Sensory Interventions for Older Adults Living with Dementia

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SOURCE Citation
Tigno, William; Hayden, Leigh; Passarelli, Christina; and Shepley, Susan, "Sensory Interventions for Older Adults Living with Dementia" (2021). Centre Publications and Scholarship. 41.
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Sensory Interventions for Older Adults Living with Dementia

A Recommendation Tool
Designed and developed by William Tigno

About the Tool
This tool maps out existing literature on sensory interventions. It is based on a scoping review of the literature on sensory interventions. Our scoping review identified what interventions exist to produce particular outcomes, in particular contexts. It did not address effectiveness. As such, this tool will help you identify what others have done in a particular context, and to produce particular outcomes. It will not tell you which options are most effective. It allows users to select a sensory intervention that might be feasible in their context, produce outcomes that are relevant to them. Users are asked to answer a set of questions that help them decide which sensory interventions to consider.

Index of Sensory Interventions Explored

1. Aromatherapy
2. Art Therapy
3. Light Therapy
4. Multi-component Therapy
5. Multisensory Room
6. Multisensory Therapy
7. Music Therapy
8. Nature Therapy
9. Touch Therapy

This tool only works with the latest version of Adobe Acrobat Reader and Acrobat Pro.

Download Adobe Acrobat Reader Here
What type of sensory intervention might work in my setting?

1. Answer each question by selecting one option. Answer the questions as numbered as order is important to the tool.
2. After answering all the questions, click the Submit button.
3. Click on the Clear button if you want to make changes to your answers.
4. The results will appear as buttons that lead you to a more detailed page about the recommended sensory intervention.

01. What type of setting are you in?
- Assisted Living (e.g. Retirement Homes, Long-term Care Home)
- Community (e.g. Community Centres, Museums)
- Day Program (e.g. Adult Day Program)
- Private Residence (e.g. House, Apartment)
- Specialized Care (e.g. Hospital Unit, Dementia Care Unit)

02. Who is this intervention targeted to?
- Individuals
- Groups
- Both

03. Which outcome is most relevant to you?
- Behaviour
- Physical (Heart Rate, Blood Pressure, or Cortisol Levels)
- Cognition
- Psychological / Mood
- Movement / Mobility
- Overall (Quality of life, Well-being)
- Sleep

Recommended Interventions:
- Aromatherapy
- Art Therapy
- Light Therapy
- Multi-Component Therapy
- Multisensory Room
- Multisensory Therapy
- Music Therapy
- Nature Therapy
- Touch Therapy
Aromatherapy is typically used in assisted living (e.g. retirement homes, long-term care) and specialized care (e.g. dementia care units, hospital units). This is because the therapy is often applied in the evening.

Individuals

Aromatherapy is targeted to individuals. Either the oils are massaged onto the arms or back of an individual, or the diffuser is located in their room, near their bed.

Outcomes

The most common outcomes expected from aromatherapy are behavioural (e.g. reduced aggression, reduced wandering, etc.) and physical (e.g. lower heart rate, lower blood pressure, etc.)

Common essential oils are: lavender, lemon balm, tea tree, sweet orange, and rosemary. Aromatherapy may work for those with reduced olfactory functioning, provided that the oil is applied topically.
**Art Therapy**

More than any other sensory intervention, art therapy is conducted in community settings (museums, art galleries, etc.). In some cases, art and art classes are brought into specialized care settings (e.g. dementia care units, hospital units).

Art therapy is typically conducted in groups because the programming often includes open discussion and group art classes/creation.

The most common outcomes measured in art therapy interventions are behavioural (e.g. reduced aggression, improved attention, etc.) and overall (e.g. improved well-being and improved quality of life).

<table>
<thead>
<tr>
<th>Location</th>
<th>Target Population</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Groups</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Specialized Care</td>
<td></td>
<td>Overall</td>
</tr>
</tbody>
</table>

Art therapy can be tactile, visual, and auditory. Visual imagery combined with discussion may promote memory.
# Light Therapy

**Location**

Light therapy studies are almost always conducted in assisted living settings, likely because in these settings, the light can be most easily and consistently modified.

**Target Population**

Light therapy is mostly targeted to individuals. However, large overhead lighting in heavily used communal areas has been used to help groups.

**Outcomes**

The most common and important outcome for light therapy is sleep. Light therapy can improve the quantity and quality of the user’s sleep. Light therapy can also affect behaviour (e.g. confusion, aggression).

This involves exposing people to bright lights or increasing their exposure to natural light. **Light therapy is attractive in some settings because it is a “passive” intervention and does not necessarily require the active participation of target users.**
Multi-component Therapy

These programs tend to be offered in a variety of locations, including: assisted living (e.g. retirement and long-term care), specialized care (e.g. dementia care units and hospital units) and day programs.

This includes sensory therapy interventions applied in combination with other interventions designed to help people living with dementia. Popular combinations include: combining music with physical exercise programming, and combining multisensory therapy with motor stimulation. If an exercise component is part of your intervention, you might expect improved physical outcomes, such as heart rate and blood pressure. Adding a sensory component to an exercise program may increase engagement and participation.

**Location**
- Assisted Living
- Specialized Care
- Day Program

**Target Population**
- Groups
- Individuals

Since these therapies are quite diverse and varied, some are targeted to individuals, and some to groups. However, as a collective, they are most often applied to groups.

**Outcomes**
- Behaviour
- Psychological / Mood

The most common outcomes measured in multi-component interventions are behavioural (e.g. reduced aggression, improved attention, etc.) and psychological/mood (e.g. reduced depression, reduced anxiety).
This is a specialized room that contains multisensory tools and equipment, such as fibreoptic lights, bubble tubes, and spray projectors. “Portable” multisensory rooms exist, where the equipment is loaded onto a cart and can be brought to people who are bed-bound.

### Location
- Assisted Living
- Specialized Care

Since this requires a dedicated room, it is most often implemented in assisted care (e.g. retirement and long-term care) and specialized care (e.g. dementia care units and hospital units).

### Target Population
- Individuals

Multisensory rooms are most often targeted to individuals. A caregiver (formal or informal) leads them through the various interactive components and works with them.

### Outcomes
- Behaviour
- Movement / Mobility

The most common outcomes measured in multisensory room interventions are behavioural (e.g. reduced agitation, improved engagement, etc.) and psychological/mood (e.g. reduced depression, reduced anxiety).
# Multisensory Therapy

**Location**

- Assisted Living
- Day Program

**Target Population**

- Individuals
- Groups

**Outcomes**

- Behaviour
- Psychological / Mood

Most multisensory therapy programs in the literature are located in assisted living facilities (e.g. retirement homes, long-term care). However, many of the interventions in the literature are tested in multiple locations (e.g. hospitals, day programs, private residences). This is a testament to their flexibility and utility.

Multisensory therapy is often targeted to individuals, but it can also be done in groups, however, it is highly dependent on what the specifics of the program are. For example - aromatherapy combined with touch therapy is targeted to individuals, while a video and music intervention could be targeted to either.

The outcomes expected from a multisensory intervention are dependent on the specifics of the intervention. However, as a collective, they tend to target behavioural outcomes (e.g. aggression, wandering) and psychological/mood outcomes (e.g. anxiety, depression).
## Music Therapy

### Location

Any Location

Music therapy has been successfully implemented across all types of settings. It can require very minimal equipment.

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### Target Population

- **Individuals**
- **Groups**

Music therapy is most often conducted in groups, although individual listening-only programs exist.

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### Outcomes

- **Cognition**
- **Psychological / Mood**

Cognition and psychological/mood are the most common types of outcomes measured because music has been documented to improve memory and mood.

This includes listening to music, singing to music, and/or playing instruments. Often songs that are familiar to the users are chosen to increase enjoyment and reminiscence. **Music therapy interventions led by a trained music therapist also commonly measure physical outcomes (e.g. heart rate, cortisol levels).**
Nature Therapy

These interventions include exposure to wander gardens, Zen gardens, English gardens, etc. They are natural multisensory rooms. Nature therapy is increasing in popularity. The type of garden used depends upon cultural salience.

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<td>Assisted Living</td>
<td>Individuals</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Specialized Care</td>
<td>This therapy is easily applied to both individuals and groups. Often educational components are added to the intervention to enhance engagement.</td>
<td>Overall (e.g. improved well-being and quality of life).</td>
</tr>
</tbody>
</table>

Since this requires a dedicated area, it is most often implemented in assisted care (e.g. retirement and long-term care) and specialized care (e.g. dementia care units and hospital units).
**Touch Therapy**

Involves gentle touching of the hands or other parts of the body, such as shoulders, or simply holding hands over the body and "energetically" touching. This should not be confused with massage therapy. Specialized training is required to learn the method.

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</tr>
</tbody>
</table>

This therapy is most often implemented in assisted care (e.g. retirement and long-term care) and specialized care (e.g. dementia care units and hospital units).

This therapy is always applied to individuals.

The most common outcomes measured in touch therapy interventions are behavioural (e.g. reduced agitation, reduced aggression, etc.) and psychological/mood (e.g. reduced depression, reduced stress).