

Chapter 8: Sensational Spaces

Sensory environments

Physical environments can play a significant role in positively influencing occupational patterns and performance (Champagne, 2006). The identification and modification of environmental factors impacting on an individual's sensory system can go a long way to enhance daily functioning.

People who prefer lower levels of sensory input are likely to respond better to neutral colours, silence or low sound, subtle or minimal scents, limited clutter and familiar furnishings. People who prefer a variety or high intensity of sensory input tend to seek vibrant or intense colours and images, loud or intense sound (e.g. music) and a variety of textures and scents.

Relevant environments where modifications could be of value include hospital and community health environments, home, community and school.

Sensory spaces

A range of areas and environments that provide a variety of sensory input to help a person change how they feel. (O'Sullivan & Fitzgibbon, 2016)

Sensory spaces can be indoors or outdoors, large or small, dedicated or multipurpose. It is important to be able to conceptualise a sensory space as being much more than just a room. An individual can move into a sensory space when they need to, whereas a sensory room may require unlocking or clinician supervision. Examples of sensory spaces can include the following

- sensory garden, nature space, water feature
- sensory corner, cabinet or wall or a box with a calm kit
- purposeful sensory spaces or zones: quiet zone, music zone, movement zone
- modified home area: lounge, bathroom, kitchen windowsill
- sensational space: one with lots of sensory modulation options. (quiet zone, active zone, loud zone, nature zone).

Planning

Planning a sensory environment involves consideration of the characteristics of the environment, as well as who will be using it. (For more information, see the Person/Environment/Occupation section in chapter 5.)

The characteristics of the environment may include being near a noisy road, a busy thoroughfare, a hot sunny dusty area, or next to a stinky rubbish tip. For individuals who experience sensory sensitivity, these sensations can be particularly overwhelming or lead to avoiding the environment. For some, these sensations will trigger a range of emotions including anxiety, disgust or feeling overwhelmed.

Planning designs of houses, buildings, cities and streets can incorporate a sensory focus. Holt-Damant and colleagues completed research on planning urban environments for people with neurodiversity. Neurodiversity is defined as the 'diversity of the neurology which changes a person's interactions with the world through their senses' (McGee, 2012, quoted from Holt-Damant,

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Guaralda, Taylor Gomez, & Nicollet, 2013). The town planners involved in the research completed sensory mapping activities, including the identification of sensations and sensory triggers in particular environments. This concept of a 'sensory space audit' could be applied to hospitals, mental health units and centres, schools, playgrounds and nursing homes. It would be particularly useful to ask a person who is sensitive to sensory input to walk through an area and identify potential sensory triggers.

Sensory spaces audit

An audit or an assessment of an environment to identify present and potential sensations that may require modification or enhancement to meet the sensory preferences of the people using the space. (O'Sullivan & Fitzgibbon, 2017)

An example of a sensory space audit for adolescents and adults is below. There are also sensory audits or sensory environment assessments available for children and classrooms (Kuhaneck & Kelleher, 2015; Middleton Centre for Autism, 2015.)

The rationale for using a sensory space audit is that by identifying potential sensations, changes can be made to the environment. An additional benefit is that an audit can inform an understanding of why an individual may be more emotional or behave differently within that environment.

To illustrate:

Mary was very distressed. She was within a private psychiatric hospital and she was having difficulty coping with the location of her room. Her room was located next to the kitchen and she found that the scents and noises from the kitchen were overwhelming for her. She was having difficulty calming herself and was considering leaving hospital. She had asked one nurse if she could move rooms but was refused the request as the nurse said that other people had not had difficulty with it. Then the team decided to do a sensory space audit, and the noise and scents were identified as being worse around Mary's room. A quiet room was located, and she was able to move.

Sensory spaces audit

A sensory space audit should commence with documentation of the environmental features present in the environment at that time. Next, the audit should be completed by moving through the environment, stopping in different spots every few metres and documenting the present and potential sensory input. Some examples include

- what smells are present?
- what sights? lighting? darkness?
- are there any bright lights, florescent lights or flashing lights?
- what are the usual temperatures? hot spots or cooler spots?
- what sounds are there?
- what textures are present?
- are there any water or other features that invite or repel touch experiences?
- are there any risky features? trip hazards?
- what is there that facilitates social connection?
- what is there that detracts from social connection?

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- are there any features that allow someone to spin, rock, sway or swing?
- are there opportunities for movement?
- are there opportunities for rest and stillness?
- how much privacy is there?
- where do people walk through the area and are seating areas away from thoroughfares?

Modification of the sensory elements in an environment can incorporate increasing or decreasing certain sensory input, to better meet the sensory needs of the individuals who engage in that space. If these needs are not taken into account, the environment is likely to:

- be less inclusive for people with particular sensory preferences or needs
- lead to people staying away from an environment that doesn't meet their sensory needs
- have people feeling on edge or even distressed or agitated if they need to remain in the environment (imagine disliking heavy metal music but being trapped at a heavy metal band concert and unable to get away).

Designing or renovating sensational spaces

The idea of designing or renovating a space to meet sensory needs is one that is universal. If someone can design their environment, they will likely design it around their own particular sensory preferences. Examples of this would include the following:

- lounge rooms designed with textured cushions and a shag pile rug
- kitchens designed to be minimalist and with extractor fans to remove scents
- dining rooms with art on the walls, candelabras and opulent colours.

An individual who can design their own space can use sensory modulation daily to support their moods.

It can also be useful to reflect on potential conflict that can arise between people living together who have different sensory preferences. Conflict can occur between those who would prefer the television to be louder or quieter, the blinds to be up or down, or the same bath gels versus a variety. Winnie Dunn's book *Living Sensationally (2013)* is a wonderful resource to explore this concept more.

Ideally, the design or review of the design for a space would be conducted by a panel of people to consider a number of different sensory preferences. For instance, if one person designing a waiting room likes to seek out sensory input, the space is likely to have bright colours, loud sounds (e.g. music, television) and a scent diffuser! While this is likely to suit other sensory seekers, it may be too overwhelming for those who are sensitive to sensory input.

Unfortunately, it is common for hospitals, aged-care facilities, mental health units and centres to be quite unsuitable for meeting people's sensory needs. They often have music blaring loudly, the television is switched on constantly, there are no quiet areas to talk, and no space or areas to walk around in. Such situations can negatively affect a person's stress levels and ability to self-regulate their emotions or promote self-righting.

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Sensory rooms

Sensory rooms are designated for the use of sensory modulation equipment. These are being increasingly used on inpatient mental health units, schools and for people with intellectual disability and autism. Equipment often includes massage chairs, weighted blankets and calming lighting and videos (Champagne, 2006). In planning a sensory room, consideration should be given to how it will be accessed by those who need it when they are distressed or agitated. Some sensory rooms are locked or require clinician supervision, and this can slow down the time to access it.

Developing sensory zones within the sensory space

Within every environment, whether indoors or outdoors, opportunities exist for sensory modulation or possibly sensory overload. One design solution is to develop a distinct sensory space or *zone* within the unit, centre, house or school. Even within the one room, there can be smaller zones. There are more ideas for zones than can fit into one space! Spaces can be designed so that people are able to move to the area that suits their unique sensory preferences and needs at the time.

Zones may include the following:

- exercise zone or gym
- calm garden zone
- massage zone
- low stimulation zone
- inspiring or creative zone
- music or auditory zone
- TV or video zone
- eating zone
- socialising zone
- soothing or comfort zone
- pet or therapeutic animal zone
- waking or pacing zone
- scent exploration zone
- reading zone
- icy zone
- game zone
- family zone (for visiting parents or children)
- sensory modulation items zone.

Resources

- chapter 19: sensory zones detailed lists
- chapter 14: equipment list
- sensory modulation Pinterest account: <https://it.pinterest.com/SensoryMod/>

Sensational spaces in communities

The idea of designing spaces to provide more options for sensory modulation in the community is exciting. Such spaces could provide more inclusive, less stressful and more calming environments for everyone, and include those with autism, mental illness, disabilities and sensory sensitivities.

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Community spaces include the following:

- cafés, restaurants
- shops, shopping centres
- libraries
- parks
- neighbourhood centres, non-government offices
- malls
- medical centres, pathology labs, dentists' offices
- festivals, events.

An increasing number of community spaces are being designed with consideration of sensory needs. Some examples include the following:

- Brisbane North Primary Health Network is currently designing safe space alternatives for people who need a safe space to go due to mental illness, unsafe environments, and lack of inclusion. They are considering a wide range of community spaces and are including sensory approaches within this. (http://www.northbrisbane.pirinitiative.com.au/wp-content/uploads/2015/03/2016_08_12-Safe-Space-Final-Report_.pdf)
- National (Australian) 7 Senses Street Day movement, which encourages neighbours to turn their streets into spaces that engage the 7 senses. (<http://www.7senses.org.au/>)
- dance parties and music festivals are creating chill-out zones for people who need a break from the sensory stimulation
- in NSW, the town of Bellingen is designing a program to consider children's sensory needs in the community. 'Bellingen Sensory Friendly Safe Spaces' (<http://www.bellingen.nsw.gov.au/news/funding-success-sensory-friendly-safe-spaces>)
- art galleries are becoming multisensory environments, with more exhibitions designed to provide different visual, auditory and visual experiences. Some also have low-sensory viewings (e.g. GOMA in Brisbane).

The sensory benefits of nature and the outdoors

Records found as far back as ancient Egypt, China, Greece and Persia discuss the healing and restorative qualities of nature. Other healing places such as hospitals and monasteries also included elements of nature. (Velarde et al., 2007). Studies of gardening programs show positive psychosocial benefits for those with mental illness, including addictions. They report a reduction in agitation, depression and stress levels (Gonzalez & Kirevold, 2014).

Theories of why nature improves mental health are listed below.

SRT (stress reduction theory)

Natural environments help reduce stress more than artificial ones due to the role nature has played in our evolution. This is attributed to the fact that certain natural landscapes (grassy plains, treed areas, winding rivers) provided our ancestors refuge, physical advantage and safety (Bratman et al, 2015). Therefore, our instinctive preferences for these environments stimulate a positive physiological and affective response including within the parasympathetic nervous system. This

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theory is supported by research studies that show positive changes in anxiety, rumination and negative mood when people are exposed to these environments (Ulrich, 1981; Ulrich et al, 1991).

The relaxation response

Several studies (Grahn & Stigsdotter, 2003; Hartig et al., 2003; Ulrich, 1991) show that contact with nature improves recovery from stress and enhances attention and concentration. Studies also reveal participants self-report increased feelings of relaxation with exposure to nature.

Environmental self-regulation hypothesis

Korpela et al. (2001) has studied the connection between restorative experiences, self-regulation and place attachment. Nature settings were the preferred favourite places and strongly correlated with positive feelings of relaxation, forgetting about worries and self-reflection. Studies have also shown that physical activity in natural settings improves positive emotions, self-esteem and behaviours more than physical activity in built environments (i.e. outdoors versus shopping centres).

Attention restoration theory

Nature invokes a sense of 'fascination', 'being away' and 'compatibility', which Kaplan and Kaplan (1989) suggest replenishes attention and may improve memory.

Strong connection between nature and health with the following major benefits

- relaxation, restoration and stress reduction
- faster recovery response gained by natural stimuli versus built settings (Ulrich et al, 1991)
- reduction of mental fatigue and improvement in mood (Alcock et al 2014)
- renewed attention and positive affect leads to increased sense of wellbeing (Berto, 2005)
- enhanced functional outcomes including recovery from surgery, reduced pain levels, better work performance and higher job satisfaction (Frumkin, 2001)
- Improved concentration and reduced impulsivity in adults and children with ADHD (Taylor, 2011)
- engagement in an enjoyable and normalising activity
- overview effect: views of nature (mountains, canyons, waterfalls or a star-filled night sky) create feelings of wonderment and awe. Research shows that such feelings can alter our experience of time and increase feelings of unity, connection, patience and a desire to help others (Rudd, Aaker & Vohs, 2012)
- blue space 'visibility of water' - a study showed that contact with blue space (in this study it was visibility of the ocean) is associated with reduced levels of psychological distress (Nutsford et al, 2016)
- can promote engagement in other activities involving physical movement, tending to plants or animals, reading, sketching, social engagement
- crosses age, gender, disability and cultural barriers—people of all ages, backgrounds, cultures, and ability and disability levels. All can find a way to connect to nature in some way
- movement promotes gross motor development for children
- pleasant surprises in nature like unexpected butterflies, birds and flowers.

Nature can incorporate the following:

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- open spaces, courtyards, playgrounds
- community gardens, green spaces, parkland
- potted plants, hanging gardens
- sensory trail (more structured sensorial 'journey' with different senses sequentially stimulated)
- views through windows
- animals (e.g. guinea pigs, aquariums, chickens).

Sensory systems engaged by nature and the outdoors

Touch: breeze, temperature, warmth or cooling, feeling underfoot, the feel and texture of leaves, flowers, grass, tree bark, moss, water, dirt, the feel of a bench or other furniture, patting animals, campfires, water features, tending to plants

Sight: sun, sky, clouds, level of light, trees, foliage, patterns, water features, surrounding movement, butterflies and insects

Sound: water trickling, wind chimes, a breeze in the foliage, bird calls, crunching of leaves underfoot

Smell: water, air, leaves, flowers, cut grass, compost, herbs

Taste: edible gardens, picnic in a park, bush tucker, BBQ, toasted marshmallows

Movement: walking, reaching for items to touch, swing, balancing, feet in water

Deep pressure/proprioceptive: sitting on grass or against a tree, walking in leaf litter or sand, balancing rocks, digging, building, and gardening

Interoceptive: deep breathing (deep inhalations if effort induced, or relaxed gentle breathing if resting), the feel of one's heart rate, the feel of muscles (exertion or relaxed), swallowing cool water.

Here are some opportunities when in nature or the outdoors to engage in heavy work activities

- pushing, pulling, lifting, playing, moving, digging
- squeezing, pinching, digging/ throwing (Jennifer Gay, 2012).

Ways of incorporating nature and outdoor sensory input into practice

Consider first:

- previous interests and engagement
- current influences or factors impacting on engagement (money, proximity, anxiety or trauma background, paranoia, sun and temperature sensitivity).

Then:

- explore interests and preferences
- go outdoors: local walks, visit a space
- investigate local options to engage with (walking groups, community spaces, city farms)
- link with another person to enhance motivation and social engagement
- views and sounds of nature: windows, posters, pictures, photos, as well as recordings of nature (evidence that looking at scenes of nature increases activity in parasympathetic

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nervous system, and the more meaningful or awe-inspiring the picture, the better the response)

- engage in community activities (e.g. bush regeneration)
- incorporate nature into personal spaces (pot plants, rocks, shells, leaves, water features).

A great document outlining the vast benefits of nature for health and wellbeing is *Beyond blue to green: The benefits of contact with nature for mental health and wellbeing*. It is available on line at http://www.deakin.edu.au/data/assets/pdf_file/0004/310747/Beyond-Blue-To-Green-Literature-Review.pdf

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Sensory space audit

The Sensory Space Audit can be completed through moving through the environment and stopping in different spots every few metres and documenting the present and potential sensory input there.

- What smells are present now? Any likely smells in the future (e.g. close to lunch or toilet)
- What sights? Lighting? Darkness?
- Are there any bright lights, fluorescent lights or flashing lights?
- Usual temperatures? Hot spots or cooler spots?
- What sounds are present now? What are likely sounds in the future?
- Is there an echo quality to the sound? (reverberation)
- What textures are present?
- Any water or other features that invite or repel touch experiences?
- Any risky features? Trip hazards?
- What is there that facilitates social connection?
- What is there that detracts from social connection?
- Any features that allow someone to spin, rock, sway or swing?
- Opportunities for movement
- Opportunities for rest and stillness
- How much privacy is there?
- Where do people walk through the area?

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Designing or renovating sensational spaces in hospitals, mental health units and aged care facilities

Exercise zone or gym

- non slip mats on the floor with vinyl rectangular cushions sectioning off the area so it is not walked over
- ideally near a wall. On the wall could be posters with exercises that could assist with anger (e.g. wall pushups, simple yoga and stretches)
- equipment including weights, basketball hoops and an exercise ball to sit on or bounce.

Calm garden zone

- garden with variety of plants including variety of leaf shapes and textures
- scent to be carefully considered. Would not recommend strong scents in garden zone. Could have a separate zone with scented plants (scent exploration zone)
- good to have soothing quality to plants and zone
- water feature e.g. pond or waterfall or water sculpture
- no hidden or dark zones to assist with soothing (so can let go of hypervigilance).

Family interaction zone

- indoor or (ideally) outdoor area for parents and children
- swings or playground equipment that promotes interaction, connection and co-regulation
- sandpit or water play
- games table
- area for ball games.

Low stimulation zone

- eye masks
- ear plugs, noise-cancelling headphones, music and earphones
- wrap or blanket
- comfortable, rocking or swinging chair
- lower light, light with dimmer switch, low lamp
- white noise or soundproofing of zone
- nil odour (takes away the scent)
- no talking in zone.

Inspiring, creative zone

- inspiring art prints or pictures
- art materials, clay, beads, craft materials
- easels set up
- shelving with examples of things that can be made.

Music or auditory zone

- area for music therapy or musicians
- music playing
- musical instruments
- space for dancing
- sound proofing or acoustic tiles.
- chair with headphones embedded in it.

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TV zone

- soundproofing so that noise of TV does not travel
- or headphones
- chairs spaced apart
- TV is set to the side so that people do not have to walk past and be potentially disturbed by the visual stimulation.

Eating zone

- space for those who would like to sit by self
- some social table arrangements
- choice of food tastes and textures
- management of acoustics through acoustic panels, chairs with felt bases, mats on floor (to minimise sound of scraping chairs)
- consideration of strong smells (e.g. tuna) and ability to manage these.

Socialising zone

- area that is conducive to socialising
- chairs around tables. Flexible seating arrangements possible to enable small groups
- shelving with board games
- background music should be low or not used (to assist people who have trouble filtering background sound).

Soothing comfort zone

- comfortable lounge chair, bean bags, swinging chair, rocking chair, massage chair with soft or textured cushions and wraps
- weighted cushions or wraps
- velvet, valour, shag pile rug
- heated blankets
- personal mini massagers
- foot baths.

Pet or therapeutic animal zone

- aquarium with fish
- area designed to interact with chickens, guinea pigs, visiting dogs or cats etc.

Walking or pacing zone

- area designed for walking
- in dementia units, include paths that can be walked around in a circuitous fashion, without feeling that it is circular e.g. lots of plants, small safe water feature, winding flat path with handrails and clearly designated path
- provide visual interest (e.g. flower garden, sculpture, small safe water feature, bamboo garden, succulent's garden, chicken area with coop etc.
- width of the path should enable a couple of people to pass each other safely. Walking this path may be used for angry or agitated persons and they need to be given space
- designed to not cast many shadows or dark areas or suddenly moving items as this increases agitation and hypervigilance.

Scent exploration zone

- this area would ideally be outdoor as scent can be a trauma trigger for some people

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- plants may include herbs, scented flowers and leaves (e.g. geraniums) and fruit e.g. strawberries
- small jars of scents including household and kitchen scents. These could be added to small individual pots for an individual kit.

Veggie patch

- promote digging or weeding to increase movement and proprioceptive input e.g. digging up sweet potatoes.

Reading zone

- comfortable chairs, cushions
- bookcase
- books, magazine, inspirational books, picture books, poetry, crossword or Sudoku books.

Icy zone

- low basin for icy water. For clients to place their head in and reduce anger or anxiety.
- small fridge with ice packs, icy balls, ice to suck, slushies. Also cold water in zip lock bags.
- water drainage on floor
- non slip mats
- marking around zone to suggest that someone in that zone may not wish to speak or interact.
- away from kids zone and noisy zones.

Game zone

- room set up for computer game use e.g. Wii, Nintendo
- headphones (wireless) may reduce noise levels.

Massage zone

- massage chair
- mini personal massagers
- massage table for visiting masseurs
- massage mat on chair
- hand and body creams
- foot baths.

Sensory modulation item zone

Sensory modulation items set up for individuals to access

- weighted cushions, wraps
- blankets, shawls
- textured cushions
- cardboard boxes to personalise a distress tolerance kit
- scented items
- icy spray
- fidget items
- books for sudoku or crosswords
- warheads, sour lollies, mints
- dencorub, eucalyptus rub.



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Items are assessed and selected with the intention of clients using them independently, without needing a staff member to access or unlock them. For example, some inpatient units have a sensory modulation box beside each bed.

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Designing or renovating sensational spaces in schools

Schools could become sensational spaces with zones that consider neurodiversity. At lunchtimes children benefit from being able to choose whether they need to move their bodies, reduce their sensory stimulation or engage in calming, soothing play. Classrooms could also be designed to have a sensory box, sensory modulation items or to become a sensory space.

Low stimulation zone:

In a school area, it would be preferable to have an indoor and an outdoor space that is low stimulation. For many schools, this is the library, however libraries are frequently providing iPad and computer games available in lunch times. These are not suitable for children needing low stimulation, a quiet space or a time out, due to the visual movement, bright lights and sounds.

Indoor low stimulation zone

- eye masks
- ear plugs, noise-cancelling headphones, music and earphones
- wrap or blanket
- comfortable chair, rocking chair, swinging chair, hammock, cushions
- lower light, dimmer switch, low lamp
- white noise or soundproofing of zone
- nil odour (takes away the scent)
- no talking in zone
- could use a box or tent with cushions (sensory retreat).

Outdoor low stimulation zone

- ear plugs, noise-cancelling headphones, music and earphones
- away from toilets, eating areas, scented gardens or other scented areas
- away from lots of visual movement (e.g. other kids running around, moving playground equipment)
- swings, hammocks, cocoon swing chairs
- could use a box or tent with cushions (sensory retreat).

High vestibular zone

- spinning equipment and toys e.g. spinners, roundabouts, bilibo
- rocking equipment, individual rockers, large rockers
- hopscotch on ground
- skipping ropes
- balancing equipment
- flying fox (if permitted).

Nature play area

- sand, dirt, water
- water tables, creeks, pvc pipes, watering cans
- wheelbarrows
- spades, buckets, sandcastle moulds
- leaves, rocks, sticks to play with.

Inspiring, creative zone

- art materials, clay, beads, craft materials

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- easels set up
- play dough.

Playground

- climbing equipment
- balancing boards or stepping stones
- slides.

Oval

- area for children to run, play ball games etc.

Music or auditory zone:

- outdoor instruments, clapsticks, xylophones, drums
- space for dancing
- music.

Eating zone:

- acoustics managed to minimise reverberation of sounds of kids talking and eating
- space for those who would like to sit by self
- social table arrangements
- choice of food tastes and textures
- consideration of strong smells (e.g. tuna) and ability to manage these
- seating to be mindful of forming clique's or excluding other children (e.g. if there is a table and chair for four then a fifth person would be excluded unless they can pull up a chair).

Socialising zone

- area that is conducive to socialising
- chairs around tables. Flexible seating arrangements possible to enable small but inclusive groups
- shelving with board games.

Pet or therapeutic animal zone

- aquarium with fish
- area designed to interact with chickens, guinea pigs, other animals.

Vegie patch

- patches would ideally promote digging or weeding as this would increase movement and proprioceptive input e.g. digging up sweet potatoes.

Sensory modulation item zone

Sensory modulation items set up for individuals to access, either on shelves, within the space or in a calm kit.

- weighted cushions, wraps
- weighted knitted chickens
- weighted plush or vinyl toys
- velcro with wool threaded through to fidget with
- blankets, shawls
- textured cushions
- play doh
- scented rubbers

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- lava lamps or liquid
- bean bags
- Bilibo
- balance board, wobble cushion
- ear defenders ear muffs, ear plugs
- nil odour to remove smell
- books
- fidget items
- kinetic sand.

Resources

- equipment list in chapter 14

Further ideas are available at the sensory modulation Pinterest account:

<https://it.pinterest.com/SensoryMod>

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Designing or renovating sensational spaces in community spaces

In a community space, café, shop, playground and public space, consideration of ways to be more inclusive of those with sensory sensitivities or to offer a place where a person can engage in sensory modulation activities, can help individuals feel more calm and more able to engage and participate in that environment.

Sensory modulation calm kit

Sensory modulation items set up for individuals to access, either on shelves, within the space or in a calm kit, for example

- ear plugs
- nil odour bottle
- noise-cancelling headphones, ear defenders, sonic defenders
- white noise machine
- virtual reality goggles
- hand grip strengthener
- instant ice or instant heat packs
- books, magazines, crosswords or Sudoku books
- signs that indicate there are freezer packs available for calming, electric hot water bottles, and that jumping up and down in the bathroom is welcome
- weighted cushion (or five kg bag of rice inside a cover)
- moh doh.

Calming zone

- massage mat for chair
- swing chair or hammock
- weighed cushions, throws, wraps, blankets
- space for someone to sit by self without needing to talk.
- space for someone to sit and engage with other people e.g. available for a board game, chat.

Soothing comfort zone

- comfortable lounge chair, bean bags, swinging chair, rocking chair, massage chair with soft or textured cushions and wraps
- weighted cushions or wraps
- velvet, valour, shag pile rug
- heated blankets
- personal mini massagers
- massage mat for chair
- space for someone to sit by self without needing to talk
- space for someone to sit and engage with other people e.g. available for a board game, chat.

Adult playgrounds

- gym equipment, signs with exercises on it
- swings for adults
- zip lines
- cocoons
- balancing boards, bosu balls.

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Resources

- adult playground pictures are available at the sensory modulation Pinterest account:
<https://it.pinterest.com/SensoryMod/>

Calm garden zone

- water feature e.g. pond or waterfall or water sculpture
- garden with variety of plants including variety of leaf shapes and textures
- scent to be carefully considered. Would not recommend strong scents in garden zone. Could have a separate zone with scented plants (scent exploration zone)
- good to have soothing quality to plants and zone.

Low stimulation zone

- eye masks
- ear plugs, noise-cancelling headphones, music and earphones
- wrap or blanket
- comfortable chair, rocking chair, swinging chair
- lower light, dimmer switch, low lamp
- white noise or soundproofing of zone
- nil odour (takes away the scent)
- no talking in zone.

Note there is some repetition in the zones detailed below, when comparing to those suggested for the mental health unit design, with minor adaptations added for this area.

Inspiring, creative zone

- inspiring art prints or pictures
- art materials, clay, beads, craft materials
- easels set up
- shelving with examples of things that can be made.

Music or auditory zone

- when in a large café or space, consider if there are areas where people can have more quiet e.g. speakers do not have to be in every area
- area for music
- music playing
- musical instruments
- space for dancing
- sound proofing or acoustic tiles.
- chair with headphones embedded in it.

TV zone

- soundproofing so that noise of television does not travel
- or headphones so that people who want to listen can tune in that way
- chairs spaced apart
- visual stimulation and changing lights of TV are managed so that they are not upsetting people who find this visual input disturbing

Eating zone

- space for those who would like to sit by self

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- some social table arrangements
- choice of food tastes and textures
- management of acoustics through acoustic panels, chairs with felt bases, mats on floor (to minimise sound of scraping chairs)
- consideration of strong smells (e.g. tuna) and ability to manage these.

Socialising zone

- area that is conducive to socialising
- chairs around tables and flexible seating arrangements possible to enable small groups
- shelving with board games
- background music should be low or not used (to assist people who have trouble filtering background sound)
- arrange the space so that games invite people to join in e.g. giant jenga on the ground, indoor bowls.

Scent exploration zone

This area would ideally be outdoors as scent can be a trauma trigger for some people. If inside, it is preferable to use small sealable jars of scents including household and kitchen scents. These could be added to small individual pots for an individual kit. Plants may include herbs, scented flowers and leaves (e.g. geraniums) and fruit e.g. strawberries and citrus fruit.

Reading zone

- books, magazine, comfortable chairs
- bookcase with inspirational books, picture books, poetry, crossword or Sudoku books.

Reading zone

- comfortable chairs, cushions
- bookcase
- books, magazine, inspirational books, picture books, poetry, crossword or Sudoku books.

Vegie patch

- patches would ideally promote digging or weeding as this would increase movement and proprioceptive input e.g. digging up sweet potatoes.

Icy zone

- small fridge with ice packs, icy balls, ice to suck, slushy drinks
- zip lock bags with cold water
- water drainage on floor
- non slip mats
- away from kids zone and noisy zones.

Game zone

- room set up for computer game use e.g. Wii, Nintendo
- headphones (wireless) may reduce noise levels.

Massage zone

- massage chair
- mini personal massagers
- massage table for visiting masseurs
- hand and body creams

Sensory Modulation Brisbane



- foot baths.

Shed zone

- woodwork equipment
- tools
- repairs.