

**Recreation Therapy Evidence- Based Practice Day  
Conference April 24<sup>th</sup>, 2019**

**The Benefits of Snoezelen for Older Adults with Dementia**

Alice Jung, BSRT Student  
Temple University  
Email: tuf55141@temple.edu

Rachel Albert, BSRT Student  
Temple University  
Email: tuf70768@temple.edu

Aurora Crew, MS, CTRS  
Instructor | Temple University  
Email: aurora.crew@temple.edu

**Search Terms:** (Snoezelen AND Older Adults AND Dementia), (Snoezelen AND Dementia OR Older Adults)

**Years:** 2002-2019

**Databases:** Google Scholar, Sage, Wiley Online Library

**Number of Articles:** 6

**Summary of Research Findings**

Individuals with dementia are diagnosed as having “a loss of cognitive functioning, such as thinking, remembering, and reasoning, and behavioral abilities to such an extent that it interferes with a person’s daily life and activities” (National Institute on Aging, 2017). Many of the affected functions include skills such as problem-solving, memory, visual perception, language skills, self-management, attention and focus. Dementia symptoms may range from mild disturbances and inability to complete or remember small tasks in the early stages to the most severe form when a person becomes completely dependent on the help of others (National Institute on Aging, 2017). Due to neural changes, there is an overall loss associated with the many of the senses. Therefore, older adults with dementia may not be able to communicate their needs, resulting in unmet needs. This can have a negative effect on mood, behavior, and communication levels (Borland, 2010). Thus, Snoezelen, a controlled multisensory environment, can help to stimulate a person’s various senses using sounds, smell, music, textures, etc. to “produce various responses from each client that identify and target their specific sensory deficits” (Borland, 2010).

In the research articles, all six studies explored the impact on mood and behavior through the intervention of Snoezelen (Snoezelen Multisensory Environments, 2018; Lancioni, Cuvo, O’Reilly, 2002; Gaudet et al, 2011; Baillon et al, 2004; Staal et al, 2004; Borland, 2010) . All six studies concluded with the result that the use of Snoezelen led to positive effects on the mood and behavior in older adults with dementia. Four out of the six studies explored the impact of Snoezelen on agitation in older adults with dementia. With agitation and distress being a common feature of dementia, the focus of these studies were to reduce negative mood and behaviors in older adults with dementia while providing an environment where the client is able to feel connected and stimulated in their senses (Baillon et al. 2004). All studies assessed client’s baseline before participating in the Snoezelen room and after the session (Lancioni, Cuvo, O’Reilly, 2002; Staal et al, 2007; Borland, 2010). Outcomes that were assessed in the review were engagement, concentrated engagement social/emotional measures, stereotype measures, challenging behavior, adaptive skills measures, adaptive and maladaptive behavior, task-related measures. heart rate measures, communication, locomotion, visual, self-injurious measures and language/memory measures (Lancioni, Cuvo, O’Reilly, 2002).

The purpose of Snoezelen is not seen as “an attempt to teach specific skills or a basis for simply promoting resting and quiet, but as an opportunity to promote a general feeling of restoration and refreshment from engaging in pleasurable and stimulating activities that do not produce an pressure and can be enjoyed in full” (Lancioni, Cuvo, O’Reilly, 2002). The Snoezelen environment can have different spatial configurations and stimulus arrangements and is supposed to offer multiple stimulation opportunities covering all the sensory channels (Lancioni, Cuvo, O’Reilly, 2002). The goals of the clients may be different per individual but they include: relaxation, distraction, interaction, socialization, comfort, stimulation, relief, and communication (Snoezelen Multisensory Environments, 2018). The staff are expected to be very closely involved with the clients that are exposed to Snoezelen and to play as role of “enablers” (Lancioni, Cuvo, O’Reilly, 2002). Some studies used a quantitative randomized control, single-blind group design while others used parallel randomized comparison groups using other types of therapies or conditions, crossover design, or post session measures compared to baseline measures. In one study an experimental group and control group consisted of 6 one-on-one sessions. One structured activity for each session were 25-30 minutes and post measurement was used to determine baseline (Borland, 2010). Research conducted by Lancioni, Cuvo, and O’Reilly, varied in the number of Snoezelen session from one to 64 session, and the duration time ranged from 20-60 minutes per client. The conditions included: baseline conditions, living-room sessions, outdoor activity, relaxation, massage/aroma, leisure, music, playroom, free-activity and activity sessions. Some studies were inclusive with those with one or multiple disabilities, with or without challenging behavior, children with mental retardation and stereotyped behavior and older adults with dementia (Lancioni, Cuvo, O’Reilly, 2002). Others were exclusive to those in geriatric psychiatric inpatient units.

All studies showed that using Snoezelen as treatment produces positive effects in mood and behavior. Some studies were found to reduce heart rate and levels of agitation with the combined effect of pharmacological treatment, in one study even more than the standard treatment alone (Borland, 2010; Staal et al, 2007; Lancioni, Cuvo, O’Reilly, 2002; Baillon et al, 2004). In addition, experimental group showed improvement in the outcome of apathy (Borland, 2010). However, more studies do need to be conducted to establish the benefits of dementia across different stages and to identify benefits additional to those who received increased staff attention (Baillon et al, 2004). Some studies may have included biases such as sample selection bias, measurement detection bias, and intervention/performance bias (Borland, 2010). However, with the positive effects on the studies and the future studies to come, the

intervention of Snoezelen can be a beneficial treatment that offers option for Recreational Therapists as well as other disciplines to help promote a better quality of life for older adults with dementia.

### Knowledge Translation Plan

Recreational therapists can implement Snoezelen as an intervention. Snoezelen can be used by anyone but is mostly used by therapists and health professionals. Snoezelen Multi-Sensory Environments are relaxing spaces that help reduce agitation and anxiety, but they can also engage and delight the user, stimulate reactions and encourage communication. They can be used to stimulate users by providing exciting visuals, music and sounds, invigorating smells and textures to explore, to calm and reduce agitation through the use of gentle light, soothing sound, relaxing smell and touch, for color matching, understanding of cause and effect, and creating themed environments to teach within. There is no restriction in terms of age or ability as many people can benefit from this intervention. Our 6 articles showed the benefits of how Snoezelen benefits older adults with dementia. When using Snoezelen you want to use caution. In one study the author reported having “adverse effects” such as “temporary behavioral deterioration and/or severe and prolonged behavioral problems, which suggested strong dissatisfaction and stress and caused definite removal from the sessions” (Lancioni, Cuvo & O'Reilly).

Three out of six of the articles used participants with dementia and put them in Snoezelen sessions from 20-60 minutes. This time frame for this intervention worked best because it was long enough for the clients to get fully immersed in the experience but not long enough for over-stimulation to occur. There are different types of Snoezelen such as guided Snoezelen, where sessions are more structured and generally include initial exploration of the environment followed by a planned activity and a period of relaxation such as guided imagery or massage. Many Snoezelen techniques are largely influenced by the training and philosophy of companions, teachers and session facilitators. Some provide sessions that are focused primarily on relaxation and wellbeing, while others incorporate therapy or educational goals in their sessions.

Four out of six studies showed that they had more of a non-guided session. Staff was expected to be very closely involved with the participants exposed to Snoezelen and to function as 'enablers' (Lancioni, Cuvo & O'Reilly). This shows to be the best use of Snoezelen for these participants, but guided sessions could be the best use for different populations. Some rooms are carefully designed 'white' rooms which allow for creative environmental change but there is also brightly colored Snoezelen environments which have a much higher level of visual stimulation to arouse interest, with a variety of colorful furniture and equipment displayed in the room. The white rooms were used for 4 out of 6 studies for participants with dementia. A Snoezelen Multi-Sensory Environment incorporates a specialized selection of sensory equipment and materials that can help clients adapt their responses to sensory stimulation and to advance education and therapy goals. Each Snoezelen MSE is tailored to meet the needs of specific populations according to age and ability. The blends of sights, sounds, textures, aromas, and motion provide stimulation of the primary sensory systems and can be modified to meet each participant's sensory need. There's a variety of different technology, black lights, bubble tubes, fiber optics, interactive panels, lighting effects, and projectors and accessories.

#### Considerations

- Setting (light & sound effects)
- Choice of seating
- Use of scents
- Duration of session
- Ending of session
- Participant needs
- Equipment
- Participant mental state (e.g dementia, physical disability, intellectual disability)

#### Intervention

- Duration: 20-60 mins
- Group size: 0-20
- Structure: Not overcrowded, not too many or overwhelming scents, non-guided sessions
- Equipment: Use of blacklights, bubble tubes, fiber optics, interactive panels, lighting effects, projectors & accessories

#### Outcomes

- Decreased agitation
- Positive mood
- Positive behavior
- Reduced heart rate
- Improvement in apathy

#### References

- Benefits and Application (2018). *Snoezelen Multisensory Environments*. Retrieved from <https://www.snoezelen.info/>
- Lancioni, G. E., Cuvo, A. J., & O'Reilly, M. F. (2002). Snoezelen: an overview of research with people with developmental disabilities and dementia. *Disability and Rehabilitation*, 24(4): 175-184. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK69455/>
- Gaudet, A., Stephens, M. L., Tallon, S., Comeau, K., McDonald, J., Moore, L., Pringle, Donna. (2011). Quality palliative care in long term care alliance (QPC-LTC): Snoezelen training toolkit. *Centre for Education and Research on Aging and Health*. Retrieved from [http://www.palliativealliance.ca/assets/files/Snoezelen\\_Toolkit-Jan25.pdf](http://www.palliativealliance.ca/assets/files/Snoezelen_Toolkit-Jan25.pdf)
- Baillon, S., Van Diepen, E., Prettyman, R., Redman, J., Rooke, N., & Campbell, R. (2004). A comparison of the effects of Snoezelen and reminiscence therapy on the agitated behavior of patients with dementia. *Geriatric Psychiatry*. 19; 1047-1052. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1002/gps.1208>
- Staal, J. A., Amanda, S., Matheis, R., Collier, L., Calia, T., Hanif, H., & Kofman, E. S. (2007). The effects of Snoezelen (Multi-Sensory Behavior Therapy) and psychiatric care on agitation, apathy, and activities of daily living in dementia patients on a short term geriatric psychiatric inpatient unit. *The International Journal of Psychiatry in Medicine*, 37(4), 357-370. <https://doi.org/10.2190/PM.37.4.a>
- Borland, I. (2010). The effectiveness of Snoezelen sensory-based behavioural therapy on individuals with Dementia. *Mental Health CATs*, 16. Retrieved from <http://commons.pacificu.edu/otmh/16>
- Dementia. (2017). National Institute on Aging. Retrieved from <https://www.nia.nih.gov/health/what-dementia>