

The Effects of Music Modalities on the Behaviour of Older Persons Living with Dementia in a Maltese Long Term Care Setting

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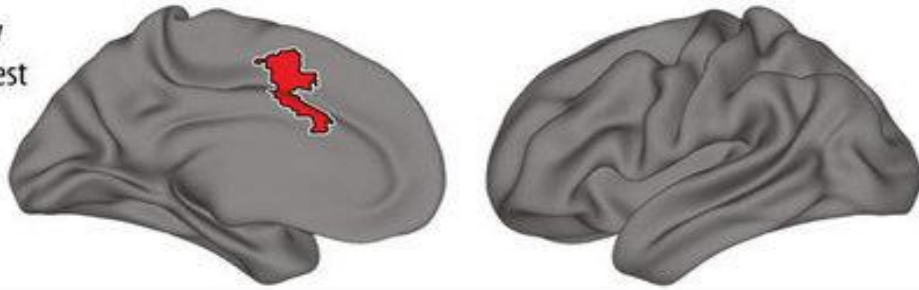
Dr Maria Aurora Fenech

Challenging Behaviour in Dementia

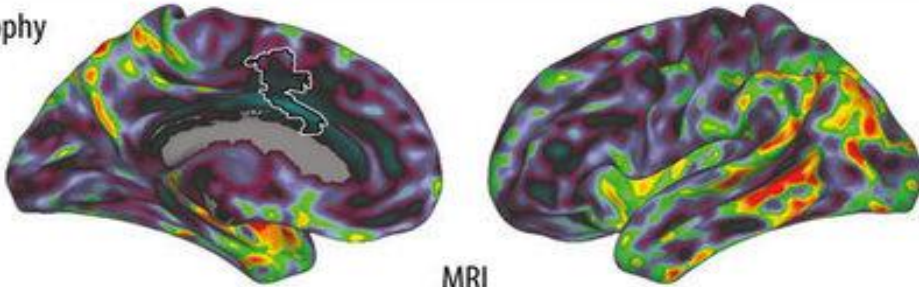
- BPSD- Behavioural and psychological symptoms of dementia
- Frequent occurrence of agitation/aggression
- Present major management challenge
- Present pharmacological treatments (atypical antipsychotics) - short term
- Serious adverse outcome of treatment (stroke/death)
- Consideration of possible nonpharmacological approaches
- Aim at having alternative therapies of intervention as first line management strategy for challenging behaviour

(Alldred, 2007).

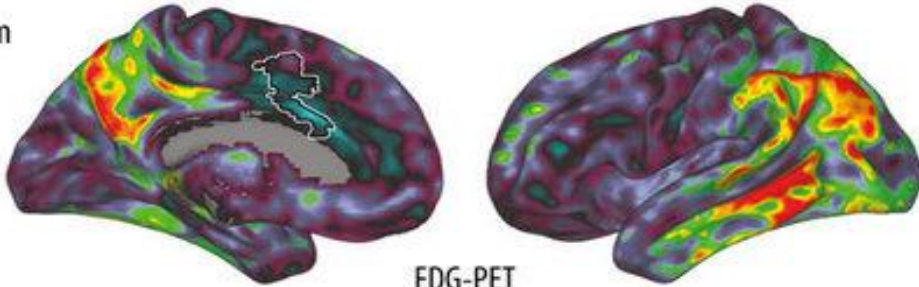
Musical Memory
Region-of-Interest



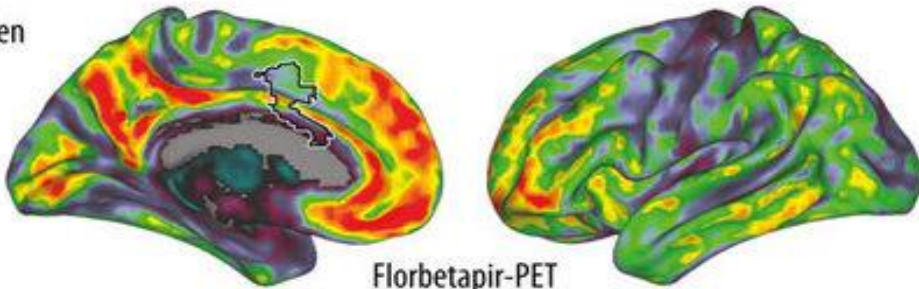
Gray Matter atrophy



Hypometabolism



β -Amyloid burden



Why Music?

- Innate natural rhythm/beats
- Pythagoras prescribed it for maladies
- Seat of long-term music memory not damaged as other parts (neuron loss, brain metabolism, amyloid deposition)
- Music response correlation (reward/emotion in brain)
- noninvasive/cost-effective

(Jacobson, 2015)

The Research Project

AIMS: -

- Explore effects of music on challenging behaviour
- Add research findings to this untapped area of study.
- New ways of incorporating alternative therapies in health care strategies for dementia care

Project site: Zammit Clapp Hospital

Recruitment:

- 13 participants through Gatekeeper
- Rudas Scale (1-15) (criterion sampling)

Music Sessions: Data Collection- 8 weeks, at 2 week intervals.

- 3 sessions weekly (30/40mnts)
- CMAI- short (behaviour assessment)

(Cohen Mansfield, 1986)

Research Benefits

- New Care strategies in dementia care
- Prevailing increase in:
 - Life Expectancy
 - Dementia Cases
- Preserve dignity and quality of life through music interaction as a pleasurable experience
- Alternative non-pharmaceutical route



3 categories, as grouped by the author (Cohen Mansfield, 1986): -

i) Aggressive behaviour - Hitting, kicking, pushing, scratching, tearing things, cursing or verbal aggression, grabbing (biting, spitting).

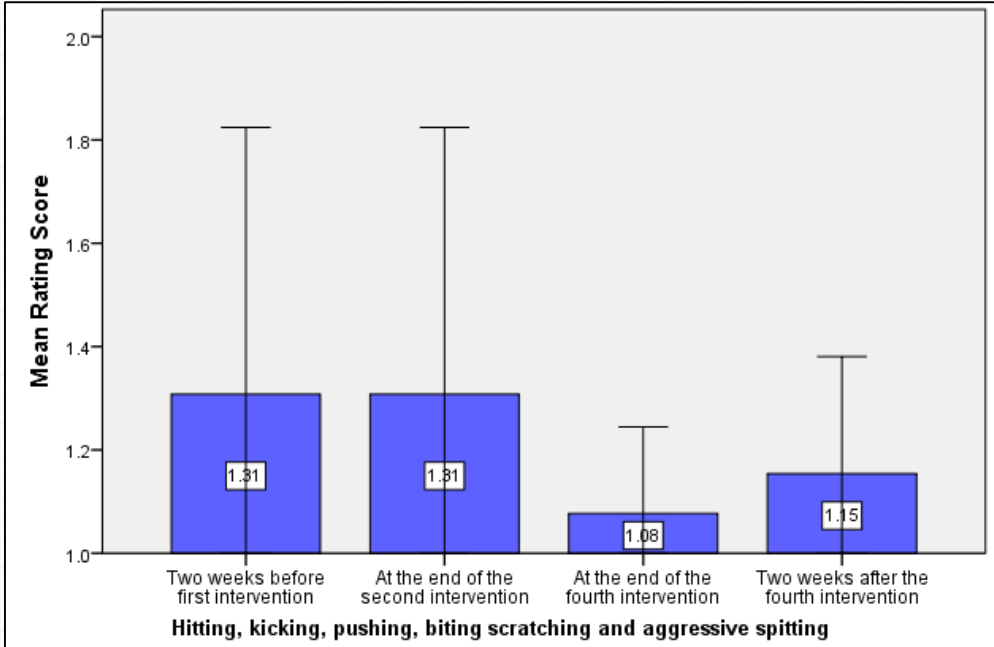
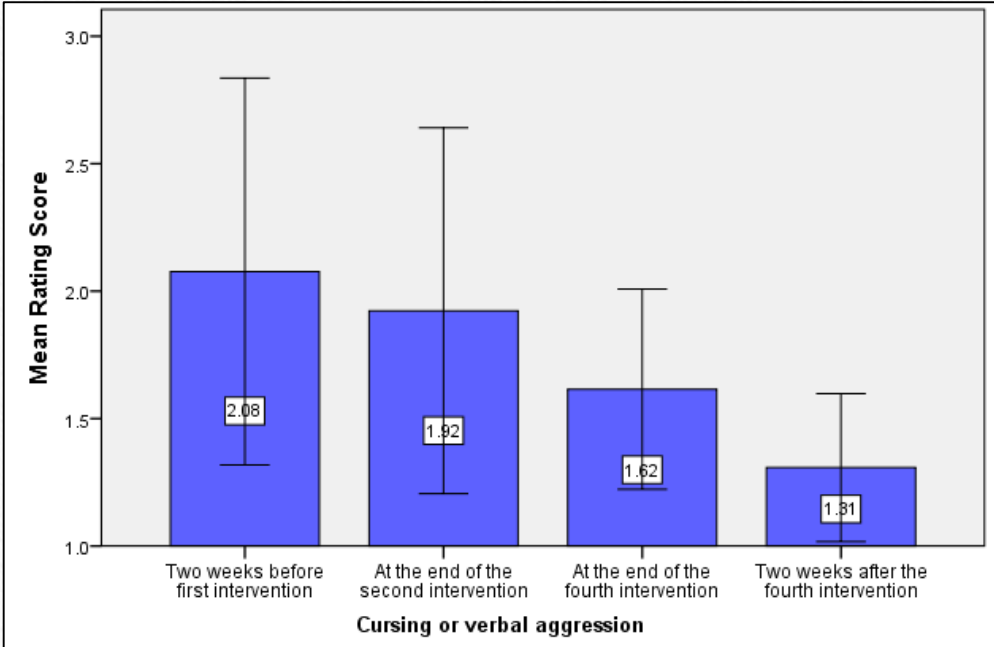
ii) Physically nonaggressive behaviour - Pacing, inappropriate robing or disrobing, trying to get to a different place, handling things inappropriately, general restlessness, repetitious mannerisms.

iii) Verbally agitated behaviour - Complaining, constant requests for attention, negativism, repetitious sentences or questions, screaming.

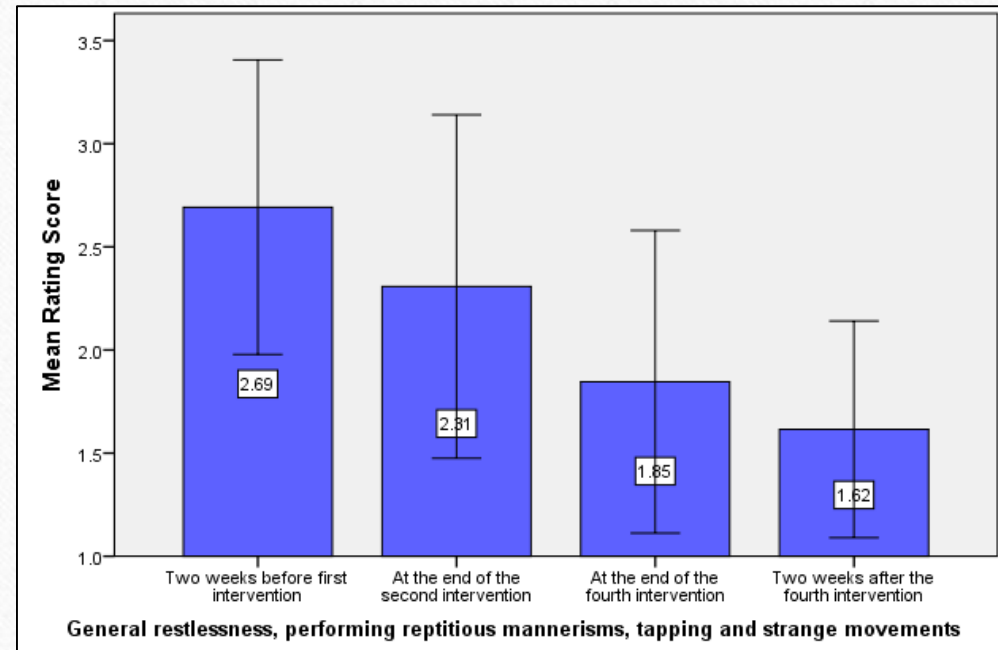
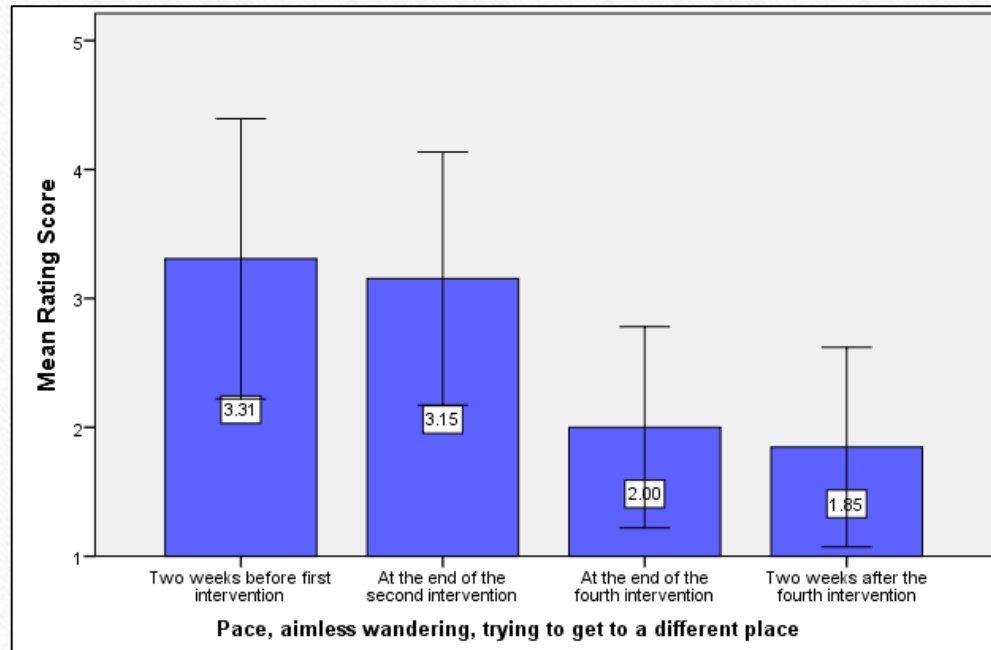
Assessments and Music Interventions

- a) Baseline - Assessment 1- no intervention - 2 weeks before 1st Intervention
- b) 1st Intervention - No assessment - Week 1 of music intervention (sessions 1-3)
- c) 2nd Intervention - Assessment 2 - Week 2 of music intervention (sessions 4-6)
- d) 3rd Intervention - No Assessment - Week 3 of music intervention (sessions 7-9)
- e) 4th Intervention - Assessment 3 - Week 4 of music intervention (sessions 10-12)
- f) Retest Intervention - Assessment 4 - Week 6 (session 13)

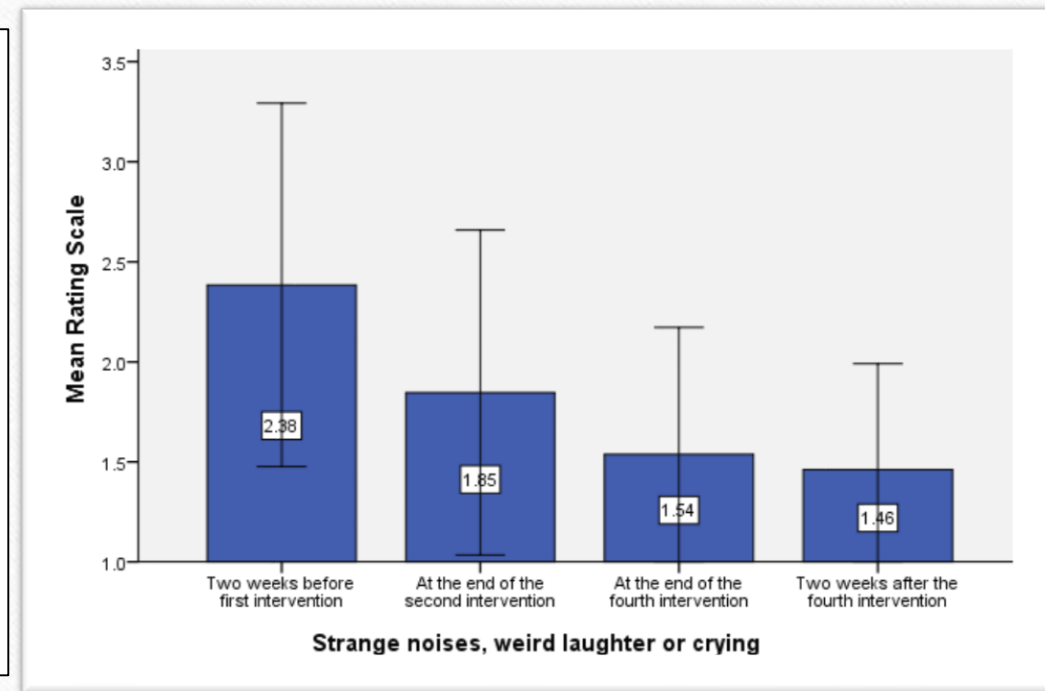
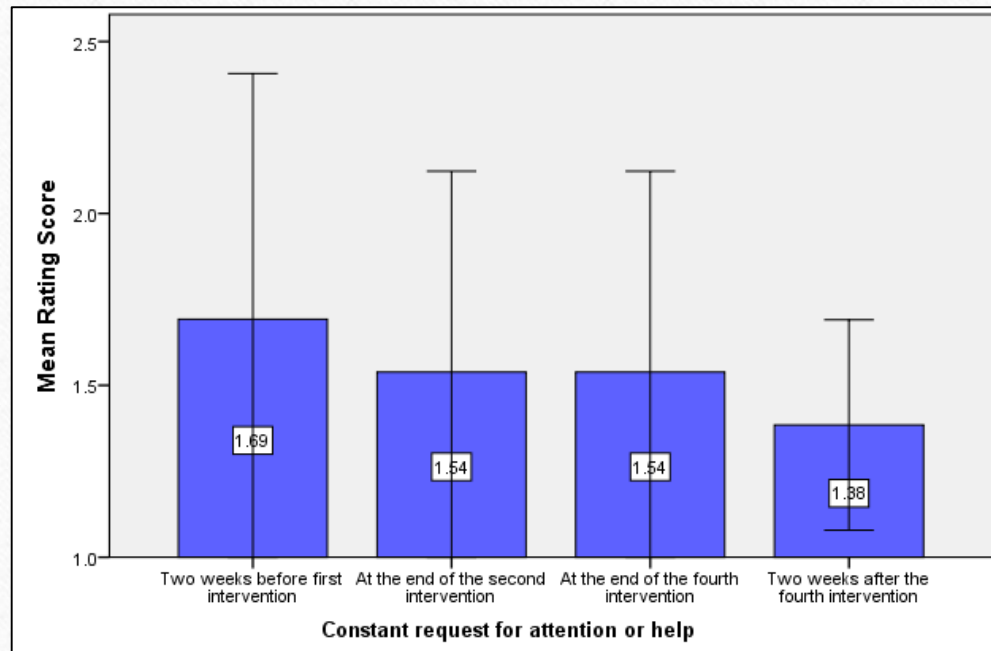
Results- Quantitative Aggressive Behaviour



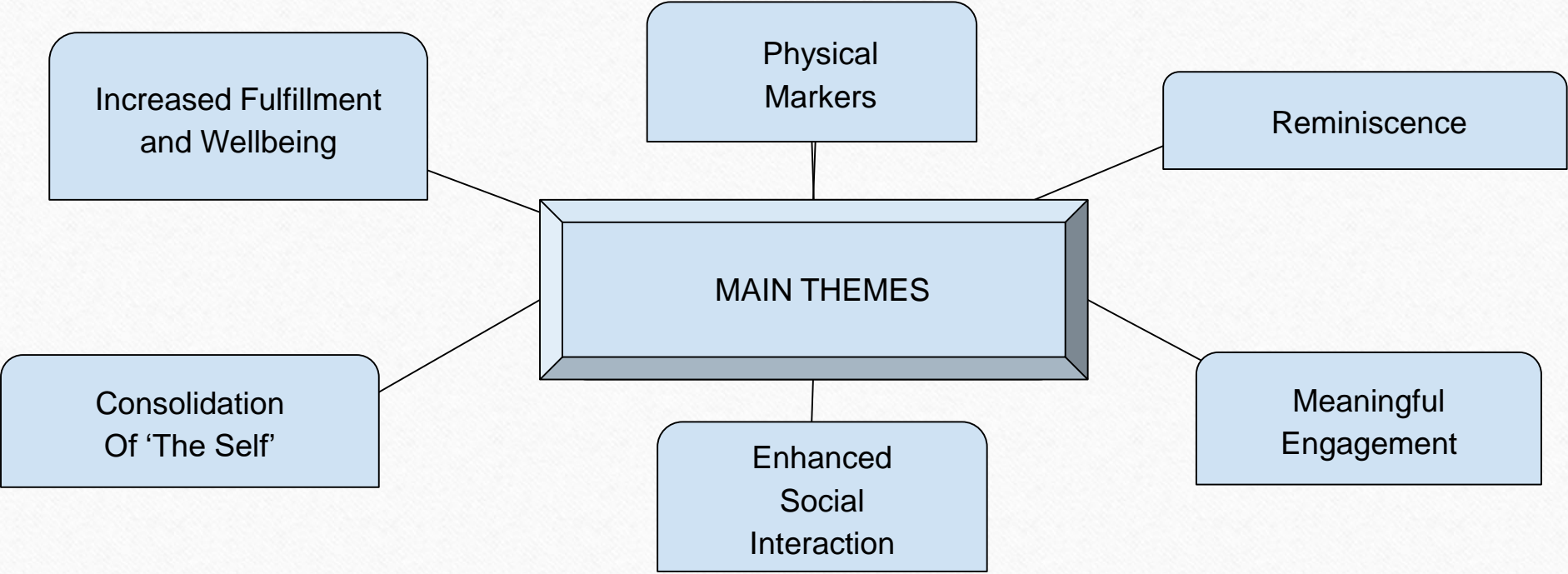
Physically nonaggressive behaviour



Verbally agitated behaviour



Emerging Themes



Sub- themes

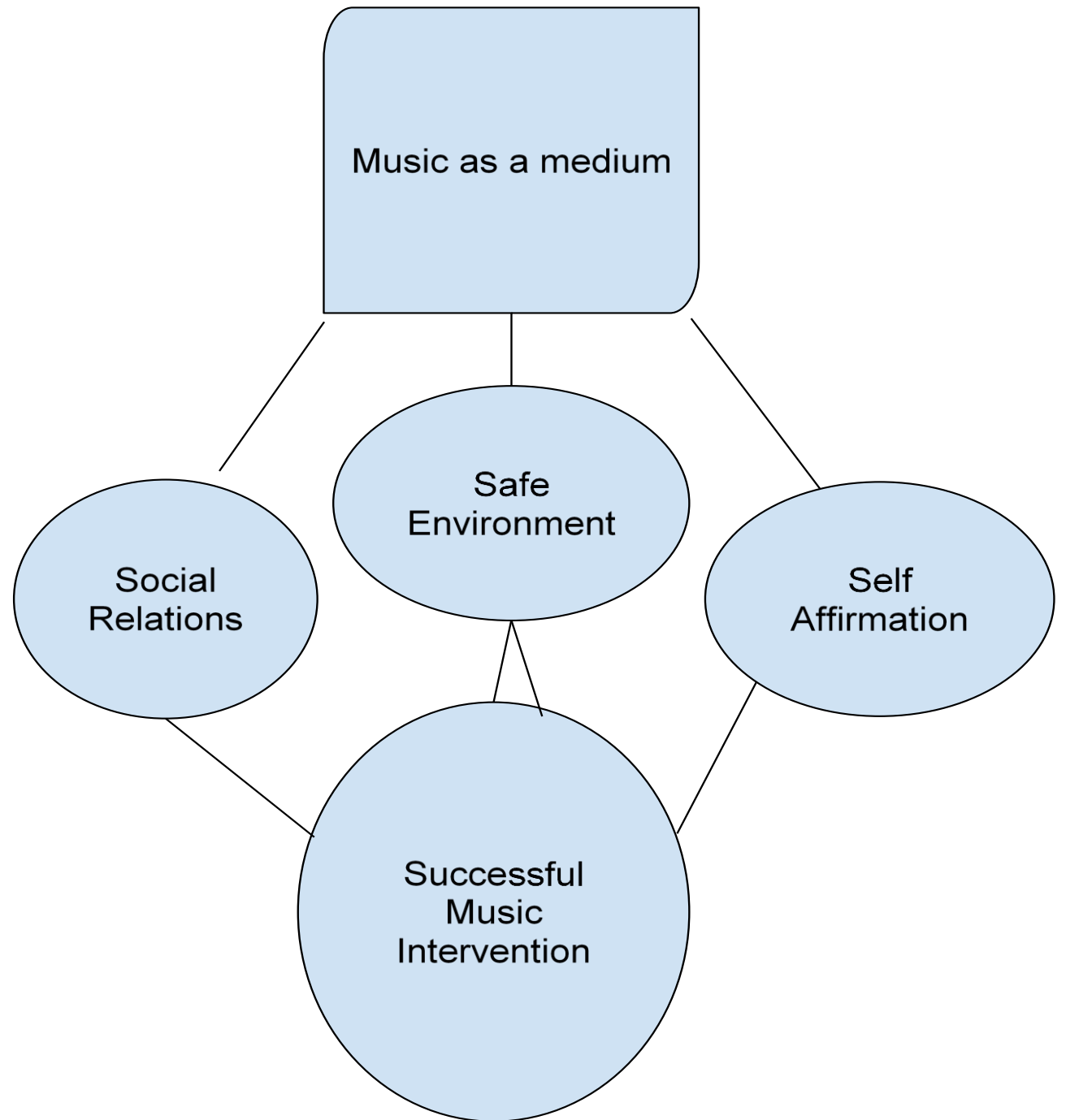
- **Physical Markers**

- This main theme was further subdivided into 3 sub-themes as follows:
 - (i) Body Movement
 - (ii) Bruxism/ Grinding of the teeth
 - (iii) Wandering

- **Meaningful Engagement**

- was further subdivided into the following 2 sub-themes to better explore the phenomena:
 - (i) Relational Interaction
 - (ii) Communication

The Music Medium Model



I have seen deeply demented patients weep or shiver as they listen to music they have never heard before, and I think they can experience the entire range of feelings the rest of us can, and that dementia, at least at these times, is no bar to emotional depth. Once one has seen such responses, one knows that there is still a self to be called upon, even if music, and only music, can do the calling.

OLIVER SACKS (2007) *Musicophilia: Tales of Music and the Brain*

New York: Knopf (p.346)



THANK YOU – SPREAD THE CHANGE

