stimulation when there is competing stimuli.

It may help to make the storage space, either a curtain or a cupboard, 'invisible', e.g. cupboard doors or curtain same colour as walls. They should be as neutral and plain as possible in look blending in with the rest of the room to not attract unnecessary attention, to prevent distraction and to help maintain the focus on the sensory equipment.

What if I only have a small budget?

You don't have to have lots of expensive equipment. If you are planning to purchase some equipment from the suppliers, buy one or two pieces from MSE suppliers and supplement your sensory kit with either products from domestic suppliers, cheaper local purchases, or make sensory items yourself (see "Design Advice"). There should be a balance between high tech (possibly costly) and every-day and familiar items.

The choice of technical equipment should be based on following points: it must be flexible and serve a range of different purposes (e.g. projector with DVD player); and must be sufficiently robust to survive the handling by people with dementia (long lasting quality equipment).

DIY / hand made objects create a sense of ownership amongst staff but may carry an inherent risk if handled without supervision. The risk for the individual should be assessed rather than a blanket ban being put in place.

Figure 88 - 89: Examples of storage space for sound system, microwave, and sensory items hidden behind a curtain.

How do I maintain and clean sensory equipment and furniture?

Equipment purchased by the suppliers and retails should come with details of how to maintain and clean it which should always be followed. A check of equipment should be made on a monthly basis (more frequently if used daily) to check for damage, any replacement batteries or bulbs needed and any missing items. Bulbs and batteries can be purchased from local hardware stores.

Tactile textile items frequently used such as cushions, blankets, soft toys etc need to be washable or easy to replace. It is a good idea to purchase multiple items of the same kind if they are inexpensive and very popular.

Fitting furniture with fabric material rather than vinyl or plastic is always better as the latter can be uncomfortable to sit on providing an unpleasant tactile experience. Choose covering textiles impervious to fluids.

Where can I get equipment and material?

Suppliers of products for people with dementia:

Best of Alzheimer's Products - *http://store.best-alzheimers-products.com*
Activity Products for Dementia - *http://www.active-minds.co.uk/*
Activities to Share - *http://www.activitiestoshare.co.uk/*
AlzProducts - *http://www.alzproducts.co.uk/*
Ode: authentic food fragrances - *http://www.myode.org/*
calmfilms - *http://calmfilms.com/list*

Suppliers of textiles impervious to fluids:

Panaz upholsteries - *http://www.panaz.com/healthcare/*
Pineapple furniture - *http://www.pineapplecontracts.com/fabrics/waterproof-fabrics/4*

Suppliers of sensory equipment:

ROMPA - *http://www.rompa.com*
Sensory plus - *http://www.sensoryplus.co.uk*
Space Kraft - *http://www.spacekraft.co.uk*
Sensory Technology - *http://www.senteqdirect.co.uk/*
Experia - *http://www.experia-innovations.co.uk/*
Sensory Toy Warehouse - *http://www.sensorytoywarehouse.com*
TFH - *http://www.multisensoryenvironments.com; http://www.specialneedstoys.com/uk/*

Further useful information

Alzheimer's Society
http://alzheimers.org.uk

Alzheimer's Society fact sheets
http://www.alzheimers.org.uk/factsheets

Alzheimer's Society guide to the dementia care environment. J. Pool
http://shop.alzheimers.org.uk/product/guide-to-the-dementia-care-environment/

BrainHub – A HealthHub Portal
http://www.brainhub.tv/dementia/home

College of Occupational Therapy tool kit: Living well in care homes
http://www.cot.co.uk/living-well-care-homes

DSDC Dementia Services Development Centre,
University of Stirling
http://dementia.stir.ac.uk/design

The King's Fund: Environments of care for people with dementia;
Enhancing the Healing Environment
http://www.kingsfund.org.uk/projects/enhancing-healing-environment/ehe-in-dementia-care
http://www.kingsfund.org.uk/projects/enhancing-healing-environment

Living sensationally – understanding your senses.
Winnie Dunn
http://www.jkp.com/catalogue/book/9781843108719

NICE guidelines – Dementia: Supporting people with dementia and their carers in health and social care
(particular reference to 1.7)
http://www.nice.org.uk/guidance/CG42/chapter/Introduction

Person centred approach to risk
http://www.helensandersonassociates.co.uk/blogs/living-ambitions/2011/9/7/a-person-centred-approach-to-risk.aspx

Pool Activity Level (PAL) - Instrument for Occupational Profiling
http://www.jackiepoolassociates.org/pal/

References, picture credits and acknowledgments

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Picture credits

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Fig 19	Cloud Ceiling Material by TFH; *source: specialneedstoys.com*
Fig 22	Multisensory 'snoezelen' room for dementia patients, Sime on Brody, 05/02/2010, Leeds Partnership NHS Foundation Trust, Mount Centre; *source: communitycare.co.uk*
Fig 26	Curved fibre optic comb; *source: rompa.com*
Fig 34	White salt lamp; *source: alohabay.com*
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Fig 67-68	Switches; *source: rompa.com*
Fig 71	Clear light up iridescent ribbon ball; *source: sensorytoywarehouse.com*
Fig 72	Construction box for people with dementia; *source: activitiestoshare.co.uk*
Fig 73	Lock box; *source: store.best-alzheimers-products.com*
Fig 74	Haywood glider nursing chair and footstool; *source: johnlewis.com*
Fig 78-79	© Lesley Collier

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