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Assisting Elders with Dementia in Residential Settings through Music Therapy: A Literature Review

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Abstract

Dementia is one of the most prevalent diagnoses for elders causing strain and debilitation of their social, mental, physical, emotional, behavioral and psychological faculties. Due to the nature of this condition, treatments for dementia have been structured to aid and improve the well-being and quality of life for those afflicted. Some of the goals that assisted-living services establish include reducing anxiety, increasing levels of comfort, improving mood, memory care and bettering verbal processing. Music therapy has been an intervention that assists with establishing these goals and implementing strategies resulting in short-term and long-term effects for those receiving treatment for dementia.

This paper explored how the literature based on music therapy for elders with dementia has been defined and evolved over time and what could be done to explore more social aspects of the work within an assisted-living setting on many levels (i.e. peer to peer, client to therapist, client to assisted living staff). The literature detailed the results from studies that have explored short-term and long-term effects of music therapy and the varying theoretical approaches developed and implemented. Additionally, the literature presented describe how music therapy treatments are introduced to programs seeking out non-pharmacological measures to treat elders with dementia. In so doing, music therapy is presented as assisting elders to be individually empowered through use and acknowledgement of their personal narratives as well as socially empowered through efforts of clients working and interacting with one another in the same setting along with staff and caregivers who work to improve their lives.

Introduction

In this paper, particular domains were considered due to their individual nature and how these domains intersect and interact with one another. Domains included: (a) elders diagnosed with and experiencing various stages of dementia; (b) their assessments, (c) goals and treatment within residential settings and goals; and (d) how music therapy has been used as a means to assist this specific population in healing or alleviating its severity. According to Alzheimer's Disease International, as of 2015, "there is an estimated 46.8 million people worldwide living with dementia…[which] represents a significant health burden to those aged sixty and above" (Elliott & Gardner, 2018, p. 199). Due to the escalating pervasiveness of this disease inflicted upon the individual, it continuously progresses leading up to numerous amounts of other psychological illnesses and symptoms that arise and debilitate its victim even further. Some of the functions that are most affected by dementia include "emotional state and perception; cognition, memory and linguistic capacities, and level of anxiety and agitated behaviors" (Spiro, 2010, p. 891). Due to the oftentimes quick and degenerative nature of this disease, various treatment strategies have been implemented to best care for people diagnosed with dementia; which have manifested mostly and culturally an accepted pharmacological means as well as alternative non-pharmacological means. One of the treatments that have shown promise over the course of decades has been music therapy .

Kenneth Bruscia (1998) defined music therapy as "a systematic process of intervention wherein the therapist helps the client to promote health, using musical experiences and the relationships that develop through them as dynamic forces of change" (p. 28). Music therapy was utilized most popularly in the United States; especially in facilities of treatment and care for older people diagnosed with dementia and other related diagnoses. However, it was not limited

to these parameters as music therapy was used cross-culturally with various populations to assist elders with dementia in countries like China and Germany. For example, in a 2006 article, Tuet and Lam conducted a study that explored music therapy treatments for Chinese patients with dementia. Their research was conducted as a crossover design, with the assistance of an occupational therapist and two therapy assistants, aimed at evoking "memories encoded with familiar environmental cues" (p. 88). Similarly, Schall, Hanerstroh, and Pantel (2015) conducted a pilot study in Germany with music therapy goals of improving "communication behavior, situational well-being, and the expression of positive emotions" (p. 114).

One of the most common settings for music therapy interventions for elders with dementia take place within residential settings that provide housing and care as well as nursing. Settings like these have had a significant role in the lives of elders diagnosed with dementia. Within a residential setting that aims for person-centered care, there are many factors that play into the lives of elders. Factors include institutional framework of policies of the residential setting, their treatment methods, and staff-client rapport that are developed "to maintain identity and worth, in the face of cognitive impairment, through a partnership of positive interactions and communications" (Broom, Dening, Schneider & Brooker, 2017, p. 1980).

There are numerous neurological and behavioral concerns due to the progressive nature of dementia. These concerns pertain to symptoms such as agitation, anxiety, cognitive impairment affecting speech articulation and memory recall as well as the risk of aggression or self-injury. All of these symptoms affect elders with dementia's individual and interpersonal capacities and hinder their well-being as their condition progress over time resulting in declining health and declining socialization. According to Matthews (2015), music therapy "enables those with dementia to re-enter their social world, to be responsive to others, to participate, to

converse, even to engage in some minimal kinds of interpretation [to provide] the means to restore their status as socially recognizable actors" (p. 575).

For decades, music therapy has been used as a non-invasive, non-pharmacological approach for elders to alleviate the severity of health-related symptoms and to elevate their quality of life. Research conducted explore the development of theories, practices, and short-term and long-term goals and objectives that consider the variance of severity in regards to dementia patients. The role of caregivers and the institutional framework of residential person-centered care settings have also been taken into consideration in numerous studies. The results of music therapy interventions for this population has amounted to what it currently known about the effects of assisting elders with dementia through music therapy in residential settings. The effects music therapy had on elders with dementia, such as alleviating agitation and improving social agency, also provide support for future research. The literature reviewed examine the strengths and limitations of previous research, the observable trends of their results over the years, and recommendations for music therapy work moving forward.

Literature Review

Accumulation of findings. In 1996, a qualitative study was published by Melissa Brotons and Patricia K. Pickett-Cooper entitled "The Effects of Music Therapy Intervention on Agitation Behaviors of Alzheimer's Disease Patients." The purpose of the study was to examine how live music therapy on agitation behavior affect Alzheimer's patients during and after interventions. The researchers also assessed if patients who had musical background had a different in effect from treatment than those who did not. The authors organized criteria define agitation with behaviors that exhibited restlessness, hyperactivity or subjective distress; which were observed to be "pacing, hand wringing, inability to sit or lie still, rapid speech, increased

level of psychomotor activity, crying, and repetitive verbalizations of distress" (Brotons & Pickett-Cooper, 1996, p. 7). Their sample size included twenty residents, 17 females and 3 males aged between 70 and 96 years old, from four nursing homes. They presented various levels of agitation exhibited as defined by the Agitation Behavior Scale as well as various levels of verbal functioning and social skills.

With the criteria of agitation, participant background, and participant involvement considered at that time, the authors developed their interventions based on previously observed benefits in which elders with dementia and Alzheimer's could be effective in decreasing the frequency of agitated behaviors. They also noted for their time that although there had been previously reported successes; these studies had little empirical data evaluating music therapy's effectiveness along with other non-pharmacological approaches. The researchers also developed hypotheses that coincide with the topics of this paper as it explores the relationship between music therapy and responses from elders' with dementia as well as the relationship between elders' exhibiting one of dementia's effects and the caregivers providing care. Although the focuses of the test were well-intentioned, they were limited by the very few amount of resources that informed the authors' practices at that time as well as by the small and inconsistent numbers of participants within the study sample.

Today's pool of research regarding dementia care through the use of music therapy has deepened as several published peer-reviewed articles have explored the relationship between the function of music therapy and its aims to treat elders in a residential setting. One of the primary justifications for using music therapy has been to explore an alternative approach to pharmacological treatments. It has been a concern that several authors throughout the years have noted in their research as "there are many aspects of the condition [of dementia] that remain

untreatable using these methods from which there are also often unwanted side effects" (Spiro, 2010, p. 892). Some of these side effects of medications for dementia and its "behavioral and psychiatric symptoms…[included] dizziness and fatigue that can result in injuries" (Ray & Mittelman, 2017, p. 690). Other researchers have also taken into account the rapport and quality of care provided by caregivers in residential settings (i.e. nursing homes, in-patient care). These qualities affect the dynamics between elders receiving treatment for dementia and between the music therapists that provide treatment for dementia. Studies have found that "through participation in music therapy family members and care staff become aware of the ways music therapists perceive and interact with persons with dementia" (Spiro, Farrant & Pavlicevic, 2017, p. 261). The studies that examine these dynamics have shown variance in results due to their scope (i.e. short-term and long-term goals); the music therapists' interpretation and administration of certain interventions (selection of musical activities, individual sessions, group sessions); quality of assessments used by professionals; and study sizes and differentiation of groups (i.e. mild, moderate, severe dementia).

Individual Music Therapy. Ridder, Stige, Qvale, and Gold (2013) published a work entitled "Individual Music Therapy for Agitation in Dementia: An Exploratory Randomized Controlled Trial." Forty participants were included in this randomized control trial (RCT) and twelve music-therapy sessions were offered. The research methods included participant and music therapist singing activities, conversations, music-making and listening, and dancing and moving to musical improvisation. Despite the clinical complications that were often associated with structuring a RCT, the model the researchers created was deemed the most feasible under the conditions of the care facility's structure. Researchers examined "individual music therapy on agitation frequency and agitation disruptiveness in persons with moderate to severe

dementia…and additionally [exploring] its effects on psychotropic medication and quality of life" (Ridder, Stige, Qvale, & Gold, 2013, p. 688). The music therapy intervention plan was a deeply person-centered approach to facilitate the social agency and advocacy of elders with dementia; where they could initiate responses to the musical process in their own expressive and subjective ways. It was also designed to consider the conditions of the caregivers for elders with dementia; as findings in the authors' study described "agitation behaviors…as disruptive and disturbing to caregivers and peer residents; and can lead to caregiver burnout and increasing agitation for peer residents" (Ridder, Stige, Qvale, & Gold, 2013, p. 675).

History with diagnosis, reports from caregivers and the institution of the elders' setting, and participant musical history were also addressed in this study as researchers aimed to create an engaging practice to assist in participant safety, regulatory levels, and social communication. The researchers found potential in reducing agitation levels in elders with dementia and some changes in prescription through a pharmacological means. However, they also noted the limitations of their study and recommended that a larger sample would provide more reliable results to analyze how music therapy is administered with this population.

Research in music therapy involving individual work such as Ridder, Stige, Qvale, and Gold's have included methods and techniques that draw upon the subjective experiences of participants; where music and creativity serve as the medium to alleviate stress and decrease the frequency of negative behaviors such as agitation and shouting. Some principles to help participants in the individual level create a space where "there is no right or wrong interpretation of art; that creativity is a matter of perspective; and that every problem is a potential for opportunity" (Gottlieb-Tanaka, K., Small, J., & Yassi, A., 2003, p. 128). Research has indicated the use of music therapy in receptive and active ways in which interventions including music-

listening led participants to engage in a more passive and internalized way. The purpose of including receptive and active music therapy interventions in a session was to structure a group setting where elders with different stages of dementia can participate together. Active reminisce music therapy interventions such as "exercises subjects could perform in a sitting position, vocalization, singing songs and playing a concert" were also utilized (Takaashi & Matushita, 2006, p. 321).

In "Time Series Analysis of Individual Music Therapy in Dementia: Effects on Communication Behavior and Emotional Well Being" Schall, Haberstroh and Pantel (2015) described their quantitative study aimed at examining how approaches to individual music therapy could assist elders with dementia. Nine participants who were all on medications were included within a small sample study as their experiences with dementia included "aggression, depression, anxiety, apathy and aberrant motor activity" (Schall, Haberstroh & Pantel, 2015, p. 115). The time series analysis in this research study was used as a quantitative intervention. The therapeutic intervention implemented "was preceded by a five-minute observation period, during which communicational interaction between the persons with dementia and their relatives, or the therapist, was rated" (Schall, Haberstroh & Pantel, 2015, p. 116) based on video-graphed findings. Twenty-seven music therapy interventions were evaluated that differentiated between active music therapy and receptive music therapy with the former utilizing activities like singing and improvisation while the latter utilized listening to music that was subjectively and experientially relevant to the clients.

The researchers of this study disclosed that the structure of their work had characterized a small sample group and noted that there was "no improvement but also no worsening in cognitive impairment, neuropsychiatric symptoms, or instrumental activities of daily living"

(Schall, Haberstroh & Pantel, 2015, p. 116). The domain of residential setting within an organization or nursing home was missing from this study as it was specific to elders with dementia who were still under the care of relatives and caregivers in their own homes. The researchers noted that their quantitative model did not find significant improvement in their participants' symptoms of dementia. However, their quantitative study does have relevance as it contributes to the history of developing treatments for the elderly population with dementia and sets a foundation for future works in development.

Group Music Therapy. There appears to be a disparity between the amount of research conducted for the elders receiving individual music therapy and research collected elders with dementia participating in group music therapy. Over the years, working professionals have appeared to have found constructing a music therapy non-pharmacological approach more feasible for this population. For example, researchers Werner, Wosch, and Gold (2015) developed a trial study titled "Effectiveness of Group Music Therapy versus Recreational Group Singing for Depressive Symptoms of Elderly Nursing Home Residents." The authors of this article designed a study to examine and compare depression levels of residents engaging in recreational singing and music therapy. The intervention used was based on a person-centered, holistic approach where participant's chosen selections of music to reflect or assist in the change of emotional responses during sessions such as relaxation and decreased aggressive behavior.

The participants' affect and introductory interactions with the practicing therapist were determinants for the direction of the session. Scales and questionnaires used to record depression levels and assess baselines and measure changes throughout the study. Within twelve weeks, the researchers found significant changes and differences between interactive music therapy and recreational singing as "concentration difficulties, lassitude, inability to feel, pessimistic thoughts

and inner tension" were explored and acknowledged as part of the participants' experience (Werner, Wosch, & Gold, 2015, p. 153). Limitations for the study pertained to the limited span of research for people who were unable to speak, no examination of long-term effects and the possibility of assessors influencing "the assessments intendedly or intendedly due to the lack of blinding" (Werner, Wosch, & Gold, 2015, p. 153).

Before more recent studies such as this example were conducted, others were developed to assess the effect of music therapy for elders with dementia in different phases. For example, Svansdottir and Snaedal (2006) published an article entitled "Music Therapy in Moderate and Severe Dementia of Alzheimer's Type: A Case Control Study." Within this descriptor study, music therapy was theorized to be a treatment for behavioral and psychological symptoms of dementia despite previous research being small and without controllable variables. Forty-six patients were randomized to either a music therapy or control group consisting of twenty-three participants for each; but thirty-eight participants were reliably evaluated as there were some who were dropped due to not being able to be involved in all of the eighteen thirty-minute structured sessions. The process of the music therapy interventions included (a) song selection by the group and the therapist; (b) openness for active and passive participation to make it "possible to include patients in different stages of dementia in the same sessions" (Svansdottir & Snaedal, 2006, p. 615); and (c) musical accompaniment from the therapist who prompted for free movement and harmonization along with his guitar-playing. The repetition and consistency of having the same music therapist facilitate the therapy was helpful as it allowed the evaluation of cognitive improvement. Also, the presence of the same therapist "increased interest on behalf of the staff in caring for treating the patients, which might [have] decrease the high turnover of staff in this kind of care" (Svansdottir & Snaedal, 2006, p. 620). Although this study found initial

promise in the findings from immediate post-therapy life for elders with this form of dementia, the researchers noted that the effects of the therapy had diminished one month after the therapy. Studies that explored the topic of assisting elders with dementia in residential settings through music therapy also examined long-term effects of music therapy.

In 2006, Ledger and Baker published a study titled "An Investigation of Long-Term Effects of Group Music Therapy on Agitation Levels of People with Alzheimer's Disease." It was conducted within the span of a year with sixty participants who, were divided into experimental groups and control groups, were given consistent sessions of group music therapy. The interventions that were included for their study consisted of "listening to music played by the therapist, choosing or requesting favorite songs, guessing song-titles from melodic/lyric clues, singing, playing instruments, moving to music, and discussing feelings and memories" (Ledger & Baker, 2006, p. 333). Their verbal and non-verbal engagement was measured by assessment tools that would characterize the frequency and severity of aggressive, repetitive, and communicative behavior.

The authors structured their program for group music therapy as it was theorized to be "effective in addressing people's unmet needs for interaction and belonging and reducing agitation during and immediately post-session" (Ledger & Baker, 2006, p. 333). The consistent structure of having the sessions taking place in a nursing home was also instrumental in the work, though the accuracy of assessing the elders' behavioral accounts from the nursing staff was notably limited. The lack of accuracy was due to high turnover rates from the staff assisting the authors' formulation of the practice. By the end of the study, the two groups divided and evaluated showed no significant differences regarding the effects of the music therapy

interventions. Ledger and Baker (2006) made some considerations for what may have contributed to the results:

> The large number of uncontrolled variables could have contributed to [the] high degrees of variability in agitation levels. There were many outside factors that could have affected participants' agitation levels over the year—illnesses, hospitalizations, changes in medications, bedroom changes, and deaths among family and friends. Differences in nursing home environments, timing of music therapy sessions, music therapy group sizes, music therapy techniques employed, and music therapists conducting the sessions could have influenced the results of the study. (p. 336)

Although there were no significant changes, the authors noted that there were slight changes observable enough in affect and levels of agitation exhibited more so immediately post-therapy than the long-term observations. Studies that focused on group music therapy for elders with dementia in residential settings such as this not only aimed to reduce agitation; but had focused on assessing what the intervention could do to alleviate the levels of depression for participants.

Ledger and Baker had previously worked on publishing articles regarding long-term effects of music therapy. For example, in their work "Longitudinal Research Designs in Music Therapy: Recommendations from a Study of People with Dementia," they explored the development of research designs for the long-term effects of music therapy for patients with dementia. The case for longitudinal research was advocated as it is discussed to not be a commonly implemented practice. For example, one of the advantages of this study was the ability to "observe a change in the degree of self-expression over time in both the group of

participants who received music therapy and the group of participants who did not" (Ledger & Baker, 2005, p. 90).

In relation to treating elders with dementia, the severity of behavior could be measured as well as its frequency when comparing groups of people who receive music therapy and groups who do not receive. The limitations listed include the supposition of having the same people committed and involved in the research (as patients may not be involved in a frequent capacity) and errors from the researchers pinpointing incorrect time-points (i.e. noting effects of five trials within seven months rather than seven trials within twelve months). Research findings contributed to the potential use of music therapy in organizations, treatment centers, and assisted-living centers and experiment of how music therapy can be used and evolve over time as the practice became more common.

In 2011, Mohammadi, Shahabi, and Panah conducted a randomized controlled trial entailed "An Evaluation of the Effect of Group Music Therapy on Stress, Anxiety, and Depression Levels in Nursing Home Residents." The rationale for the work conducted in this study was how music therapy interventions could be "effective for restoring memory, attention, motivation and perception (Mohammadi, Shahabi, & Panah, 2011, p. 58). The setting of the trial was in a long-term care facility where the association providing the care advocated for alternative treatments to coincide with traditional interventions in improving the health and overall well-being for elders with dementia. Although the study had taken place in Iran, the aims of the study had common goals that other studies from Western cultures for populations affected by dementia. Study aims included the opportunities to improve skills in memory recall as well as improving the ability to express positive emotions. Other aims of the study included decreasing the frequency of aggressive behaviors while "[promoting] relaxation and [encouraging] positive

change of mood" (Mohammadi, Shahabi, & Panah, 2011, p. 58). The study intervention consisted of ten weekly sessions lasting ninety minutes at a time where there was active engagement in instrumental playing, singing, writing and positive physical expression though group collaboration facilitated in a safe, non-judgmental capacity.

The study had found empirical support that group music therapy could reduce the levels of stress, anxiety, and depression as it helped participants cope with their circumstances as evidenced by the comparison between the music therapy group and control group developed for the study. One ways in which researchers assessed this goal was by equipping participants with a space that assisted them in "[diverting] their attention away from pain and worries while focusing on positive self-talk, thought processes, and increasing intimacy with peers" (Mohammadi, Shahabi, & Panah, 2011, 64). The researchers noted the small number of participants involved in this study as a limitation. They suggested that further studies with a greater pool of elders with dementia involved could help contribute to observing the effects of music therapy for this population in a residential setting.

Sole, Mercadal-Brotons, Galati, and De Castro published an article in 2014 entitled "Effects of Group Music Therapy on Quality of Life, Affect, and Participation in People with Varying Levels of Dementia." The authors had defined quality of life as follows:

> A concept that that reflects a person's desired life conditions in relation to eight basic needs, which represent the nucleus of each person's life dimensions: emotional well-being, interpersonal relations, material well-being, personal development, physical well-being, self-determination; social inclusion, and rights. (p. 105-106)

The authors also noted that the factors that can affect the quality of life for elders with dementia are correlated between "level of well-being and time spent participating in therapeutic activities, activities of daily living, and activities that involve interaction with other people" (Sole, Mercadal-Brotons, Galati, & De Castro, 2014, p. 106). These levels were variable as determined by the divisions between mild, moderate and severe dementia as groups had exhibited their own unique empirical findings. Data was collected using a tool called the GENCAT for Quality of Life which explored the eight dimensions that defined quality of life within the study for all groups formulated. Group music therapy program interventions were differentiated amongst participants with mild to moderate dementia as interventions included "listening, improvising rhythms with instruments, singing patients' preferred songs followed by some verbal discussion, and structured movements" (Sole, Mercadal-Brotons, Galati, & De Castro, 2014, p. 112). Participants with severe advancing levels of dementia had been involved with "active participation such as singing, playing music instruments and moving to music and less on verbal" (Sole, Mercadal-Brotons, Galati, & De Castro, 2014, p. 112). The researchers noted that the same music therapist had implemented the interventions which made for more consistent practice in the study. Each group reportedly exhibited verbal and non-verbal responses that showed the trends of effects of music therapy on elders with mild, moderate, and severe dementia (2014):

Mild

- Positive verbal responses to the music therapist
- Participation in the activities and improvisation
- Spontaneously playing an instrument without a specific prompt from the music therapist

- No observable negative verbalizations
- Slight positive trend in the appearance of positive emotions (i.e. smiles)

Moderate

- Active participation of singing activities in a lesser degree than in the group with mild phase of dementia
- Decrease in initially high signs of restlessness
- Increased interactions with music therapist through verbalizations and looks

Severe

- Frequency of verbalization close to zero
- Almost no eye contact between participations
- Worsening signs of agitation

Based on the signs exhibited from each group, the authors pointed to the decrease of participation with cognitive deterioration (Sole, Mercadal-Brotons, Galati, & De Castro, 2014). The authors also noted the limitations in measuring one's quality of life within the structure of this study due to the various levels of abilities that can be maintained or degenerated within different groups through the assistance of various interventions. Having a flexible and malleable structure for sessions also encourages elders with dementia to engage in their unique ways with the capabilities they have left.

Assessment. As several studies have used different measurements to evaluate the progressive nature of dementia, the rapport between music therapist and participant, participant and caregiver/staff, music therapist and caregiver/staff; the use of assessment has been mentioned in literature as one of the tools to help in the treatment of elders within a residential setting. Although it has been mentioned as a part of studies and articles, there has not been

enough information that makes music therapy assessment for elders as the primary subject. For example, Norman (2012) developed an article entitled "Music Therapy Assessment of Older Adults in Nursing Homes." The author described the importance for music therapy assessment in residential settings "to address the need for music-based assessment and music therapy with older adults" (Norman, 2012, p. 9) that manifest in various assessments such as York's Residual Music Skills Tests (RMST) and Lipe's Music Based Evaluation of Cognitive Functioning (MBECF). Other assessments listed include the Mini-Mental Status Examination (MMSE) and Geriatric Depression Scale (GDS) to evaluate the measurements of psychological capacities of older persons. The article addressed how these assessments were used and modified for individuals with different phases of dementia as well as how they can coincide with one another to add to "the holistic view of [a] client's functioning…[and] the effectiveness of integrating music therapy interventions into the resident's treatment plan" (Norman, 2012, p. 9). This article touched upon the subject of this paper as it demonstrated the collaborative efforts needed from music therapy professional and residential setting institutions to provide the most reliable treatment for elders with dementia. Norman (2012) addressed the protocol of developing an assessment tool as follows:

> Beginning with a verbal interview to gather information about the resident's social background and musical experiences, then observation of the resident under musical conditions in both group and individual sessions. Recommending movement to music, singing, verbal reminiscent and naming exercises, and instrument playing as interventions…[providing] a checklist for observations in several areas of functioning including cognition, emotional status, memory, motor skills, pain management, sensory processing, musical participation, musical

> abilities and experience, social interactions, singing, and speech and communication. (p. 9-10)

Developing a process was also helpful to consider the appropriateness and fitness for including music therapy in a resident's program as there may be a situation where music therapy could ultimately not meet a compatible structure for certain individuals. Also, the research noted the importance of continuing developing assessment strategies for elders within facilities that aim to provide care for elders with dementia.

Residential settings. The relationship between residential settings and the acceptance of music therapy as a non-pharmacological approach to treating elders with dementia is a prospect that has been explored over the years of music therapy dementia. For example, an article entitled "Care Staff and the Creative Arts: Exploring the Context of Involving Care Personnel in Arts Interventions" was published by Broome, Dening, Schneider, and Brooker in 2017. In this quantitative study, the focus was to explore the involvement of care staff in developing the knowledge of creative expressive arts practices for residents with dementia as well as gaining awareness of the potential benefits it can provide for the residents with dementia. The rationale for this study was to assess how the care staff's exposure to the music therapy interventions could affect their relationship with the clients they care for as well as how their presence could affect the practices of creative expressive arts themselves. A database was formed to "identify and extract information relating to the intervention, context, mechanisms, and outcomes related to [creative expressive arts] research questions" (Broome, Dening, Schneider, & Brooker, 2017) that were developed within residential settings that had reported to have such programs that included drama and music.

The context of the kinds of residential settings were taken into consideration including low-care facilities, nursing homes, dementia-care units, and residential home day centers. The context of the kind of personnel being exposed to or participating within a creative expressive arts practice included music therapy practitioners, care personnel, and nursing assistants. With music therapy, personnel were exposed to "post-therapy video presentations…with the aim of imparting knowledge of methods and techniques of music therapy" (Broome, Dening, Schneider, & Brooker, 2017, p. 1984). External factors of the residential setting were also assessed in the study to consider how its social and organizational structure influenced and limited music therapy treatment. Some of the factors included staff changes and limited funding for resources required for music therapy treatment Having these considerations had been helpful in constructing this paper and contributing to the information available regarding assisting elders with dementia in a residential setting through music therapy. With accessibility of music therapy, staff and residents can both internalize the work provided the opportunity to express themselves and develop rapport in ways they otherwise would not have been able to before. The benefits highlighted from this study indexed how "the meaningfulness of an interaction [through a creative expressive means] plays a role in the positive attitude between staff and residents and developing a deeper understanding of residents" (Broome, Dening, Schneider, & Brooker, 2017, p. 1986). One note that the author made was that the benefit of including a program is that emphasis could be put on acknowledging the personhood of residents that strengthens them rather than the degenerative nature of their condition; which could lead to more deteriorating consequences if the lingering focus is on that.

Furthermore, Pavlicevic et al. (2015) in "The 'Ripple Effect': Towards Researching Improvisational Music Therapy in Dementia Care Homes" addressed the ways music therapy has

the potential to reverberate beyond the sessions and affect the dynamics between patients and the people caring for them. in In their work, they detailed the ways music therapy can affect the levels of care within a residential setting from "micro (person-to-person musicking), meso (musicking beyond 'session time') [and] macro (within the care home and beyond)" (Pavlicevic, et al., 2015, p. 665). The micro level was noted to explore the initial reflections of agitation, fragmentation, and depression that participants of the study exhibit due to their diagnoses. These reflections were treated with an intervention called musical matching which "[referred] directly to the tempo, intensity, pitch and/or phrasing of residents' voice/playing, and to their movements" (Pavlicevic, et al., 2015, p. 666).

The meso level was defined as the bridge between the residents and their families and staff that care for them, where "any music making…heard beyond the music therapy room [had influenced] the general mood and atmosphere of the care setting" (Pavlicevic, et al., 2015, p. 670). Adding a social dynamic to the work, according to the therapists' theory, contributed an additional perspective to how residential staff/practitioners view their work and interactions with clients. The macro level consists of strategies that aim to "provide continuity of musicking throughout care and developing communication channels within and beyond the care home" (Pavlicevic, et al. 2015, p. 673). Exploring these levels and their contributions to the care of elders would be a helpful foundation to developing music therapy's presence in a facility that may not have had its kind of interventions before. It also shows how it can benefit clients from an individual capacity as well as social and familial capacities. The theoretical framework for this study was stated by Pavlicevic, et al. (2015) as follows:

> Based on empowerment philosophy, resource-oriented music therapy challenges the notion of residents being identified as only 'receivers' of 'treatment' or 'help,'

> and considers the economic, political resources that help to construct ‘illness’ and ‘conditions’ as situated exclusively within the person living with dementia. (p. 675)

The article was successful in incorporating all of the topics of interest within the paper as it examined (a) the relationship between elders with dementia and the music therapist; (b) the music therapist and the caregivers/residential setting; and (c) between elders with dementia and their caregivers/residential setting.

In 2017, further research into this topic was conducted and published. Melhuish, Beuzeboc, and Guzman (2017) published an article entitled “Developing Relationships between Care Staff and People with Dementia through Music Therapy and Dance Movement Therapy: A Preliminary Phenomenological Study.” This study aimed to explore the residents’ abilities in expressing their subjective feelings and creative skills as well as how the alternative dual approaches of dance movement therapy and music therapy could benefit the connections between care staff and the residents. Interviews and questionnaires were provided to staff to gather information on their understanding of the creative arts practices. Interventions were organized through a weekly program for fifteen residents with moderate dementia and twelve residents with advanced dementia. The therapists centered their work around “[following] the pace of the participants, allowing time and space for musical, physical, verbal and emotional responses, [and] choices to be made and individual wishes to be respect” (Melhuish, Beuzeboc, & Guzman 2017). Dyads were formed between the music therapist and resident as well as between care staff and resident where a musical repertoire was provided in which the population had likely been familiar with (i.e. music from the 1920’s to 1960’s).

The findings of the article showed that there was a "contrast between the therapists' pace and that of the staff" (Melhuish, Beuzeboc, & Guzman, 2017) that showed how the potential differences between the connections made between the music therapist and resident and the connections made between the care staff and the resident. The fact that the care staff had a longer rapport and more referral and background information at their disposal than the music therapist affected the dynamic as well. This study aimed to develop a greater understanding of the residential setting's experiences in how they handle the care for elders with dementia in a residential setting and to see if there was potential in reframing residential care to develop stronger connections. The researchers noted that the manager of the setting disclosed how "working alongside professional therapists and people with dementia in MT sessions seems to [had] been an effective means of supporting care staff and developing their skills" (Melhuish, Beuzeboc & Guzman, 2017, p. 293). One of the essential skills for development in staff and settings for elders with dementia is having greater empathy and providing as much social agency as possible.

Ray and Mittelman (2017) furthered music therapy research within a residential setting in their article "Music Therapy: A Non-Pharmacological Approach to the Care of Agitation and Depressive Symptoms for Nursing Home Residents with Dementia." They developed their study based on randomized controlled trials where it was found that the use of music therapy techniques (i.e. reminiscence with familiar songs) led to a significant reduction of depressive symptoms. They also developed their methods based on the histories of music therapy affecting symptoms of agitation and wandering exhibited by elders with various forms of dementia. For agitation, they assessed the short-term effects in comparison with long-term effects in post-music therapy life for residents and determined stronger short-term effects similar to those discovered

in “quantitative and mixed methods studies…observed after the use of music therapy” (Ray & Mittelman, 2017, p. 691). The authors noted the various outcomes from other studies where there were significant to very little changes in wandering due to “insufficient descriptions of the process by which music therapy aided in changing behaviors” (Ray & Mittelman, 2017, p. 692).

One-hundred and thirty participants completed the screening for this study as there were factors such as health complications, deaths, and transfers to other facilities that contributed to the decrease of the initial total of three hundred and thirty participants. Two music therapists had obtained information about staff, caregivers, and family that had provided information for the practice after legal consent and permission to work with the participants was granted. After two weeks of interventions that occurred three days within each week, the researchers concluded that “the use of therapeutic singing, music, and movement, and a tonal protocol specifically created for individuals with moderate to severe dementia” had reduced symptoms of depression and agitation (Ray & Mittelman, 2017, p. 702). Wandering behaviors was a trait exhibited by the participants that had been unaffected by the study.

Discussion

The studies and articles presented in this literature review explored the relationship of music therapy and its function in assisting elders with dementia within a residential setting. The short-term and long-term goals for studies were examined to address their strengths and weaknesses. Research within these studies and articles found a higher prevalence in short-term benefits for elders with dementia than long-term benefits. A number of contributing factors were discussed in each study including the neurodegenerative nature of dementia as it progresses in severity, the potential of variance in staff as there are turnover rates, unfamiliarity and lack of exposure to expressive creative arts-based therapeutic practices, and the external factors that

music therapists have no control over (i.e. health matters outside of sessions, family incidents, transfers). The findings from articles published decades ago did not have the benefit that current studies had. As music therapy had been a budding alternative treatment for elders with dementia, studies that informed practices such as the 1998 article
"The effects of music therapy intervention on agitation behaviors of Alzheimer's disease patients" by Brotons and Pickett-Cooper had difficulties in the reliability and validity in their studies since there was very little research to cross-reference and compare.

As an accumulation of research was established, music therapy research notably moved towards quantitative inquiry unlike previous studies that historically relied on qualitative measures. This shift was evidenced in works such as Schall, Haberstroh, and Pantel's 2015 article "Time series analysis of individual music therapy in dementia: Effects on communication behavior and emotional well-being." The research related to this topic also demonstrated efforts to have members of residential settings more involved in acquiring information and validation from the previously empirical findings of music therapy's effect on elders with dementia. Articles such as "Developing Relationships between Care Staff and People with Dementia through Music Therapy and Dance Movement Therapy: A Preliminary Phenomenological Study" (cit.) and "The 'Ripple Effect': Towards Researching Improvisational Music Therapy in Dementia Care Homes" (cit.) pointed to the role of the environmental and social factors have on residents. As the well-being, empathy and knowledge of caregivers and organizations are strengthened, so is the quality of care provided to residents with dementia as their quality of life improves.

My recommendations for future study include the continued exploration of the relationship between elders with dementia and the benefits provided by music therapy within a

residential setting. When there are collaborative efforts and multidimensional factors put into consideration, the strength of a music-based intervention can help in setting more foundations into the work as the breadth of research is widened and creative expressive arts practices are advocated. As residential settings may have conservatively prescript treatments for practices that have had longer establishments (i.e. occupational therapy, physical therapy, speech therapy), it is important to integrate a work that has openness for participants to initiate their social agency when provided the opportunity. Qualitative, quantitative, and mixed-method approaches should all be considered for increased care. As there is no cure for dementia or any of its other degenerative diagnoses, we should strive for increased music therapy practice to alleviate pain, prolong life, strengthen relationships within a personal and health-based community for in the betterment of elders with dementia.

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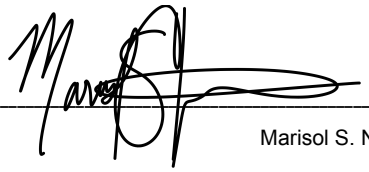
In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

Thesis Advisor: 

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