## Multi sensory environments and dementia essay

Art & Culture, Music



Running head: MSE and Dementia Multi-Sensory Environments and Dementia: Abstract This paper addresses the concern for the wellbeing of patients with dementia and the struggle to find a new or alternative and

effective treatment. The topic, Multi-sensory environments and dementia, was selected for the challenge it presented, and the conviction that the writer has for the rights of geriatric psychiatric patients.

Along with personal conviction, this topic was chosen because of the intrigue of the new frontier of neuropsychology. The Multi-sensory environment itself is based on beliefs in this field of psychology for which there is little research. Research was compiled from several different sources; from journals, to reference material.

A thorough literature review was conducted and examples from said review were applied to the body of this paper. Through the literature review, the researcher was able to find both biased and unbiased data about the topic and an answer to the original problem was found. The overall findings were unfortunately inconclusive. More research is needed in this field before any firm belief can be established. The review provided somewhat of a settling discovery however. While there is no evidentiary support for the Multisensory Environment to replace the use of drug or other therapeutic interventions, there is firm support that it is on equal par with other therapies. The Multi-sensory Environment can safely become an addition to the current practices of treating dementia.

This is due to the fact that throughout the review, no signs of negative effects were found from the use of an MSE. In the future research on this

topic should be more regulated. There need to be established tools to measure the intensity and duration of the negative behaviors displayed by dementia patients. There need to be universal measures put in place so that world-wide research can be relevant and valid.

Since neuropsychology is a relatively newer field, this may take time to perfect. Advances in the field are taking place and hopefully future research can be more helpful and established. Multi-Sensory Environments and Dementia The topic chosen for this paper is the effects of Multi-sensory environments also known as " Snoezelen")on patients with dementia.

Psychiatric care in the United States and most of the world is lacking knowledge and insight that is necessary to treat and potentiallycure these illnesses. Moreover, the elderly population in the psychiatric community is often overlooked and neglected. Geriatric patients who are hospitalized to treat dementia have historically been over-medicated and under-cared for. The topic addressed in this paper covers old thinking and theory as well as breakthrough techniques at eliminating the debilitating symptoms of dementia. The purpose of this paper is to explore the different experiments conducted on dementia involving MSE and MSBT. Through a thorough literature review, treatment outcomes, implications, and limitations of using such interventions will be explored and discussed. Research has been conducted and collected for approximately a decade on multi-sensory environments (MSEs).

The purpose of this research is to determine whether an environment in which persons with neurological disorders can be treated through stimulation of all senses. Furthermore, research conducted with MSEs on patients with dementia is aimed as suppressing and even eliminating behavioral problems caused by dementia. Multi-sensory environments employ concepts from the neuroplasticity model to treat behavioral disturbances in many individuals suffering from neurological damage, disorder, and illness. The implications for MSE usage range from the treatment of traumatic brain injury in young adult soldiers, to children with developmental disabilities, to elderly patients suffering from dementia.

In the past, the behavioral issues caused by dementia have been mostly treated by psychological pharmaceuticals. Because dementia causes such dramatic behavioral modifications, many doctors treat these symptoms with anti-psychotics, mood stabilizers, and anti-depressants. Long term use of psychological medications can have harsh ramifications however.

One of the most severe side effects from use of psychological medications is called EPS or extrapyramidal symptoms. The first of these symptoms is called Dyskinesia. Dyskinesias involve involuntary movements such as: mouth movement, twitching, and excessive blinking.

Another, more extreme form of EPS is called Akathisia. Akathisia ischaracterized by the inability to remain still for any period of time. Individuals experiencing this EPS may also convulse and have seizure-like activity. (Pekka, 1984) The last major EPS is called Dystonia.

This symptom involves strong, often painful, muscle contractions and stiffness of muscles. There are few ways to treat EPS but two medications

that are commonly used are Benadryl and Cogentin. PDR, 2005) In order to avoid the use of these harsh psychological drugs, many care facilities are employing new practices to help control behavioral problems in geriatric dementia patients.

One method is psychotherapy, another is environmental control. Environmental control is about adapting the environment to suit the needs of the dementia patient. For example, ifa patient becomes aggressive and violent when placed into a room where there are many people, the treatment plan for that individual should include avoidance of large groups of people, preferably one to one interaction. This practice has been expanded upon even further and thus the MSE (multi-sensory environment) was introduced to long-term care facilities for the treatment of dementia.

Method Participants Procedure Results Studies from multiple sources concluded that Snoezelen or Multi-sensory Environments have a positive effect on mood activity level. A study conducted by L. Pinkney showed results that showed Snoezelen to have a "...positive effect in reducing most of the negative behaviors observed..." (Pinkney, 1997) The negative behaviors in that particular study included observable sadness, and negative facial expression. Pinkney's snoezelen subjects also showed an increase in positive behaviors. These behaviors include such things as singing and making eye contact. Conversely, a literature review performed by G.

E. Lancioni showed no significant long term changes in patients being treated with Snoezelen therapy. Lancioni did however find that the number of positive effects during the actual session of Snoezelen increased

significantly. Lancioni concluded from the review that there was little evidence to support Snoezelen therapy as more beneficial than current medical practices. A third study was conducted by D.

Minner. In this study Minner discovered that, "The mean number of negative behaviors exhibited before, during, and after Snoezelen therapy decreased in occurrence." (Minner, 2004) Another effect of the Snoezelen therapy that was reported by Minner was an increase in visible positive behaviors. In a complete overview of all the literature found, the majority of studies found that Snoezelen was effective at relieving patients of their negative behaviors. Some experiments found that Snoezelen, as opposed to cognitive behavioral therapy or occupational therapy, brought about visible changes in the participants' affect. The consensus is that Snoezelen is a valid and effective form of therapy for patients suffering from dementia. Discussion The biggest difference between conventional therapies and MSBT is that MSBT can be customized to the individual. Occupational therapy, reminiscent therapy, music therapy are all relatively generic and made to be universally accepted, Snoezelen environments have the ability to be changed and molded to each individual based on his or her responses to the environment.

This difference can be seen as both positive and negative. Since the therapy can be more individualized, it can increase its efficacy, however the fact that it is not universally measurable or regulated can make it difficult to research. Another difference is that a MSE will stimulate all five senses. This can be done all at once or individually, but each sense has different needs and they are supposedly all filled by a Multi-sensory environment. This allows for the

individualization and addresses multiple issues at one time. Conventional therapies generally focus on one aspect of the mind and or body. Music therapy for example utilizes the sense of hearing to calm and ease a patient thus relieving him or her of the negative behaviors caused by dementia. Music therapy does not work well on many patients for the simple fact that their hearing is impaired or compromised.

Research in this topic is very inconsistent and the assessments used in the experiments were not universal which makes it difficult to compare the researches findings. Most of the positive and negative effects were measured through observation. While observation is a very necessary tool in collecting information especially in psychological settings, itcan be very subjective. Usually observations can be measured on regulated scales such as the Pittsburgh Agitation Scale, but these measurements are not always universal making the reliability and validity of the research decrease. Much of the research was conducted in Europe as well which decreases its reliability based on the fact that data was collected in multiple ways. Standards for research vary in Europe as well thus decreasing reliability even more so.

One of the greatest aspects of the Multi-sensory environment is that it does not require a high level of cognitive functioning to be effective. Conventional therapies such as Cognitive Behavior Therapy can be effective in individuals, but it requires a certain level of cognitive ability that most people with dementia do not have. Along with the low amount of cognitive functioning that is necessary, the environment itself created specifically to boost efficacy ofthe MSBT. MSBT rooms are designed to block out any noise that is not being produced from the environment itselftherefore controlling the environment and molding it according to what is needed. The environment can be manipulated in ways that conventional therapies cannot. During a session, one can reduce or increase the level of intensity of any of the sensory stimulants in order to produce a desired response. All of those things, while they may be benefits, can make the MSE a very difficult thing

effects of Multi-sensory Environments of people with dementia.

to study and regulate. More research is required to prove or disprove the

There is no evidence to support that MSEs are ineffective or harmful, so they may still prove to be useful. ConclusionThis paper addresses the concern for the wellbeing of patients with dementia and the struggle to find a new or alternative and effective treatment. The topic, Multi-sensory environments and dementia, was selected for the challenge it presented, and the conviction that the writer has for the rights of geriatric psychiatric patients. Along with personal conviction, this topic was chosen because of the intrigue and enticing new frontier of neuropsychology.

The Multi-sensory environment itself is based on beliefs in this field of psychology for which there is little research. Research was compiled from several different sources; from journals, to reference material. A thorough literature was conducted and examples from said review were applied to the body of this paper. Through the literature review, the researcher was able to find both biased and unbiased data about the topic and an answer to the original problem was found. The overall findings were unfortunately inconclusive. More research is needed in this field before any firm belief can be established. The review provided somewhat of a settling discoveryhowever. While there is no evidentiary support for theMulti-sensory Environment to replace the use of drug or other therapeutic interventions, there is firm support that it is on equal par with other therapies. The Multi-sensory Environment can safely become an addition to the current practices of treating dementia. This is due to the fact that throughout the review, no signs of negative effects were found from the use of an MSE.

In the future research on this topic should be more regulated. There need to be established tools to measure the intensity and duration of the negative behaviors displayed by dementia patients. There need to be universal measures put in place so that world-wide research can be relevant and valid. Since neuropsychology is a relatively newer field, this may take time to perfect. Advances in the field are taking place and hopefully future research can be more helpful and established. References Baker, R.

et al. (2003). Effects of multi-sensory stimulation for people with dementia. 136 patients from three different countries participated in a randomized controlled trial to test the effects of Snoezelen on dementia. Patients participated for four weeks in either eight 30 minute sessions of Snoezelen or a generic activity group. Results showed no significant difference between the moods of the Snoezelen group and the activity group. Deipen, E. V.

et al. (2002). A pilot study of the physiological and behavioural effects of snoezelen in dementia. British Journal of Occupational Therapy, 65, 61-66.

This is a case study involving 10 patients who were randomly assigned to either Snoezelen or reminiscent therapy. Data was collected over the length of four weeks.

Results showed that both therapies had a positive effect. Lancioni, G. E. et al. (2002). Snoezelen: An overview of research with people with developmental disability and dementia.

Disability and Rehabilitation, 24, 175-184. Literature review of research conducted using Snoezelen on people with dementia. Results showed a majority of research that supports the positive effects of Snoezelen within the therapy session, but no notable long term effects were consistently reported. Livingston, G.

et al. (2005). Systematic review of psychological approaches to the management of neuropsychiatric symptoms of dementia. American\_Journal of Psychiatry\_, 162.

Retrieved from http://ajp. psychiatryonline. org Literature review showing unbiased statistical findings for multiple forms of therapies which are used to treat dementia. The studies reviewed reached the number 1, 632. Results found that Snoezelen was useful for stimulation of the senses but found no evidence of long term results. Minner, D.

et al. (2004). Snoezelen activity: The good shepherd nursing home This was a case study involving 19 patients.

All subjects participated in Snoezelen therapy in sessions that were one hour long. Results showed that the number of negative behaviors had decreased and positive behaviors had increased after the Snoezelen therapy had been completed. Pekka, M. et al. (1984). Extrapyramidal signs in people with alzheimer's disease. American Academy of Neurology, 34.

Retrieved from http://www. neurology. org Patients with Alzheimer's diseases were studied to find the type and occurrence of extrapyramidal symptoms that were displayed. Findings showed that most patients with Alzheimer's disease displayed signs of Dyskenisia most often. Physician's Desk Reference 59th ed. (2005). Montvale, NJ: Thompson PDR. Medical reference book used to find which pharmaceutical interventions were taken to treat extrapyramidal signs in patients taking psychotropic medication.

Pinkney, L. (1997). A comparison of the snoezelen environment and a music relaxation group on the mood and behavior of patients with senile dementia. British Journal of Occupational Therapy, 60, 209-212. This study was made up of three experimental case studies. 3 patients were to participate in Snoezelen and music therapy. Each patient participated in Snoezelen sessions for the duration of three weeks.

Findings show that both music therapy and Snoezelen reduced negative behaviors and increased positive behaviors. Staal, J. A. et al. (2007). The effects of snoezelen (multi-sensory behavior therapy) and Twenty-four patients suffering from dementia were studied.

Participants were selected at random to either participate in a session of MSBT or an activity group. Findings show that MSBT reduces the amount of agitation and apathy in dementia patients as well as increases their ability to conduct their activities of daily living. Terry, R. et al. (2004). Senile dementia of the alzheimer's type. Annals of Neurology, 14(5), 497-506.

A study was conducted on the occurrence on dementia in patients with Alzheimer's disease. Findings were inconclusive and no universal treatment for dementia was identified.