

# Sensory modulation implementation and practice issues: learnings from research

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## Background

Sensory modulation is becoming widespread in New Zealand acute inpatient mental health units. Recent research has highlighted a number of evidence-based issues about sensory modulation practice that are useful for clinicians and others who delivery sensory modulation practices in acute mental health units.

Sensory modulation uses a range of tools to provide service users with sensory input which helps them regain a sense of calm during high states of arousal or distress. Tools may include the use of music, soft or pleasant materials, pleasant aromas or weighted blankets.

Sensory modulation often occurs in dedicated rooms called sensory rooms, but can also be used in other parts of in-patient wards. There are also emerging examples of sensory modulation being used by service users in the community, including in their own homes.

Te Pou has been working alongside a number of district health boards (DHBs) to safely embed sensory modulation in services. This has included supporting research into the effectiveness and acceptability of sensory modulation in New Zealand settings and by helping DHBs to have consistent training in sensory modulation practice and implementation through the provision of training.

In 2011 Te Pou contracted Dr Daniel Sutton (Auckland University of Technology) and Ellen Nicholson (Auckland District Health Board) to undertake a qualitative study of the use of sensory modulation in four DHBs. The full study report *Sensory modulation in acute mental health wards: A qualitative study of staff and service user perspectives* (Sutton & Nicholson, 2011) can be located here <http://www.tepou.co.nz/library/tepou/sensory-modulation-in-acute-mental-health-wards-a-qualitative-study-of-staff-and-service-user-perspectives->.

This summary highlights issues arising from the qualitative research regarding (1) implementation of sensory modulation into acute mental health wards, and (2) safe, effective practice.

## Methodology

Staff and service users from three inpatient and one child and family acute inpatient units across four DHBs were interviewed about their experiences of using sensory modulation. In total, 20 service users and 40 staff were interviewed either face-to-face or within group interviews.

The interviews were audio-taped and later transcribed, and a qualitative thematic analysis of the interviews was undertaken. These themes are addressed in the fuller report *Sensory modulation in acute mental health wards: A qualitative study of staff and service user perspectives*. Implementation and practice of sensory modulation issues are discussed in this report.

# The efficacy of sensory modulation in acute units

The Te Pou (2011) literature reviews showed that:

- Sensory modulation is a promising approach in acute settings.
- There is some evidence that sensory modulation may reduce the use of seclusion and restraint when part of a range of positive practices
- The literature supports sensory modulation in sensory rooms and shows that they are at least as effective as traditional methods, and better than no treatment
- The evidence for particular tools is limited, but weighted blankets and questionnaires appear to be useful and popular with service users
- It is important that sensory rooms are locked, but remain accessible at all times
- Clinicians need to have practice using sensory modulation techniques and tools with service users who are less distressed, before feeling comfortable with using sensory modulation with service users who are more so.

New Zealand research (Sutton & Nicholson, 2011) built on the above literature, and found that sensory modulation:

- has the potential to improve aspects of the service user experience, including time with staff, a space for sanctuary and escape, increased personal control and self-soothing, a meaningful distraction from boredom, and a potential alternative to PRN medication through its calming influence
- provided a useful tool for calming
- is helpful for people experiencing anxiety or mood disorders but is particularly effective for people with trauma histories, post-traumatic stress disorder and self-harm behaviours
- facilitates interpersonal connection and trust. A sense of connection created in the process of using sensory modulation is significant. Staff being present to the service user's experience and available to assist and listen during the session can amplify the sense of safety, soothing, stability and control
- can help develop self-awareness and self-management skills for many service users
- provides concrete self-management tools that are simple and effective in managing arousal and distress
- affected the physiological arousal of service users as well as associated emotion and behaviour.

## Implementation considerations

The research into sensory modulation has shown that the following issues should be considered when implementing sensory modulation in acute mental health inpatient wards.

Successful practice outcomes of sensory modulation are more likely to occur in conjunction with other key change strategies such as strong leadership for change, using seclusion and restraint data to inform practice, workforce development, service user and family involvement and debriefing techniques.

Financial and philosophical investment in organisational resources, clear procedures and visible, strong leadership for sensory modulation appears to lead to clinicians applying the techniques with more consistency and with greater confidence. For example, the routine and consistent use of sensory modulation needs staff time to be freed in order to be able observe early signs of distress, and support service users in their calming and self-management.

Staff need to have access to sensory modulation training to learn the underlying theory and principles of the approach, practice using the tools, and apply learning to meet the unique needs of individual service users. Increasing staff confidence and capacity related to assessing risk, management of distress and responding to disclosure of trauma is also an important consideration.

To be effective, it is advisable that services develop clinical guidelines and practice protocols that can be applied alongside existing risk, safety, seclusion, and infection control policies. Services are encouraged to make practice expectations that include: the routine assessment of sensory preferences, the development of personal safety or recovery plans to inform the sessions, staff commitment to work alongside service users within the sensory room and to support the generalisation of strategies beyond the room and ward environment.

It is advisable to ensure that a staff member accompanies service users which in the sensory room, and to lock the sensory room when it is not in use. This ensures that the room is ready for use for calming and de-escalation.

It is possible to use the sensory modulation approach out in the ward, rather than just the sensory room. In inpatient wards there can be open access 'comfort rooms' (if space allows) with basic sensory equipment, portable sensory carts that clinicians can take to service users in other parts of the ward as necessary, and personalised sensory kits for individual service users.

Key pieces of equipment that services might consider purchasing because of their general efficacy include massage chairs. These are widely reported as being helpful for calming and seen as a worthwhile investment. Similarly rocking chairs and bean bags are often experienced as comforting and provided useful alternative seating options. Weighted blankets and soft toy animals were found to be valuable tools for grounding, and stress balls were effective for many service users. Also essential are audio and visual items, which are helpful additions for some service users.

Services will need to be prepared for the ongoing cost of replenishing the sensory equipment. To convey the service's value of both the approach and the service users who access it, the room, furnishings, and tools should be well maintained, available and clean.

## Practice issues

The research shows that the following practice issues should be taken into consideration by clinicians and others delivering sensory modulation in acute mental health inpatient units.

Sensory modulation was not always effective in reducing arousal and occasionally resulted in a negative reaction. Some participants were not able to sit long enough to engage in the sensory modulation session due to their agitation or feelings of claustrophobia, while others were overstimulated or opened up to negative thoughts or emotions. Practitioners therefore should be cognisant of these risks and have an understanding of the person's trauma history and triggers. Trauma informed care is an important element in implementing sensory modulation approaches in the acute mental health inpatient unit.

Sensory approaches are useful with highly-aroused people if risk management principles are followed. The practice should be informed by an understanding of individual risk factors, triggers, sensory sensitivities, late warning signs and sensory preferences. Relevant sensory modulation strategies should be incorporated into advanced directives, recovery and safety plans. The findings suggest that highly agitated people should be supported to use simple sensory items, such as a weighted blanket or a stress ball, which have an ease of use and carry minimum risk of harm.

Staff need to recognise the impact of noise, light and social demands for people who are hypersensitive to this sensory input. The account of one participant who absconded from the ward due to being overwhelmed by the noisy ward environment is a valuable reminder of the importance of having respite from overstimulation in a safe and uninterrupted space.

Staff awareness of the principles for soothing, stabilising and mindful distraction is critical. This includes, for example, recognising the potential for soothing in their own voices in terms of tone and volume, movements and body language are important. Additionally the principles of using a slow pace and steady rhythm with items such as lighting, music and massage and softness and warmth with lighting, blankets and furnishings is important. 'Stabilising' was a key mechanism for many. The massage chair and weighted modalities were frequently reported as being useful; supporting the notion that sustained stimulation of deep pressure receptors appears to be one of the most effective ways of inducing calm, through 'grounding' the person in their body.

Staff can enhance the grounding features of the weighted blankets, massage chair and other items by encouraging service users to shift their attention to the here and now and focus on the physical sensation. Once service users are sufficiently calm, diaphragmatic breathing and mindfulness techniques can also be used to enhance the stabilising effect.

Creating mindful distractions using the sensory equipment and environment can divert attention away from distressing thoughts or urges for destructive behaviour, and appears to be useful for people who are feeling agitated.

For some service users, sensory modulation provided a welcome escape from the present. If staff are to use sensory modulation as a calming strategy, it is important to discuss with service users other places or times that they most associate with relaxation, and any sensory items that should be avoided due to negative associations.

The sense of control gained through sensory modulation was also important to many of the service user participants. Staff can support service users in taking control by encouraging decision making and active participation in setting up the equipment and room for themselves. Staff can also support service users to gain control over breathing and thinking through relevant relaxation and mindfulness techniques.

There is evidence of sensory modulation being used by service users in their own homes. Some DHBs are training staff to be able to support and coach service users to do this. Although there is no research evidence about the effectiveness of this, it seems likely that this is a promising advancement of sensory modulation.

## Conclusion

Sensory modulation is a promising approach in acute mental health inpatient units, and appears to be largely supported by service users and clinicians as a useful tool. The study discussed in this report has highlighted approach and practice considerations that are important for those who deliver sensory modulation. These will be updated by Te Pou as more evidence emerges from research and practice.

## References

Sutton, D & Nicholson, E. (2011). Sensory modulation in acute mental health wards: A qualitative study of staff and service user perspectives. Auckland: Te Pou o te Whakaaro Nui

Te Pou (2011). Sensory modulation in inpatient mental health: A summary of the evidence. Auckland: Te Pou o te Whakaaro Nui

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