Group Art Therapy with Nursing Home Residents with Dementia:

Qualitative Case Studies

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ABSTRACT

Dementia is the leading cause of institutionalization of the elderly population (Takeda, Tanaka, Okochi, & Kazui, 2012). In the nursing home setting, art therapists have the unique opportunity to bridge important components of quality of life for the residents in progressive decline. They can employ cognitively-engaging therapeutic techniques to strengthen and stimulate what neural capacities the residents still possess. This research was aimed at the implementation of the Therapeutic Drawing Series (Del Giacco, 2000), a cognitively stimulating art therapy intervention, with a group of nursing home residents with dementia. The research focused on changes in social behavior and cognitive response from the participants. Through qualitative observations, interviews with facility staff, and participant artwork, the researcher created case studies for two focus group participants where the TDS directive was implemented. The researcher then discussed the results and observed responses that could warrant additional research and experimentation to further show effectiveness in using this technique with this population.

*Keywords:* art therapy, nursing home, dementia, therapeutic drawing series
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CHAPTER I

Introduction

Dementia was a neurocognitive disorder, categorized by the progressive reduction of memory and cognitive functions that became severe enough to interfere with an individual being able to independent performance of the tasks of daily life (Takeda, Tanaka, Okochi, & Kazui, 2012). While dementia has been seen to onset at any age, for a variety of reasons, it has been most commonly associated as an effect of aging and was most prevalent amongst the population aged over 85 years, regardless of race, ethnicity, and sex (West, Cole, Goodkind, & He, 2014). The United States population over the age of 85 is predicted to more than double by the year 2050 (West et al., 2014). With this steady increase of population aged over 85 years, the prevalence of dementia was predicted grow as well (Brookmeyer et al., 2011). Dementia was the leading cause of institutionalization of the elderly population (Takeda et al., 2012).

The estimated cost of health and long-term care for persons with dementia, in 2017, was an estimated $259 billion dollars (Alzheimer’s Association, 2017). Considering the large costs, care, and burden associated with managing dementia, there was significant importance to increase the implementation of therapeutic interventions aimed at the reduction of incidence, delaying the progression, and minimizing the adverse effects of dementia (van Alphen et al., 2016). The adverse effects of dementia affect not only the individuals experiencing dementia symptoms but also, health care institutions, and care givers. Creative arts therapists, recreational therapists, and occupational therapists alike, understood the vulnerability of older persons with dementia, and the power that non-pharmacological therapies have had in improving the lives of older adults with dementia, especially in a nursing home setting (Kolanowski, Fick, Frazer, and Penrod, 2010).
The benefits of including a regimen of art and expressive therapies on quality of life for persons with dementia had been shown to reduce the reliance on medication to alleviate symptoms. A reduction in medication reliance could have led to a reduction in the frequency of trips to physicians specifically for the pharmaceutical management of dementia symptoms (Cohen, 2009; Zeilig, Killick, & Fox, 2014). It was estimated that a reduction in doctor visits for medication management of dementia symptoms alone could have saved Medicare an estimated $6.3 billion dollars a year (Cohen, 2009). Non-pharmacological interventions that have alleviated or delayed dementia symptoms even a modest amount could significantly decrease the financial impact of caring for those with dementia (Brookmeyer, Johnson, Ziegler-Graham, & Arrighi, 2007).

At the time of this study, no cure nor effective drug treatments had been shown to reverse the neurological effects and symptoms for people with dementia. This was probably why research on treatments and treatment modalities aimed at improving quality of life were at the forefront of multidisciplinary person-centered care (Zelig et al., 2014). Cognitive training exercises had been studied to show improvements in cognition in older adults with dementia (Balogh & Wong, 2017), however they were not typically implemented by art therapists or typically used with fine art materials. There was research that needed to be done on specific interventions, implementation, and benefit within medical community.

**Neurological Explanations**

Often in the progression of dementia, the hippocampus area of the brain, within the limbic system, was the first area to be affected with anatomical change (Del Giacco, 2010). The hippocampus area of the brain had been identified as the spatial processing and reasoning center, and changes to an individual’s hippocampus had become problematic for the individual in terms
of understanding the world and could cause anxiety and confusion to changing perceptions (Del Giacco, 2011). As the syndrome progressed through the prefrontal cortex, cognitive processes and communication became more affected and the individual could experience behavioral changes such as, wandering, aggression, anxiety, and social isolation (Young, Camic, & Tischler, 2016).

The researcher interviewed a neurologist to gain a more in depth understanding of the relationships between the limbic system and the prefrontal cortex functioning as it related to this intervention. The neurologist (A. Polifrone, personal communication, February 15, 2018), explained that the limbic system’s cognitive processing is concrete, and engraved in repetitive steps that have a distinct order, while the prefrontal cortex is for abstract problem solving, figuring out a problem and deciding how to proceed. These two brain systems work closely together in both cognitive tasks and motor functioning, like in the TDS directive.

**Therapeutic Drawing Series Directive**

Del Giacco (2011) developed what was believed to be a neurologically-based art therapy technique that provided sensory and cognitive stimulation for clients experiencing neurological impairments such as: traumatic brain injury, stroke, and brain tumors. Del Giacco (2010) explained from a neurological perspective that using art therapy designed to stimulate sensory and motor functions could help to activate the parts of the brain that are acting abnormally due to a neurocognitive disorder, like dementia. During the researcher’s practicum internship, she observed her supervisor using an adaptation of the Therapeutic Drawing Series (TDS) in a nursing home group with severe dementia and became immensely interested in the observations she witnessed during the administration and completion of the directive.
The TDS art therapy directive that was utilized during the focus groups of this pilot study, was designed to use shape, color, and visual/motor coordination to stimulate the limbic system of the brain where the majority of sensory processing occurs (Del Giacco, 2011). Each participant had a sheet of paper laid out in front of them with pre-stenciled outlines of a rectangle, a circle, and a triangle. The media offered was tempera paint in the three primary colors, red, yellow and blue. The directive entailed the participants choosing the color and filling in the shape, that was told to them by the administrator in specific steps.

While this directive was probably not challenging to an adult brain with a healthy functioning limbic system, the process of recognizing shapes and colors, following ordered steps, and deciding how to complete them could have been very challenging for a brain that with cognitive impairments (Del Giacco, 2011, & A. Polifrone, personal communication, February 15, 2018). Utilizing neurologist Polifrone’s (2018) explanation on the function and relationship of the limbic system and the prefrontal cortex, the researcher determined that the limbic system, could possibly be strengthened by identifying the known colors and shapes, and process of painting from memory recall, while the prefrontal cortex could be engaged by trying to abstractly solve the problem of how the paint is going to get on to the brush, how much paint to use, and then how to get the paint onto the paper and fill in the shapes.

Before the art directive began, each session started with a physical warm up where the participants passed a ball to each other. This was intended to increase alertness as well as introduce the participants to each other and oriented the group to the beginning of each session. While physical exercise and movement therapy were known to have physiological benefits to the cardiovascular system and muscle motor function, there were also cognitive and behavioral
benefits (Forbes, Thiessen, Blake, Forbes, & Forbes, 2013). These benefits included improvements in alertness, awareness, and overall executive functioning (Murray & Paek, 2016).

When Del Giacco (2000) utilized the TDS in rehabilitation for traumatic brain injuries it was believed to be cognitively stimulating. Engaging the brain’s cognitive processing with this type of directive on a regular basis had over time led to increases in cognitive abilities according to Del Giacco’s research and practice (2000). Additional studies that researched art therapy sessions which were aimed at stimulating cognitive activity, had shown improvements in responsiveness, sociability, calmness, and physical engagement over time (Rusted, Sheppard, & Waller, 2006).

**Problem Statement**

According to the Alzheimer’s Association (2017), symptom reducing programs that utilized cognitive stimulating exercises, and therapeutic interactions with the goals of reducing behavioral symptoms such as depression, apathy, and anxiety, had been found coincide with a slower rate of decline and improve quality of life. However, with the millions of people in the United States affected by dementia symptoms at the time of this research, 5 million of which had Alzheimer’s disease (Murray & Boyd, 2009), there continued to be a negative but accepted social stigma that cognitive decline, and neurocognitive disorders were a normal part of aging. That stigma prevented people affected with dementia symptoms to get therapeutic help that may have improved their quality of life and possibly even slowed their decline. Art therapy group sessions using directives intended to improve cognition and provide an opportunity for increased sociability and enhanced quality of life for persons with dementia still required further research.

While research studies and literature demonstrated that art-based interventions could improve cognition in cases of traumatic brain injury, like in the studies done by Del Giacco
(2010, 2011), there was a lack of evidence-based research of such interventions with persons with dementia. While there was evidence based cognitive training exercises that had been utilized effectively in the cases of participants with dementia, these interventions did not use creative art methods, or materials. While there was a growing interest in improving the quality of life for persons with dementia, there was a lack of evidence-based art therapy interventions that could holistically compliment a conventional pharmaceutical medical treatment plan (Mirabella, 2015). Lastly, there was a lack of literature on effective art-based interventions aimed at increased sociability, and increased well-being, and quality of life for nursing home residents in the more advanced stages of dementia.

The researcher’s intent in documenting the use of the Therapeutic Drawing Series as an art-based cognitive training exercise with this specific population and setting was to raise awareness for the need of evidenced based art interventions that could be used by art therapists with individuals affected with dementia. While there were therapeutic interventions aimed at sensory stimulation, affect and behavior, as well as mood and alertness (Rusted et al. 2006), this study aimed to also observe and include the additional elements of physical involvement and sociability. There was a lack of longitudinal group studies that reported benefit of neurocognitive art therapy, and this pilot study hoped to gain more interest in advancing the field with further research.

**Research Questions**

1) During the focus group art sessions:

   a) How do the nursing home resident participants with dementia respond to the administered art directive?

   b) Do the participants engage socially?
c) Can these qualitative observations be compared longitudinally through case studies?

2) Are there any observable behavioral differences of the participants during the activities within the group as compared to sedentary times?

**Basic Assumptions**

While the participants in their current cognitive state may have been unfamiliar with the art materials and techniques, it was assumed that at some point within their lifetime prior to experiencing dementia symptoms, the participants were familiar with what a paintbrush was and the function of a paintbrush, to paint, as in to apply a fluid material to a surface.

**Statement of Purpose**

The objective of this pilot study was to explore a specific group of nursing home residents with dementia and observe how they responded to each other during the implementation of a specific, art-based intervention that was intended to be cognitively stimulating to adults with reduced cognitive capacity, motor function, and coordination. While the participants may have shown changes in ease or ability to work on the directive over the duration of the research period, this study was not designed to measure or make claims of effectiveness of the TDS specifically.

**Definition of Terms**

**Art-based.** Describes the method of using the elements of creative arts, including the act of making art (McNiff, 1998). The practice of creative arts can include many different art disciplines, media and modalities.

**Behavioral symptoms.** A group of non-cognitive symptoms occurring in persons with dementia and can include: agitation, wandering, anxiety, irritability, depression, apathy,
delusions, hallucinations, sleep and appetite changes (Cerejeira, Lagarto, & Mukaetova-Ladinska, 2012).

**Cognitive training exercise.** Defined as an intervention that includes repeated practice of targeted cognitive abilities, over multiple sessions, that gradually increase in difficulty at the subjective pace of the individual participant to continue to challenge the participant (Takeda et al., 2012).

**Dementia.** In this study, the term “dementia” was used which the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association [APA], 2013) had replaced as a Neurocognitive Disorder. For this study, the term “dementia” was be used to encompass *DSM-5* neurocognitive disorder classifications, including but not limited to; Alzheimer’s disease, frontotemporal lobar degeneration, Lewy body disease, vascular disease, Parkinson’s disease, Huntington’s disease, and other unspecified neurocognitive disorders that are causing significant distress or impairment in occupational and cognitive functioning for the individual participants. The researcher chose to use the term “dementia” even though it had been reclassified by the *DSM-5* (APA, 2013) because “dementia” was still the term used to classify the syndrome of individuals experiencing significant cognitive dysfunction in many hospital and clinical settings, as well as the majority of research on this topic.

**The limbic system.** The area of the brain that controls cognitive and behavioral functioning. This cognitive functioning includes the brain’s ability to process learning, emotion, the ability to understand or initiate reactions to experiences, and memory storage and retrieval. Includes the hippocampus and the amygdala (Rolls, 2015).

**Neuroplasticity.** Refers to the brain forming new neural connections and activity to compensate for injury or disease (Medicinenet Inc., 2017).
Nonpharmacological intervention. Applies to types of therapies which do not require the use of prescribed medication, including: Recreational activities, art therapy, music therapy, dance movement therapy, relaxation and meditation, cognitive training exercises, cognitive stimulation therapy, and physical activity (Kolanowski et al., 2010; Takeda et al., 2012).

The prefrontal cortex. Shares commonalities with the limbic system in areas of information processing and cognition. The prefrontal cortex of the brain is associated with sensory processing, abstract thought, planning, organizing, focus, and impulse control (Kaimal et al., 2017).

Severe. For this study, the term “severe” is used to specify the advanced state of the dementia’s progression. According to the DSM-5 (APA, 2013), the classification of a “severe” level specification is given when the individual is fully dependent, and their cognitive deficit interferes with independent daily living and daily activities, which include but are not limited to; feeding, dressing, and being voluntarily ambulatory.

Verbalization. To express something in words (Verbalization, n.d.).

Vocalization. The production of sound, not words (Vocalization, n.d.).

Justification of the Study

Institutionalized individuals with dementia spend an average of 72% of the day sedentary and withdrawn from social activity and engagement (van Alphen et al., 2016). This withdrawal may present as a loss of interest, being unmotivated, unsocial, or depressive symptoms; however, it often resulted from the individual’s cognitive deterioration, and an inability to process a thought long enough to put forth an action on that thought (Reisberg, Ferris, de Leon, & Crook, 1982). By incorporating the group activity to stimulate alertness and sensation, the individuals might have been able to engage with, or at the very least observe the group and the art materials,
and experience different behavior symptoms than when sedentary. The researcher saw value in empathetic interaction through art making in a group setting, and the researcher saw meaning in art therapy used to strengthen both cognitive alertness and sensory awareness.

Dementia not only took a financial and operational toll on the healthcare system, but also had a significant emotional and physical toll on the caretakers, friends and family, of those with dementia. This study hoped to show that the role of an art therapist was vital to any nursing facility’s therapy team. Within client centered care and exploring the use of nonpharmacological interventions like art therapy, there could be benefits of improved function and improved quality of life (Kolanowski et al., 2010). The TDS art-based cognitive intervention was rooted in promising neurological research that warranted further observation and experimentation in its administration. Even though further research was required to quantify the results of this intervention, it was worthwhile to initiate this pilot study and make record of the observable changes that occurred so that a future study could include results on a larger scale, where variables could be noted and compared.
CHAPTER II

Literature Review

The Scale of Dementia

As of 2017, there were an estimated 50 million people worldwide with dementia, and this number was projected to increase by 10 million new cases of dementia each year (World Health Organization, 2017). The projected number of people with dementia in the United States, by the year 2050, was 88 million (He, Goodkind, & Kowal, 2016). Dementia was categorized by dysfunctional, and damaged nerve cells in the brain, that were responsible for cognitive functioning (Alzheimer’s Association, 2017). Symptoms of dementia include: difficulties with memory, language, problem solving, and cognitive skills that affect an individual’s ability to perform even the simplest of everyday tasks. People affected by dementia experience the described symptoms, but also the reality of a fatal disease that follows an uncertain path of progressive, worsening, functional impairment that ultimately leads to death for the affected individuals (Murray & Boyd, 2009).

The healthcare needs for affected individuals evolves throughout the progress of dementia as independence transitions into eventual total dependence (Murray & Boyd, 2009). The estimated cost of long-term health care for individuals with dementia was estimated at $259 billion dollars (Alzheimer’s Association, 2017). Dementia was the leading cause of institutionalization of the elderly population (Takeda et al., 2012). Including physicians, nurse practitioners, registered nurses, pharmacists, and social workers, it was estimated that the United States at the time of this study had only half of the number of medical professionals trained in caring for older adults, which it needed to meet the demands of dementia cases (Alzheimer’s Association, 2017).
Therapeutic Treatment Options and Patient Care

Mirabella (2015) explained that conventional and costly pharmaceutical interventions are aimed at alleviating dementia symptoms but cannot stop or reverse them. As with any medications, adverse or unwanted side effects could occur, and persons with dementia often reported dissatisfaction with pharmaceutical interventions and sought different therapeutic options. With the projected increased rate of dementia cases, therapeutic options, like art therapy, which might stimulate the cognitive functioning, sociability, and overall quality of life, for persons with dementia should be implemented within a multidisciplinary treatment plan.

In a study done by Kolanowski, Fick, Frazer, and Penrod (2010), nursing home staff acknowledged that pharmacological interventions, aimed at managing behavioral symptoms could be used as a crutch. They clarified that the overreliance on medication was due to lack of overall staff in general, but also that the staff members that were employed were untrained to do productive nonpharmacological therapy with individuals with dementia. Nursing home residents with dementia have 40% lower levels of daily activity than healthy adults of the same age (van Alphen et al., 2016). Kolanowski et al. (2010) describe that despite being clean and living in an environment that’s safe from harm, nursing home residents with dementia were at risk of living with an unacceptable quality of life; that a nursing home resident with dementia who was passive or withdrawn may have gone completely unnoticed unless there were staff or planned activities to engage them.

Esker and Ashton (2013) explained that passive behaviors, aside from decreasing quality of life, could negatively impact cognitive functioning. Prolonged inactivity and isolation could exacerbate loss of skills, and sensory deprivation. Cohen-Mansfield, Thein, Dakheel-Ali, and Marx (2010) pointed out the importance of stimulating activities for nursing home residents with
dementia to engage them from boredom and isolation. The engagement was shown to positively increase happiness, interest, alertness, and overall quality of life.

For persons with dementia, quality of life had to do with living with dignity and wellness in the wake of reduced and deteriorating cognition, and a progressive inability to function independently. While quality of life should be at the forefront of patient centered care, it could be overshadowed by operational costs and staff who were inadequately equipped to deal with the behavioral and psychological symptoms of dementia (Kolanowski et al., 2010). These residents could have been attended to by professionals, such as art therapists, who were skilled at implementing effective therapeutic interventions, and at the same time were committed to improving the lives of older adults with dementia.

Quality of life

While the emphasis of this study revolved around the significance of improved quality of life, it was important to go further into depth on what quality of life was, what constituted quality of life for this study, and why this was and is relevant to the therapeutic treatment for persons with dementia. Quality of life (QOL) is a subjective experience; it could be derived from: independence, safety, stability, education, family, community, a home, an income, the sense of purpose and a sense of accomplishment (Pukeliene & Starkauskiene, 2011). There are specific factors that are generally applied to QOL that are both accepted and recurrent in the health industry literature. Fayers and Machin (2013) emphasized the components of happiness and satisfaction of life and described quality of life as a state of physical, mental and social wellbeing.

Regarding QOL in terms of healthcare, Fayers and Machin (2013) went on to explain that while physical functioning, emotional functioning, cognitive functioning, and social wellbeing
were all major components, the ability for one to cope with illness and remain satisfied with life also determines quality of life. Nasim et al. (2018) further included that quality of life in healthcare transcends the aspects of physical, emotional, and cognitive functioning, and includes the significance of spirituality, and being a member of a community. Myers and Shannonhouse (2007) explained that because ageing was a universal experience, biases about frailties and disabilities that surface into old age should have been challenged and replaced with the attitude of wellness and maintenance of quality of life.

Wang and Li (2016) explained that as dementia progressed, the person’s language skills, ability to complete daily living tasks, functional independence, as well as overall cognition, awareness and understanding of the world gradually declined. Tucknott-Cohen and Ehresman (2016) described an aspect of dementia as an altered view of reality, where the affected persons were constantly confused by their surroundings. Both Tucknott-Cohen and Ehresman (2016) and Wang and Li (2016) explained that because of these adverse declining health factors, persons with dementia could have been prone to behavioral issues and psychological distress. In Wang and Li’s (2016) study, they found that 70-90% of persons with dementia experienced the distressing behavioral and psychological factors associated with poor or diminished quality of life including; restlessness, anger, depression, anxiety, and sadness. The behavioral and psychological distress from these factors contributed to reduced and poor quality of life.

In their study, Wang and Li (2016) defined factors that contributed to a high quality of life as the feelings of accomplishment by working on or completing a task, the sense of purpose through engagement, and the sense of belonging in a group. Through group art therapy participants might have achieved these factors that contribute to a higher quality of life, just by being included in a group activity, and being recognized by others. Cohen (2009) found that art
making contributed to a sense of control, awareness, empowerment, and increases in social engagement and interaction. These benefits were all succinct with improved quality of life and were reflective of quality of life as was defined in this study.

**Art Therapy in the Nursing Home**

Art and expressive therapies were often omitted from nursing facilities to cut costs, and general lack of industry knowledge. The inclusion of art therapy in residential nursing homes included benefits such as: increased socialization among participants in the art therapy group, increased sensory awareness, higher levels of mental alertness, an opportunity to learn new skills, building a social support network, increased feelings of independence, and increased self-esteem (Boatswain, 2016; Safar, 2014). Participating in art therapy allowed older adults to continue to challenge themselves and increase longevity by staying mentally and physically active in art making and self-expression, while creating social relationships with peers, and having fun (Safar, 2014).

While their physical frailties may have been of primary concern, older adults in nursing homes, like any other adult, yearned to and deserved to be treated with respect (Levine-Madori, 2013). Older adults may have had challenges, but they also had wisdom, and art therapy could have provided them an environment to share their experiences and have an outlet for intense and stressful feelings (Buchalter, 2011). Using art therapy to create an atmosphere where participants could have felt safe, dignified, autonomous and empowered respected personhood into older adulthood even in the wake of frailty or terminal illness (Duncan, 2013; Gross, Danilova, Vandehey & Diekhoff, 2015).

While learning new creative skills and strengthening old skills, the brain’s cognitive functioning was challenged and strengthened (Buchalter, 2011). Providing nursing home
residents with the outlet to feel productive, cope with their present situation, accept their future and acknowledge their strengths, provides an opportunity for increased self-esteem that might remove the person from being their illness, and gain perception that their illness is just an aspect of them and doesn’t encompass their whole persona (Buchalter, 2011; Levine-Madori, 2013). While the focus of this research study was on strengthening cognitive functioning, it was important to recognize that improved cognition could have led to improved self-esteem, and that improved self-esteem could have led to more physical stamina, better cognition, and improved memory functioning (Buchalter, 2011).

Art making, and self-expression are meaningful and having an outlet through art therapy could allow older adults in the nursing home setting to live with meaning and integrity, and feel more satisfaction (Boatswain, 2016). Seeing life as unproductive and unfulfilling for nursing home residents, could lead to feelings of guilt, disappointment, despair, depression, hopelessness and anxiety (Boatswain, 2016; Gross et al., 2015). The aforementioned factors were all components affecting the person’s quality of life and might have caused the individual emotional distress in addition to their other physical and mental symptoms.

**Art Therapy and Dementia**

Malchiodi (2012) argued that neuroplasticity, the ability for the brain to adapt, existed into old age, and it included the ability to learn new skills and increase creativity. That art therapy could enhance cognitive performance and perception in older adults, and therefore had the potential to be an important therapeutic method related to neuroplasticity and cognitive functioning of the brain. Safar and Press (2011) discussed that art production utilized several brain regions simultaneously including the cognitive, emotional, and sensorimotor processes.
The value of visual arts and visual brain functioning was expressed by Safar (2014) as one of the brain’s most important channels, and that from infancy through old age, we learn about the world through visual information that is constantly received and processed in our brains. Art making directly contributes to the cognitive ability to interpret the world, create spatial reasoning, the ability of abstract thought, use of fine motor skills, while contributing to the individual’s cognitive functioning and brain plasticity (Safar, 2014). While typically regarded as a leisure activity, making art was a beneficial therapy to maintain and develop cognitive skills, and could possibly combat cognitive decline and the speed rate of dementia progression. In an exciting study done by Drago et al. (2006), using clients who had no prior art experience, they theorized that the dementia progression had lowered the clients’ resistance to making art and increased their artistic capabilities, and art making skills with regularly scheduled art therapy sessions.

Gross et al. (2015), expressed that therapeutic art activities could have enhanced the mental functioning of individuals living with dementia, reduced behavioral problems and even slowed cognitive decline. The importance was stressed on engaging in art activities where facilitators and therapists encouraged genuine, empathetic, and supportive social interactions, that respected personhood. This reiterated the mindset that even while experiencing decline and deterioration of both cognitive and physical abilities, persons with dementia still possessed a range of emotions and deserved empathy, respect, and consideration of their quality of life.

Safar and Press (2011) discussed that while working with persons with dementia, the art therapist needed to understand the brain areas affected by the illness, and have geared art interventions toward strengthening their functions that were still intact. That by having understood the neural framework and the nature of deficits in art production due to symptoms of
dementia, the art therapist could have targeted art therapy interventions to the specific impairments. In a case study done by Safar and Press (2011) they described that ultimately, as dementia was degenerative, it would have affected an individual’s functioning and capacity to make art. As dementia progresses, the individual’s artwork could gradually have become more simplistic; however, it had been theorized that as the sessions and art exercises progressed, the individual’s sensorimotor coordination continued to advance.

In a longitudinal study done by Alders and Levine-Madori (2010) aimed at the effects of art therapy on cognitive functioning in older adults, it was indicated that attending and performing within the art therapy sessions contributed to beneficial changes in cognitive functioning, as well as improvements to spatial abilities, auditory comprehension, and fine motor skills. The improvements in cognitive functioning were attributed to art therapy involvement over other tested variables. The art-based interventions used during their study were similar to the TDS art therapy interventions in that they were aimed at cognitive stimulation and functional improvement of persons with dementia. It was concluded that the participants who regularly attended the art therapy sessions, outperformed those who did not on cognitive evaluation tests (Alders & Levine-Madori, 2010).

**Cognitive Benefits in Movement Therapy and Physical Engagement**

It was widely known and accepted that physical activity including movement and exercise could benefit a person’s cardiovascular system, motor functioning, and overall physical health. Forbes et al., (2013) expressed that movement therapy and physical exercise could enhance cognitive functioning, communication ability, emotional well-being, and behavioral well-being. Even frail adults with physical and cognitive limitations had shown increases in alertness and awareness with the addition of physical activity (Bherer, 2015).
Karkou and Meekums (2014) expanded on this by explaining that movement involved implicit body memory, relational memory, and sensory memory, and that the cognitive and emotional benefits of movement participation went beyond the physical health benefits associated with exercise and improved coordination. In a study done by Murray and Paek (2016), after adding a physical component to the therapeutic treatment of persons with dementia, there were slower declines in awareness levels, alertness and motor functioning. Karssemeijer et al. (2017) explained in their study, that combining cognitive exercise with physical involvement led to improvements in overall cognitive functioning, mood, and behavior, which could have been connected to improved quality of life.

For this study, the physical warm up which started each session began with a ball being passed back and forth around the table to each participant. This was a way to familiarize them with the start of each session and each other and was similar to the study done by Spector et al. (2003). They went on to explain that adding the physical stimulation might have oriented the participants to the group and encouraged alertness and socialization. By being encouraged to participate in the gentle physical warm up, the group could have possibly formed a channel of meta verbal communication and encouragement for each other (Spector et al., 2003). Karkou and Meekums (2014) explained that even if participants only got so far as to watch other participants engaged in the physical activity, it still enhanced neural responses and increased neural activity.

Goldstein-Levitas (2016) explained in her compelling study that as dementia progressed, individuals lost the ability to process sensory stimuli, engage in activities, and perceive their environment. She went on to explain that sensory deprivation could have resulted from neurological deterioration and could have led to negative behaviors such as: repetitive movements, aggression, and wandering. Because the act of physical movement can be broken
down into such basic parts, such as passing, rolling, or tapping a ball, that participants who were usually withdrawn, expressionless, and/or easily agitated were in many instances able to make eye contact, and sometimes smiled during the mild movement parts of the therapeutic sessions (Goldstein-Levitas, 2016). Even the slightest physical mastery of bodily control, and ability to move, and interpret and process the movement activity could give a participant a sense of accomplishment, empowerment and self-esteem, contributing to higher quality of life.

**The Therapeutic Drawing Series Adaptation**

Art therapist, Maureen Del Giacco developed her trademark neuro-art therapy as a bridge between neuroscience and art therapy. Del Giacco emphasized neuroplasticity and used art therapy to stimulate the brain regions that correspond to emotion, cognition, motivation and behavior (2010). The neuro-art therapy was designed to specifically: rebuild brain pathways, relieve stress, and improve cognition. Del Giacco (2010) explained that as dementia progresses within the limbic system, the individual was less likely to understand shapes, process sensory or spatial information. She also explained that stress, anxiety and behavioral changes resulted from these brain challenges as well, and that not only does the individual need help in generating new brain pathways to process information, but also coping skills to handle life’s changes.

While the focus of the TDS is on strengthening the limbic system, a cutting-edge study done by Kaimal et al. (2017) measured oxygen levels, and brain activity of the prefrontal cortex during art therapy sessions which included coloring pre-drawn shapes, doodling, and nondirective free drawing. For the participants (who were not avid artists) there was a significant activity increase in the prefrontal cortex, suggesting that the brain was being stimulated by learning a new skill. The activity levels in the brain stayed significantly higher than at resting
state, regardless of the art media or directive (Kaimal et al., 2017). Regardless of the specific activity, using art therapy was neurologically stimulating to all the participants in the study.

To address the criticism of using a directive that involved participants filling in a pre-drawn stencil, and not creating their own free hand drawings or paintings, Forkosh and Drake (2017) explained the significance in coloring versus free hand drawing or art making on cognitive demand. They found that free art making tasks that were too cognitively demanding could have caused anxiety, pressure, depression, and other negative mood states due to frustration of not knowing how to complete the task. That being involved in an activity which included coloring pre-drawn designs led to a higher success rate, a more involved performance, and completion of the activity with a sense of accomplishment (Forkosh and Drake, 2017). It was important to note, that while coloring simple pre-drawn shapes may be low complexity to adults without dementia, it could be a complex set of steps and procedures for someone with dementia.

The Therapeutic Drawing Series (TDS) was designed to help client’s regenerate their cognitive, spatial, and sensory processing (Del Giacco, 2011). There was a compelling case study of a client with Alzheimer’s disease who gained more awareness and became more socially active over time using the TDS in art therapy sessions (Del Giacco, 2011). Even the most current research on neuroplasticity and the brain’s ability to adapt and function throughout a person’s lifetime describe it’s potential as still completely unknown, at the time of this study (Bherer, 2015).

Cohen (2009) explained that any challenging and new experience in the therapeutic context has the neurological potential to activate cells and enhance activity in the reserve parts of the brain that are still intact. Murray and Paek (2016) expressed that even the parts of the brain
that were deteriorating might have been able to maintain a slower decline, and in some cases possibly even preserve some functioning through regular stimulation and in cognitively challenging activity. Involvement in stimulating and engaging therapeutic activities that might have prolonged independence and ability to function could have enhanced one’s quality of life.

In the study with dementia patients done by Hattori, Hattori, Hokao, Mizushima, and Mase (2011), similarly to the TDS, they administered outlines of shapes that the participants filled in with paint or other fluid media. In this study Hattori et al. (2011) evaluated; mood, behavior, quality of life (QOL), memory, and orientation. While there was no significant evidence that the directive improved cognitive functioning, or behavior, measured improvements were made in attention, alertness, interest, and QOL. It could be concluded that if for no other reason, administering this directive gave the participants a chance to stimulate their senses by interacting with art materials, shapes, and colors, while experiencing joy, and enhanced vitality (Hattori et al., 2011).

Quality of life was at the forefront of person-centered research theories and studies, which considered treatment planning and care for persons with dementia. With the stresses of excessive healthcare and care giving burden and cost, persons with dementia and their loved ones had to cope with a degenerative disorder, declining cognition, progressive functional impairment and eventual death (Murray & Boyd, 2009). By adapting art therapy sessions and interventions to the strengths and strengthening of persons with dementia, there may have been therapeutic options that were effective for stimulating function, maintaining social activity. Possibly even demonstrating neuroplasticity in a brain affected by dementia.
CHAPTER III

Methodology

Participants

For this study, the participants resided in a nursing home within the dementia unit. The two participants that were observed in this study had dementia symptoms and had extreme difficulty communicating verbally. The participants of this study all had a diagnosis of “Unspecified dementia without behavioral disturbances” (B. Lazarus, personal communication, September 10, 2018). The brief interview for mental status (BIMS) was administered by the facility case workers as a part of each resident’s quarterly assessment. The BIMS is a part of a nursing home assessment group called the Minimum Data set, which was developed by Medicare and is standardized for use in all United States nursing homes and later life care facilities (Saliba et al., 2012). The BIMS was administered to rate the cognitive decline and reality awareness of the person being tested. The exam consisted of questions that required verbal answers, and as these participants were nonverbal, they all scored “severe impairment” (Department of Mental Health and Hygiene, 2011).

Additionally, because the participants in this study were unable to coherently communicate verbally, the researcher also used the Reisberg Global Deterioration Scale (GDS), which assessed the degeneration of the dementia progression, based on the participants’ level of everyday functioning, and didn’t require verbal responses to questions. The GDS assesses the levels of cognitive functioning for adults with dementia in seven stages (Reisberg et al., 1982). The stages progress from stage 1, no cognitive impairment, to stage 5, where living with assistance is necessary, to the advanced stage 7, where almost all functional abilities are lost. The researcher used participants who fall within stage 7 of the GDS for this study.
These participants resided on a specific floor of the nursing home designated for residents with dementia. The researcher, along with the assistance of the nursing home’s recreational director and therapist team, determined residents that would be good candidates for participating in this research study. The chosen residents all scored at stage 7 on the GDS scale, and had difficulty with ambulatory functioning and an inability to communicate verbally. The researcher utilized the facility’s therapeutic team in order to find participants, access information about participants, and gain behavioral knowledge of the qualified residents.

The researcher fully disclosed to the therapeutic team, details about the directive that would be asked of the participants within the focus group, including the instructions and the materials that the participants would be using. The researcher was not as familiar with these participants so the team that had been working with them was the best to advise if they could use art materials and had the behavioral capacity to sit and participate in a focus group. Behavioral knowledge was important for the safety and wellbeing of the researcher and the participants, as some individuals with dementia in the advanced stages may have become agitated in an unknown setting like the group or may have been too regressed to safely participate.

Exclusionary criteria for participation in this study, as was determined by the therapeutic team and the researcher were individuals who were too far regressed that using art materials might be too challenging or unsafe. Exclusionary risk factors included: the potential for one to put the art materials in one’s mouth, or using materials not as they are intended, such as throwing paint or water. Residents who possessed these risk factors were not be eligible to participate in the art therapy group or the research study. Residents who already had a scheduled therapy or visitation from a friend or family member, at the time of the focus group were also not eligible to
attend the group. This was done so that focus group could function as an activity that replaced idle time, and not an alternate activity.

The focus group became a regularly scheduled twice weekly activity added to the therapeutic curriculum and open to any residents who did not meet the exclusionary criteria. The goal of the researcher was to have four to six participants in each focus group session. Of these four to six potential resident participants, two had their designated representatives (respective family members) consent to be documented in the study. The reason for the group being a mix of consented participants as well as open to other residents within the unit was twofold. Firstly, it was done so that any residents within the unit could enjoy the group and any benefits from participating in the activity, without having to consent to be a research participant. Secondly, it was added a measure of confidentiality and safety for the group members and participants. The residents did not have to feel pressured to consent to be in the study in order to join the group activity, and the participants would not be singled out as research subjects by other residents or staff within the unit.

The rationale for having a group of four to six participants was to allow for encouraged social interaction between participants (Schneider Corey, Corey & Corey, 2014), including the potential for eye contact, and visual observation of each other, as they were able to all sit at a rectangular table facing each other during the group. It was assumed that following the directive could be challenging at times for the participants. It was important for the administrator to be able to assist the participants if necessary without losing control of the other participants and jeopardizing the course of the directive.

Additional participants in this study were three staff members who worked within the unit where the focus group sessions took place. These team members have all had a minimum of
one-year experience working closely with each of the participants. Due to the resident participants not being able to describe their experience verbally, the staff members who cared for these clients before and during the study were asked questions about the participants, their normal activities, and their involvement during and post group.

**Research Design**

The design for this study was qualitative, observational narrative with case studies of the participants, their behaviors, and their artworks done during the implementation of the therapeutic drawing series adaptation. The participants were first observed as they were led through the physical warm up exercise that was presumed might “wake up” their neuro pathways, and stimulate their reflexes, hand-eye coordination, and alertness (B. Lazarus, personal communication, September 14, 2017). The administrator then led the group into the adaptation of the TDS directive, which included the participants using tempera paint to fill in a pre-drawn template of shapes by following the instructions given by the administrator as to which color goes to which shape.

The researcher observed the sessions and at specific intervals throughout the directive and made notes as to whether the participant was; alert, aware, made intentional eye contact, showed interest, or was engaged in the activity. Notes were also taken if the participants were passive, had dozed, or were not engaged or interested in the activity. Each participant’s actions and reactions to the instructions and to the other members were noted. Participants were unable to express their experience verbally so additional interviews were made with team members to describe the participants pre and post focus group. This holistic view aimed to encompass the participants’ experiences was not limited to engagement in the directive but the complete social engagement and interactions of the participants within the unit.
Research Instruments

The nature of this pilot study is qualitative and subjective to interactions and artwork that were made within each session. The researcher used a self-made spreadsheet to record observations at the same intervals from each session.

Data Collection

For data collection, the researcher used the observational spreadsheet in addition to and providing lengthy notations and descriptions of the entire session start to finish. The researcher was primarily focused on the behaviors and social interactions of the participants during the focal sessions. The researcher conducted interviews with other clinicians and therapists who cared for the participants, by asking questions regarding the participants’ behavior during and after the focus group, and if any changes in behaviors were noticed.

Additional data collected included the painted templates done by the participants in each focus group session. During the focus groups the participants were instructed and encouraged to work on the TDS directive. This directive utilized a pre-drawn template of stenciled shapes that the participants filled in with tempera paint. The painted templates were collected after every focus group session as they progress longitudinally through the research study. These paintings were intended to serve as observational data to accompany the case study narratives. The researcher did not presume to know why changes in styles of painting, ease of painting, or amount of work done in each painting may have occurred from participant to participant, in each session throughout the progression of the research period, however, each painting was logged with the behavioral and social observations made of each participant during the sessions.
Data Analysis

The researcher coded the data collected from the observational spreadsheets from each session, notes taken during and after the sessions, and interviews with therapists and staff. Each of the two consented focus group participants had drastically different experiences, both in their cognitive states, social and behavioral activity levels, and responsiveness to the activity. Due to the uniqueness of each participant and their dementia symptoms the case studies are purely observational with preserved subjectivity, and not to be used as a comparison of experiences.

Validity and Reliability

The researcher provided a consistent atmosphere where the group met, and the directive was administered at the same time and place every session. The administration began the same way each session, and the instructions were given the same way in each session. The researcher re-checked with staff members who were present in the unit where the sessions were being held to confirm accuracy of the themes determined from the data. Being that this was pilot study with this population using this specific directive, reliability assessment was not possible.

Ethical Implications

The participants of this study were a vulnerable population, meaning they did not have the capacity to understand or authorize consent to both the participation in this research study and for the use of their artwork in the data collection and analysis. Attempts were made by the researcher, the recreational director of the nursing home, and other nursing staff of whom the participants were familiar and comfortable with, to inform the participants of their rights. This was done using plain language broken down to the level of understanding within the participant’s capacity and explained what was to be requested of them by choosing to participate in the study. Additional consent from family members who are their designated representatives was
necessary. The participants were informed and reminded of how valuable they are to this study, to the researcher, and the research process. This added measure of respect was intended to create value and meaning for participants and expresses gratitude and confirmation of the participants’ vital role of participating in this study.

The researcher abided by the *Ethical Principles for Art Therapists* (American Art Therapy Association, 2013). The participants all had the right to choose, and make informed choices about participating, and that the researcher was conducting research in a way that caused the participants no harm, that the participants’ wellbeing was constantly minded, and that the researcher was acting honestly, responsibly, and with integrity towards the nursing home staff, policies, and procedures. The participants always had the right to choose and refuse participation within the art therapy sessions, and their choice was respected and honored. The participants and their designated representatives were informed that their participation would in no way affect the level of care they received at the facility.

Although the researcher had prior personal and professional experience using art making with persons with dementia, the researcher understood how unpredictable persons with dementia could behave regardless of their familiarity with the researcher, art materials, and the art making process. There was an appointed staff member for the participants present in the area where the art therapy directive was administered who was trained, aware, and was personally familiar with caregiving for these participants, if at any time during a focus group session a participant wanted to get up or not participate, this attendant would have intervened and removed the participant from the group to where they were comfortable. There was also a nurse station where at least one doctor or registered nurse was always present and was within twenty feet, of the research area with an unobstructed view of where the participants were in the art therapy group working on the
directive, as an extra measure of safety. The entire staff within this unit of the nursing home was aware of the researcher, the study and the participants.

The participants were assigned and referred to by random aliases for their collected data and case vignettes in the discussion and results. The participants’ data was also coded with an alias and was confidential to everyone outside of the researcher. This data was also kept by the researcher in password protected software, with no personal information of the participants including name or identifying information of any kind.

**Researcher Bias**

Prior to this study, the researcher had conducted another recurring art therapy group with nursing home residents with dementia and used an adaptation of this TDS directive. While this could possibly have created a bias of experiencing how the other group responded, the nature and manifestation of dementia symptoms were subjective and unique to each person, it would be impossible to compare or predict experiences without having a sizable test base of participants. Having taken this bias into account, the researcher believed that by reporting a narrative case study utilizing the actual artwork produced by the participants in the sessions and utilizing data of what behaviors were observed by unrelated facility staff, provided a transparent and unbiased account of the research.
CHAPTER IV

Results

The results of this study were first displayed through two case study narratives of the consented focus group participants and their experiences throughout the research period. The described experiences include what was personally observed by the researcher within the group sessions, as well as data collected by the researcher while interviewing the staff members who observed the consented participants’ experiences both in and out of the art therapy sessions. The poignant themes observed during the research were also compiled and described.

Participant Case Study: Marie

Marie (pseudonym) was an 86-year-old female resident in the dementia care unit for three years, prior to becoming a participant in this research study. She had suffered a stroke, which left her with paralysis of her right dominant side, and was diagnosed with, aphasia which as defined by the Mayo Clinic (2018) is a neurological condition which impairs a person’s ability to verbally communicate, read, and write language. Marie attended all the focus group sessions.

During the first focus group session, when the researcher first approached Marie to introduce herself and introduce her to the group, she was sitting alone in the group room, awake, but not alert and not focused on anything. She agreed to join the group by nodding her head while making eye contact with the researcher when asked if she would like to participate, but then nodded off when placed at the table in her wheelchair. Marie became alert and active during the physical warm-up. She was unsure what to do when presented with the art materials and needed assistance with getting the brush into the paint and on to the paper.

During her second attempt, Marie needed no assistance putting her brush into the paint. Her painting was self-initiated and intentional. From the second session onward, Marie
maintained alertness throughout the entirety of the sessions. Beginning in the fourth session, Marie began to show signs of a more developed painting style, and a greater ease and finesse with the materials. While still a bit shaky using the paintbrush with her non-dominant hand, the way she applied paint seemed thoughtful, careful, and deliberate. After the fifth session, she gestured to have her painting given back after the group display, and then proceeded to correct spots on her template that were left blank by applying more paint.

Beginning in the sixth session, Marie was observed as showing an increased interest and alertness to the other members of the group. For the first time Marie began to use emotional facial expressions in response to the group members and their artwork. She did this by nodding approvingly, to a participant that had filled in their template completely, and by flaring her nostrils and turning down her mouth to a participant that did not paint their template according to the instructions. During the eighth session she attempted to vocalize to the administrator while looking at and shakily pointing to another group member who was not following the instructions.

After the seventh session Marie notably showed increases in alertness during the activity, and greater endurance in sustaining her interest and alertness level beyond the activity in wanting to pursue another activity following the group. She did this by motioning not to return to her room after the directive was completed as usual, but instead pointed to a table where another resident was working on a puzzle and gestured to join them. This increased alertness, awareness, and endurance beyond the group, was sustained throughout the rest of the study period as Marie was noticeably interested in what other activities were around her, and what other residents were doing after each session from the seventh onward.

Prior to session eleven, the researcher approached Marie as she was sitting in her room alone and asked her if she would like to join the group. Marie made eye contact and responded
by saying “yes”. This was the first coherent and purposeful verbalization of language that the researcher encountered throughout the duration of the focus group period.

Beginning during the twelfth session Marie showed noticeable improvements in her finger dexterity and ability to hold the paintbrush with her non-dominant hand. She was observed dipping her brush into the paint and twirling the brush between her fingertips with total control. She continued to twirl the brush this way, engaging her fingertips to control the brush during the remaining sessions as well.

Marie began this study showing general alertness but lack of focus. She seemed unsure of how to use the materials, confused by the directions, and required assistance. By the end of the eight-week study Marie showed alertness and interest that extended beyond the focus group sessions. She was making purposeful eye contact and vocalized communication. Lastly, Marie made a coherent vocalization of language, a significant accomplishment.

**Participant Case Study: Hannah**

Hannah (pseudonym) was an 88-year-old female resident in this facility and had been residing in the facility for four years prior to this study. She did not suffer a trauma or injury prior to being admitted, and her diagnosis was: Unspecified dementia without behavioral symptoms. Hannah was put on hospice care shortly after her designated representative consented for her to participate in the study, and when asked to participate Hannah was able to verbalize yes, or no. Hannah was always able to give a verbal response “yes” or “no” on whether or not she wanted to join the group prior to each session, further verbalizations beyond a “yes” or “no” were incoherent and gibberish-like.

While Hannah was able to verbalize a response when asked to join the group, her alertness was extremely limited. During the first group she made no eye contact, however after a
minute of the warm up held up her hand and tapped the ball for the remainder of the warm up. Hannah nodded off after the warm up. She needed assistance with the first color and shape and dabbed small amounts of the paint into and around the shape. Hannah dozed off between color and shape changes but became alert when prompted again. At the end of the first session Hannah was awake and made eye contact during the group display of her and the other group members’ templates.

In the third session Hannah began to show an increase in alertness during the group and after the group, by staying awake for more of the group, and staying awake after the group. During the fifth session Hannah was much more alert than she had previously been in the prior sessions. While she did not spend much time on the actual painting portion of the exercise she was aware of the activity and to the others within the group. During the group display she commented that her painting “had a lot of space”, the first verbalization that had coherent context to the present moment and task. She was asked if she would like to paint more and fill in the space and she replied “yes” but only engaged in the painting for a minute before putting down the brush.

After the sixth session, for the first time, Hannah remained alert and aware after the group had finished and observed other residents. A staff member noted Hannah’s alertness and awareness after leaving the group and invited her to join another resident that was working on a puzzle. The staff member commented during her interview that Hannah being alert and wanting to engage with the resident working on the puzzle was not typical of her normal behavior.

During the seventh session the researcher noticed a decline in Hannah’s alertness. She was also unsure about wanting to join the group, and for the first time seemed confused when asked. Hannah had fallen ill and did not attend from sessions eight onward. Prior to each group
session the researcher went to Hannah’s room, and each time Hannah appeared to be sleeping in her bed and was unresponsive when verbal interaction was initiated.

Although she was unable to attend the latter half of the group sessions, Hannah’s contributions provided valuable insights to the emergent themes of this study. Hannah had limited bursts of alertness but was responsive to the physical activity, and the group engagement. Hannah’s increases in alertness and sociability even for a short while was noted by the facility staff.

**Theme 1: Alertness Levels**

**Marie:** When the staff participants were questioned about Marie’s alertness levels outside of the focus group, the common theme was that she tended to be alert and observant about her surroundings. During the focus group the staff noticed she was alert. Staff remarked on the differences in behavioral levels of interest versus alertness, that Marie is commonly alert, but during the group they observed interest and engagement as well. When questioned about Marie’s alertness outside of the group directly after the session, they observed that her alertness remained stable, which for Marie was neither common or uncommon.

**Hannah:** When the staff participants were questioned about Hannah’s alertness level outside of the group, they described her alertness as fluctuating from day to day. They noted that she was sometimes responsive to music or sounds, but that without intentional stimuli or interaction, Hannah tended to be very passive and inattentive. The staff remarked on her participation in the group, similarly as she was outside of the group, with fluctuating levels of alertness. During sessions when Hannah did show increased levels of alertness and participation within the group activity, the staff noticed that after the group Hannah was able to sustain her alertness for an additional activity or interaction if prompted.
Theme 2: Sociability

Marie: When questioned about Marie’s level of sociability, the staff noted that Marie did sometimes try to interact with staff members and sometimes other residents. They described these interactions as, pointing to a new pair of shoes, noticing and pointing to bright colors, or gesturing to change where she’d like to sit or who she’d like to sit next to. They noted that unless this type of social engagement was directed toward a staff member it usually went unnoticed.

When asked to comment on Marie’s behavior during the directive, they noted that she seemed more social. They noticed her eye contact with other members during the activity, as an increase in sociability, but also as an increase in attempted engagement with other residents, and that without the group it may have been uninitiated or unreciprocated. Staff commented that the activity within the group provided stimuli that added a common ground for increased social engagement.

Directly after the group, as previously mentioned, Marie showed sustained alertness and awareness of her surroundings. After leaving the group, she seemed more interested in engaging with others. Staff reported that a couple of times after leaving the group, while being transported out of the common area where the sessions were being conducted, Marie would notice if another resident was at a table doing an activity and would point to them and gesture to be wheeled to the table with them.

During session 12 a new member joined the focus group, and the warm-up sessions became more energetic with the new member’s alertness. The new member began to laugh as they passed the ball to each other, which caused the other members to laugh as well. Marie donned a huge smile as she passed the ball enthusiastically to the other members. This was the first time the warm-up part of the session seemed like more of a game, than an exercise. The
remaining focus group sessions began this way as well, where the warm-up took on the feeling of a game, and Marie smiled and enjoyed “playing” with the group.

From the twelfth session onward, Marie was observed nodding to other group members if they made sounds or said anything. During the fourteenth session, Marie made eye contact with another group member, pointed her brush at them, and attempted to vocalize. This was her strongest attempt at communication that was observed during the group, utilizing both physical and vocal gestures accompanied by alert eye contact.

**Hannah:** It was noted by the staff the while Hannah was able to briefly verbalize, it was never self-initiated and only in response to being asked a question. During the focus group sessions, Hannah was able to socially interact with the other group members during the warm-up activity during the moments when she was alert. Social engagement with Hannah during the research period was always in response to a prompt and was also dependent on her levels of alertness at the time.

**Theme 3: Response to the Added Therapeutic Activity**

An aspect of this research study is that the focus groups, while regularly scheduled into the facility therapeutic curriculum, took place during sedentary times when the participants had no other activities. Without an activity during the focus group, these particular participants would either be, idly watching or not watching television in the group room, sitting alone in their personal rooms, or sitting alone in front of the windows in another room within the unit. For both of the participants, the focus group provided them with an opportunity to observe and interact with fellow residents face to face which otherwise would not have occurred.
Theme 4: Increases in Self Confidence

While the directive was being administered and the instructions were being given, the participants that were correctly and attempting to complete the directive received positive encouragement for their efforts. There was no negative feedback or attempted corrections made to the participants who did not fill out their template according to the instructions given.

Marie: The encouragement often brought a smile to Marie’s face, and a sense of determination to do her best during the activity. As an observer, the researcher could sense that Marie took great pride in her completion of the painted template as she used the materials carefully and deliberately. Marie’s template was usually more filled in according to instructions than the other group members’ paintings, and through facial expression during the group display, it seemed obvious that Marie was proud of her work.

As described as an increase in sociability, when the warm-up part of the session turned more enthusiastic from session 12-onward, and Marie probably showed an increase in her ability to pass the ball to the other members while attempting to smile and laugh with them. She was able to keep up with their energy level during the physical activity. The researcher felt the inclusion with peers and increased ability to participate could have attributed to greater self-confidence for Marie.

Hannah: Hannah was often surprised when she received positive feedback for painting her template according to the instructions. She would respond with a vocalization of an “ooh”. As she often dozed in and out of alertness during the sessions, during the group displays when Hannah’s artwork was praised she would often respond in amazement, and disbelief in her abilities, with wide eyes and “WOW”.
The increase in participation and abilities was evidenced in the artwork produced during the sessions as well. Appendix A includes Marie’s templates that were painted within the focus group sessions. This inclusion of this artwork was intended as further evidence of the changes and improvements that took place over the course of this study. Only Marie’s artwork is included for review, as Hannah and her family preferred to keep her artwork and images private.
CHAPTER V

Discussion

The primary purpose of this study was to observe any social or behavioral changes that occurred to the participants during the implementation of the focus group sessions that included a creative arts-based therapeutic directive. It has been stated that the biggest challenges in the progression of dementia is the significant decline in ability to function, and communication skills (Young et al., 2016). These changes can manifest in challenging behavioral symptoms that can significantly impact well-being, and quality-of-life (Young et al., 2016). Providing the group with this directive had the possibility to stimulate socialization as well as cognition. Not only did it reduce boredom during their sedentary time, but increased their alertness, and had positive effects on their happiness and wellbeing. It became evident that over the course of the study these participants were able to function and engage socially despite their limitations and exhibited no challenging behavioral symptoms.

Theme 1: Alertness Levels

It was observed that over the course of the research study, the participants showed an alertness, interest, and a desire to be active in the focus group during the administration of the directive. It was observed that the participants’ ability to physically and mentally engage in the activities within the focus group improved over the course of the research sessions. Like Murray and Paek (2016) observed in their study, when the participants engaged in the group activity with the physical and cognitive component they showed not only increases in their alertness, but also increases in their attention, ability to focus, and ability to participate in the activity.

Mirabella (2015) suggested that severe dementia compromises the brain too much, and that participating in a highly structured art task that required fine motor skills would be too
difficult, and that the clients would not have wanted to participate or would have been unable to participate. The researcher found the opposite to be true. That even with diminished capabilities, the participants wanted to attempt the task and showed improvement in their engagement in the activity over the course of the study.

Sophisticated instruments were used to measure brain activity in the prefrontal cortex during free drawing and coloring based art therapy sessions in the study done by Kaimal et al. (2017). The study found that even when the participants were passive in their engagement, that just observing the art making activities affected and stimulated neurological responses. Karkou and Meekums (2014) also emphasized that even passive participants who only observed the group engaged in the physical and cognitive activity without physically participating, were still engaging and responding on a neurological level. It might be assumed that during the participants’ active or passive engagement, when they were alert within the sessions they were being neurologically stimulated.

**Theme 2: Sociability**

The observations made during this study found that the aspect of the session being an opportunity to engage socially with other group members was beneficial. While most of the group members were completely nonverbal, they still found ways to communicate through facial expressions and gestures. Hattori et al. (2011) noted there were no significant improvements in mood or behavior when making art with dementia-stricken participants. Observations with Hannah and Marie did reveal significant improvements in participants’ moods by acknowledging each other through eye contact during the first several sessions and then advancing into laughing and smiling at each other during later sessions over the course of the research period.
Levine-Madori (2013) explained that seniors, like all people, regardless of age or ability, need to feel included within their society and social environment to preserve quality of life. Nasim et al. (2018), also agreed that a key component to quality of life is being a member within a community. In the study done by Gross et al. (2015) they theorized that supportive and social group interaction could possibly even slow the decline of dementia progression. It could be concluded to some degree that the participants within this focus group had improved quality of life through increased socialization during the focus groups.

**Theme 3: Response to the Added Therapeutic Activity**

Murray and Boyd’s example of caregivers and clinicians seeing persons with dementia as passive, unable to participate in tasks, or interact with others, came up in both the literature (2009) and the researcher’s own life experiences. It was reported that in some instances, due to lack of education and services that nursing home staff have overly relied on pharmaceuticals as interventions to manage behavioral and psychological symptoms of dementia (Kolanowski et al., 2010). The researcher was fortunate to have conducted this study in a facility equipped with staff that believed in and encouraged the benefits of recreation and creative arts therapeutic activities for all residents including those in advanced decline, however this is the exception and not the rule in many communities and facilities.

Buchalter (2011) explained that seniors, like everyone else, wanted to be respected and treated with dignity. The researcher believed respect is of ultimate concern and priority in care and treatment of all persons, including persons with dementia. Even with the deterioration of cognitive capacity and ability to function, research has shown that persons with dementia still have preferences, feelings, and a sense of self (Cohen-Mansfield et al., 2010). During this study, the caregivers and staff observed and compared the participants interacting and engaging in the
focus group, opposed to being sedentary or isolated outside of the group. Seeing the participant’s abilities and strengths, could’ve added an additional level of support and compassion, which could contribute to a higher quality of life for participants, as well as higher quality of care from staff and caregivers.

**Theme 4: Increases in Self-Confidence**

Fayers and Machin (2013) expressed the importance in finding and maintaining happiness and satisfaction in life when coping with illness. They stressed the significance of physical, mental and social wellbeing, as components of quality of life. Wang and Li (2016) included feelings of accomplishment by working on a task, as well as belonging to a group within the components of life satisfaction that contribute to higher quality of life.

Forkosh and Drake (2017) found that in their study, using pre-drawn stencils in their art therapy directive had a higher success rate in the participants’ ability to complete the activity. They added that this ability lead to a greater sense of accomplishment for the participants. Likewise, in the study done by Goldstein-Levitas (2016), it was observed that as the participants gained physical control and ability to master their task, they gained a greater sense of empowerment and accomplishment. It was concluded that the feelings of empowerment and accomplishment lead to increased self-esteem and self-confidence. In this study it was observed that as the participants progressed and their physical control and ability of using the art materials increased, they also showed an increase in feelings of accomplishment.

The researcher observed this sense of accomplishment and pride from the participants, as they completed the directive, as well as when they reviewed their painted templates together after each session both with verbal and nonverbal gestures and responses. It may be concluded from the literature and observations of this study that as the participants’ abilities increased, that
their self-confidence increased as well. Therefore, it might be concluded that increases in the participants’ self-confidence and sense of accomplishment could have contributed to overall wellness and improved quality of life.

**Limitations**

For this study the size of the focus group and the number of participants was an intentional delimitation. This was done to ensure the safety of the group as well as to allow the researcher to focus on the two documented participants specifically and thoroughly. The overall length of time for this study was a limitation based on a specific timeline within the thesis guidelines for completion. Had the focus group continued for a longer duration, with clients’ progress documented, there could have possibly been more evidence relative to the themes.

An unintended alteration to the study occurred within the first three weeks. A session had to be cancelled due to a holiday, when the licensed supervisor overseeing the administration of the study was unavailable. The session was unable to be rescheduled, therefore the group had fifteen sessions instead of the original sixteen that were intended.

The specific adapted TDS directive observed in this study involved the participants filling in a specific template of shapes. As the sessions progressed, the researcher noticed the abilities of some of the group participants increasing, and with it their ease of using the materials increased. The researcher was limited to only including data and observations made during the specific TDS directive, even though further adaptations could have been made to increase the complexity of shapes and instructions, as was originally intended by Del Giacco (2000), when the TDS was utilized with clients recovering from traumatic brain injury.
Recommendations and Future Studies

This study has demonstrated that the participants were able and eager to observe and engage in the activity. The observations made during this study in alertness, sociability, increase in ability and increase in self-confidence have exceeded expectations. It was recommended that art therapy sessions utilizing the TDS be implemented into all dementia care group settings for less sedentary time, and increased alertness, sociability, and overall wellbeing of residents.

Further study and more in-depth studies are recommended, in order to move toward an evidence-base of the neurological, cognitive, and social benefits of utilizing the TDS directive within a group setting. From a quantitative perspective, measurements could be done to compare the cognitive improvements of persons with dementia using the TDS in individual sessions, versus group sessions to show if there is an added benefit of group intervention beyond just socialization. Utilizing a quantitative rating scale with a large population could provide more evidenced based data as to any increases alertness levels and engagement levels. It would also be both interesting and beneficial to do longer longitudinal case studies which include increases in the complexity of the TDS directive to adapt to increases in ability to complete the directive and ease of using the art materials.

Conclusion

In researching and documenting this pilot study, the researcher was able to conclude through observations, that the participants were able to participate in a group activity, use fine arts materials, and follow specific instructions according to a directive, with zero negative behavioral symptoms. It was expressed by Safar (2014), that art making not only stimulates and maintains cognitive functioning, but also stimulates and maintains emotional functioning through connecting with others. During the time of this study, there was no research or medical
knowledge confirming that art therapy could change the ultimate outcome of dementia.

However, using time instead of passing time, to make art and connect with others has value, meaning and contributes to an improved quality of life. Boatswain (2016) stated that staff and administration may not fully understand the benefits of socialization and wellbeing that art therapy group work may have on resident quality of life within the nursing home, or quality of life in general for persons with dementia. This study hopes to further advance that knowledge and awareness.
References


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Appendix A:

Painted Templates Created by Marie During Sessions

Session 1

Session 2

Session 3

Session 4

Session 5

Session 6

Session 7

Session 8
Figure 1. Painted templates created by Marie done in each focus group session (2018).