

Treatment of alzheimer's disease and dementia psychology essay



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Music therapy has been a widely used source of treatment for many patients suffering from mental, physical or communicational disorders as well as learning difficulties and eating disorders. This type of therapy uses various methods to develop verbal interaction, offers opportunities to create positive changes in mood, emotional states and increase self-confidence and awareness. Outcomes such as these are vital in the treatment of mental disorders such as Alzheimer's disease and dementia as a patients' well being and a positive emotional state can, in some cases, increase memory and communication skills and slow the progression of the disease.

In Stanley Kubrick's 1968 film 2001: A Space Odyssey this degeneration of the brain is portrayed; The intelligent HAL 9000 computer is deactivated circuit board by circuit board and degenerates to singing Harry Dacre's "Daisy Bell". In the film it is stated that the reason the computer reverted to singing this song was because it was one of the first things HAL learned when it was originally programmed. This scene has many parallels to the degeneration of the brain due to Alzheimer's disease as the last area of the brain to degenerate is its cognitive reaction to music. (Kreitzer, M 2013)

Alzheimer's disease has a degenerative effect on the brain and its cognitive functions. The main symptoms of this disorder include dementia, loss of memory and aphasia, impairment of communication and social contact skills as well as behavioural disturbance and distress for the patient. In the latter stages of the disease, patients can develop Apraxia, motor impairment and deterioration in awareness of surroundings. While there is not yet a cure, there are many medical treatments available to slow down the progression of the disease or in some cases to sedate a patient with severe behavioural

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concerns (Aldridge, D 1989). Despite the extensive use of medical treatment, many patients are given different non-medical treatments to improve state of mind and emotional well-being; music and arts therapies are widely used for this purpose. These types of non- medical therapies have a profound effect on a patient's emotional state and can provide an outlet for the frustration and loneliness that many patients suffer from. Music therapy is an exceptionally effective form of brain stimulation as the frontal lobe is, in most cases the last section of the brain to lose its cognitive functions; this section of the brain controls emotions and behaviour and stores our deepest memories. When music is played or sung with patients, many can recall rhythms, pitch and lyrics despite not being able to recognise their own children; ' While language deterioration is a feature of cognitive deficit, musical abilities appear to be preserved' (Aldridge, D, Brandt, 1991; 29) A retrospective case history of the French composer Maurice Ravel demonstrates how the right-sided cognitive system can remain despite the progression of Alzheimer's disease. At 58, Ravel was struck with aphasia, which silenced any further artistic output. He was able to think musically but unable to express his ideas in either writing or performance. ' Hemispheric lateralization for verbal (linguistic) and musical thinking offers an explanation for the dissociation of Ravel's ability to conceive and to create. What makes Ravel's history interesting to the public as well as to physicians is not only the tragic toll exacted in this composer's personal and creative life but also the resultant loss of the output of one of the 20th century's towering musical geniuses.' (Cytowic R. E 1976: 109-114)

Kenneth Swartz of the University of Rochester put forward a paper reporting on initial experiments using ERP (Event related potential) to measure the perception and information processing of music stimuli by subjects with SDAT (Senile Dementia of the Alzheimer's Type) The experiment compares the behavioural and neurophysiologic SDAT responses to those of healthy age-matched controls. Swartz suggested the following levels of musical disorder and which of those levels Alzheimer's patients suffer from.

Swartz proposal- levels of musical disorder

The acoustico-psychological level which includes changes in intensity, pitch and timbre.

The discriminatory level, which includes the discrimination of intervals and chords

The categorical level which includes the categorical identification of rhythmic patterns and intervals

The configurable level which includes melody perception, the recognition of motifs and themes, tonal changes, identification of instruments and rhythmic discrimination.

The level where musical form is recognised including complex perceptual and executive functions of harmonic, melodic and rhythmical transformations.

In Alzheimer's patients it would be expected that while levels (i), (ii) and (iii) remain unaffected, the complexities of levels (iv) and (v) when requiring no

naming, may be preserved but are susceptible to deterioration. (Aldridge, D 2000: 142)

Music therapy can be administered in various forms including group singing sessions and individual listening sessions; some therapies consist of improvisatory exercises using percussive instruments and others recalling songs from childhood, such as hymns or the national anthem. 'Improvisatory music therapy offers opportunities to supplement mental state examinations in areas where those examinations are lacking; ascertain the fluency of musical production; intentionality, attention to, concentration on and perseverance with the task in hand; episodic memory can be tested and the ability to repeat short rhythmic and melodic phrases.' (Aldridge, D 1993: 93-94) Some of the expected outcomes of music therapy include developing through musical (non-verbal) and verbal interaction an enhanced awareness of self and others, encouraging children and adults to have a self-belief in their own musicality. It is expected that a development in physical, sensory and cognitive skills, improved concentration and attention span can be obtained by patients. These skills are instrumental in gaining in self-confidence and self-esteem and help decrease tension, anxiety and stress. In addition, music therapy sessions can encourage the use of skills such as active music making, listening and the use of motor movements, sequential memory and recall of information. (unknown, 2012)

Alzheimer's disease is one of many forms of degenerative disorders that take over and damage the brains cognitive functions for instance Parkinson's disease. In most cases recognition and appreciation of music remains until the very late stages, therefore music therapy by its very nature helps in <https://assignbuster.com/treatment-of-alzheimers-disease-and-dementia-psychology-essay/>

slowing down symptoms of these conditions and/or improving patient's emotional well-being.