

The use of the multisensory environment to improve mood and behaviour in people with moderate to severe dementia: a randomised control trial.

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Dementia currently affects over 30 million people worldwide. (Alzheimer's Disease International, 2005). Clinicians and healthcare managers report dissatisfaction with current healthcare options available for people with dementia. Multisensory Environments (MSEs) utilise advanced sensory stimulating equipment that targets the senses. MSEs have been successfully used in dementia care, severe learning disabilities and palliative care (Staal et al, 2007). Despite this, only limited studies have been conducted to explore the efficacy of this intervention on mood and behaviour. **Objective:** To explore to what extent, if any, do MSEs influence the mood and behaviour of people with dementia compared with a control activity (gardening)? **Method:** Thirty participants were selected from people with a diagnosis of moderate / severe dementia (Standardised Mini-Mental State Examination; SMMSE scores 0 – 17), in residential care within the UK. Participants were allocated to one of two groups (MSE or gardening). Following baseline assessment (GBS Scale, SMMSE, PAL Occupational Profile, Adult Sensory Profile), each participant took part in their allocated intervention 3 x week for 4 weeks. Binded assessment was carried out before and after each session using the Neurobehavioural Rating Scale (NRS). **Results:** Only results from the NRS will be reported in this paper. Analysis was conducted using intention to treat analysis. Results revealed a significant main effect of intervention ($P = .001$) on mood and behaviour. When variable end points were analysed a significant main effect of intervention was also identified ($P = .001$). Sessional analysis and number of sessions for which improvement was made revealed significant improvement in mood and behaviour for the MSE group ($P = .008$). **Conclusion:** Improvement in mood and behaviour may be indicative of enhanced sensory processing and reduction of environmental demand facilitated in the MSE. These findings may have implications for OTs working with people with challenging behaviours who may not respond to more conventional treatment approaches.

Alzheimer's Disease International (2005) Global prevalence of dementia: a Delphi consensus study. *Lancet*. 366 (9503), 2112–2117.

Staal et al. (2007) The Effects of Snoezelen and Psychiatric Care on Agitation, Apathy, and ADL in Dementia Patients. *IJPM*. 37(4). 357-370.