

Music Therapy Program for Geriatric Patients Diagnosed with Serious Mental Illness:

A Dalcroze and Wellness Approach

by

Hayley Susanne Park

A Thesis Presented in Partial Fulfillment  
of the Requirements for the Degree  
Master of Music

Approved April 2019 by the  
Graduate Supervisory Committee:

Melita Belgrave, Chair  
Melissa Elliott  
Jill Sullivan

ARIZONA STATE UNIVERSITY

May 2019

## ABSTRACT

Older adults diagnosed with a serious mental illness (SMI) often face a lifetime of psychiatric institutionalization, making them a very vulnerable population. However, music therapy research has not been conducted with this specific population. The purpose of this thesis was to develop an evidence-based proposed music therapy program for geriatric patients diagnosed with SMI utilizing both music-based and non-music based theoretical frameworks. The music-based approach used for the program is Dalcroze and the non-music based approach is Wellness with a focus on quality of life. The population diagnosed with SMI and the complications of aging for this population are discussed as well as the results of previous music therapy studies conducted with adults diagnosed with SMI. The components of the Dalcroze and Wellness approaches are described and the elements that are incorporated into the program include improvisation and eurhythmics and client strengths and the physical domain (movement). The proposed music therapy program will have the therapeutic goals of increased social interaction, increased self-esteem, and increased quality of life. The data collection tools are mentioned and how to measure results. The program is described in detail with session plans consisting of warm-up, improvisation, movement, and closing interventions. The recommendations for clinical evidence-based practice are discussed.

## TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iv
INTRODUCTION TO THE PROJECT.....	1
LITERATURE REVIEW.....	2
Older Adults Diagnosed with Serious Mental Illness.....	3
Strengths-Based Perspective.....	9
Music Therapy with Population Diagnosed with SMI.....	11
Dalcroze Approach.....	16
Wellness Approach.....	19
Music Therapy and Dalcroze.....	21
PROPOSED MUSIC THERAPY PROGRAM.....	22
Project Statement.....	22
Therapeutic Goals.....	23
Domain.....	23
Problem Areas.....	24
Advanced Preparation and Materials.....	24
Data Collection Tools.....	25
Intervention Description.....	26
Session 1.....	27
Session 2.....	29
Session 3.....	32
Session 4.....	34

	Page
Recommendations for Evidence-Based Clinical Practice.....	36
REFERENCES.....	39
APPENDIX	
A MUSIC THERAPY INTERVENTIONS FOR POPULATION DIAGNOSED	
WITH SMI.....	43
B SOCIAL INTERACTION CHECKLIST.....	50

## LIST OF TABLES

Table	Page
1. Theoretical Framework.....	23

## INTRODUCTION TO THE PROJECT

It is difficult to conduct research with the population diagnosed with serious mental illness (SMI) due to obtaining informed consent. Difficulties with obtaining informed consent relate to clients' diagnoses and symptoms which categorize them as a vulnerable population. Oftentimes this population is either a danger to themselves or others due to their symptoms. Because of these reasons, advanced practicing clinicians need to create additional ways to contribute to the research literature with this population. The current project contributes to the literature by selecting music and non-music based approaches related to music education, music therapy, and social work that have not been researched with this population and using the framework to develop a music therapy program for the geriatric population diagnosed with serious mental illness (SMI).

As I found myself interacting with the population diagnosed with SMI in my clinical music therapy work, I decided to develop a meaningful music therapy program that draws on several components of my advanced training. In this way, I have created a four session program of interventions that addresses the unique needs of the geriatric population diagnosed with SMI. These needs have been identified through the research literature and the existing evidence-based studies which have been done with the population diagnosed with SMI. My goal was to add meaningful information to the research literature by sharing clinical interventions and concepts that can be recreated for other music therapists working in this field. My hope is that other advanced clinicians begin to think out of the box when conducting research and realize that one of our roles in the field is to continue developing and creating new programs that synthesizes all of our learning and experience. Every advanced clinician has different experiences and

knowledge, based on training and clinical work. By embracing our knowledge and clinical experiences, we are able to look at the research literature and see what is lacking. Our duty is to our clients to create programs that may help them in ways never identified or created before.

## LITERATURE REVIEW

Even in today's society there is a stigma regarding mental illness. In the past, people have been ostracized and locked away for a lifetime because of their mental disorder. Mental illness is not a choice and we as a society need to accept and support those who struggle with this diagnosis. Each year in the United States around 18.1% of the adult population is diagnosed with a mental disorder. Of this population, 1 in 10 Americans (9.8%) struggle with serious mental illness (SMI) (Morgan, 2016). Specifically, 2% of older adults are diagnosed with serious mental illness and this percentage is expected to increase two-fold come 2030 (Cummings & Kropf, 2011).

Individuals who suffer from a serious mental illness also usually suffer from a decline in physical health and consequently then have minimal recovery from their mental illness (Bahorik, Satre, Kline-Simon, Weisner, & Campbell, 2017). Unfortunately, maintenance rather than recovery is the reality for many individuals diagnosed with SMI. Patients with serious mental illness who reside in a psychiatric hospital are at risk for spending most of their lives institutionalized because they usually cannot be stabilized within the community due to various factors such as lack of social support, limited financial resources, and health issues (Bahorik et al., 2017; Baker, 2005; Bartels & Pratt, 2009; Cummings, & Kropf, 2011; Evenblij, Widdershoven, Onwuteaka-Philipsen, Kam,

& Pasman, 2016; Jones et al., 2004; Millman, Galway, Santin, & Reid, 2016; Morgan, 2016; Yu, Sylvestre, Segal, Looper, & Rej, 2015).

### **Older Adults Diagnosed with Serious Mental Illness**

One study in Canada found that psychiatric re-hospitalization was prevalent in older adults diagnosed with SMI. After a five year follow up with the participants, it was shown that 32.3% experienced a psychiatric re-hospitalization. The study also found that the factors for re-hospitalization included previous lifetime admissions to a psychiatric hospital, having a diagnosis of bipolar disorder, and living in a supervised environment (Yu et al., 2015). This goes to show that older adults diagnosed with SMI who spend most of their lives institutionalized in a psychiatric hospital have a greater chance of remaining institutionalized for the remainder of their lifetime.

In this author's experience working in a psychiatric facility with patients diagnosed with SMI, she has seen geriatric patients who are on their third to seventh admission at the facility. They usually have had numerous psychiatric hospitalizations at other facilities throughout their lifetime as well. Many patients do not want to discharge because they know that while they remain at the facility all their basic needs are being met. In fact, they are fearful to leave because they do not have a support system when being discharged into the community. Patients diagnosed with SMI have a high incidence of substance use disorders. This is problematic because substance abuse disorders in this population cause medication non-compliance, inability to hold a steady job, and homelessness. Therefore, many individuals with SMI end up back on the street and the vicious cycle of institutionalization begins all over again (Tidey, 2012).



Depending on the type of psychiatric diagnosis, there are different ways the serious mental illness changes as a person ages. When discussing the symptoms of schizophrenia there are two categories of symptoms: positive and negative. Positive symptoms include hallucinations, disorganized speech, or delusions. Negative symptoms include flat affect, little to no motivation, or decreased social interactions (American Psychiatric Association, 2014). Older adults with schizophrenia experience fewer positive symptoms as they age, about the same negative symptoms, quality of life, and depression as when they were younger, and increased cognitive decline (Bartels & Pratt, 2009). Cognitive decline is also found in diseases of the brain, such as dementia and Alzheimer's disease, which affect mostly older adults. Some of the side effects of dementia include "anxiety, apathy, agitation/irritability, depression, sleep and appetite disturbance, disinhibition, delusions, and hallucinations" (DiNapoli, 2016, p. 262).

As we can see, symptoms of dementia can be similar to those of schizophrenia. So while some of the positive symptoms are reduced with age for people diagnosed with schizophrenia, they may start facing some of the same symptoms of their mental illness if they begin to develop dementia. These symptoms may cause their quality of life to drastically decrease as well as cause stress to not only them, but to the staff members who take care of them. DiNapoli (2016) discussed that quality of life is much lower for older adults who are institutionalized versus their community dwelling peers. It has been shown that as a living environment becomes more restrictive, quality of life for older adults with a psychiatric diagnosis further decreases. The most restrictive environment is a geriatric psychiatric facility and limited research has been done in this setting.

Therefore, older adults who are diagnosed with SMI and are living in a psychiatric facility may have the lowest levels of quality of life.

By living in an even more restrictive environment, a psychiatric hospital, older adults who are diagnosed with SMI who also suffer from cognitive decline in addition to their serious mental illness would be expected to have a diminished quality of life. Due to institutionalization in adulthood, older adults who are diagnosed with SMI lack social and economic resources (Cummings & Kropf, 2011). Older adults who are diagnosed with SMI not only face the effects of aging, but the devastating complications of having a serious mental illness for most of their lives. Therefore, older adult patients who are diagnosed with SMI who are institutionalized need extra support and services to enhance their health and well-being. If we do not provide interventions that address the problem areas of older adults who are diagnosed with SMI, there is a greater chance for a decrease in quality of life. Geriatric patients who are diagnosed with SMI already suffer from a mental illness that is likely to cause depression and suicidal ideation and if their quality of life is not addressed, this could lead to an increase in the desire for older adults who are diagnosed with SMI to end their lives.

This population also faces other detrimental problems, including a drastically shorter life expectancy than the normal population. In fact, they can expect to live 20 to 25 years less than their counterparts (Morgan, 2016). Individuals who are diagnosed with SMI also have significantly higher rates of morbidity and mortality compared to their counterparts who do not have a psychiatric disorder (Evenblij et al., 2016). Individuals who are diagnosed with SMI have increased chances of medical comorbidities (Bahorik et al., 2017) and decreased likelihood of overcoming a cancer diagnosis (Millman et al.,

2016). According to a study that was representative of the population diagnosed with SMI, 74% had a chronic illness and 50% had two or more chronic illnesses (Baker, 2005). According to Morgan (2016), some of the comorbidities that occur in individuals who are diagnosed with SMI are “hypertension, cardiac disease, diabetes and other metabolic conditions, respiratory illnesses, obesity, renal disease, cerebrovascular disease, cancer, and HIV/AIDS” (Morgan, 2016, p. 31).

Older adults diagnosed with SMI face certain side effects and permanent complications from taking various psychotropic medications throughout their lives. They also age faster and look chronologically older than their peers (Hooyman, Kawamoto, & Kiyak, 2015). These issues may explain a greater rate of comorbidities and mortality in this population. Older adults in general are also more prone to falls that can have devastating effects. As Hars et al. (2014) states, “Physical impairments and falls are among the most common and devastating concern facing older adults, significantly contributing to disability, hospitalizations, nursing home admissions, poor quality of life, and mortality in this population” (Hars et al., 2014, p. 393). Therefore, older adults who are diagnosed with SMI face many health problems due to both their age and their SMI diagnosis.

Another potential issue for geriatric patients who are diagnosed with SMI is medical professionals finding cancer in the later stages. The sad reality is that mortality rates for this population are twice that of people without a mental illness, mostly likely due to delayed presentation of cancer and limited use of cancer fighting surgeries and chemotherapy or radiation (Millman et al., 2016). This increases the chance that these individuals will require hospice as soon as they are given their cancer diagnosis because

they will usually have a bleak prognosis. This can happen when the signs and symptoms of cancer go unnoticed by nurses who have specialized in psychiatric issues more so than the physical needs of their patients. Psychiatric patients may also not receive palliative care in a timely manner due to transfer of care from a psychiatric to a physical care environment (Evenblij et al., 2016). Doctors may inadvertently dismiss the physical symptoms of older adults diagnosed with SMI believing the symptoms to be related to their psychiatric disorders (Hooyman et al., 2015). This can be detrimental when a serious diagnosis goes unnoticed. This is another possible reason why the mortality rate is higher in individuals diagnosed with SMI.

In the United States there is not a system that addresses hospice care for individuals who are diagnosed with SMI. Individuals who are diagnosed with SMI are vulnerable and are already suffering a great deal (Baker, 2005). If individuals who are diagnosed with SMI are not given dignity and assistance during end of life through hospice programs, we as a society are doing a great disservice to this vulnerable population. We should design services and interventions for terminal patients who are diagnosed with SMI that will increase their quality of life and provide support during their end of life experiences. This is especially important because we know from the research provided above that individuals with SMI have low quality of life, do not have family support, and are at risk of dying alone.

Older adults face problems of receiving proper medical and psychiatric care through insurance programs. As older adults in the workforce retire the issue of health-care coverage becomes a problem because they are no longer ensured by an employer. Coverage and the services they need become more difficult for them to receive. One

study was conducted by Stahl (2017) to determine psychiatric diagnoses of older adults (age 65 and over) who had public funded mental health services compared to private insurance. The results showed that older adults who received county funded mental health services and Medicaid had diagnoses of schizophrenia and episodic mood disorders, whereas older adults who had private health insurance had diagnoses of neurotic conditions and dementia. Some of the implications based on this study include factors such as economic status. As shown, older adults diagnosed with a typical SMI diagnosis (schizophrenia or mood disorders) were using publicly funded mental health services which may suggest these individuals come from a lower economic status.

As individuals who are diagnosed with SMI are institutionalized often at a young age, they have fewer opportunities to achieve educational and occupational goals (Cummings & Kropf, 2011). This lack of opportunity leads to limited income and resources for older adults who are diagnosed with SMI. This could explain why older adults who are diagnosed with SMI are using publicly funded sources rather than private insurance; they simply cannot afford private insurance. Most of the individuals with private insurance had a diagnosis of neurotic disorders or dementia which is not classified as a serious mental illness (Stahl, 2017). People with a higher income are more likely to be able to afford private health insurance and they most likely do not suffer from a serious mental illness.

As previously discussed, older adults who are diagnosed with SMI have many unique needs. Services for these individuals should be enhanced in order to align with their needs. As Jones et al. (2004) states, “although prevention and wellness interventions are increasing, few services exist that are tailored to the needs of the many persons with

mental illness who already have serious physical problems” (Jones et al., 2004, p. 7). As we know we will soon face a substantial growth in the older adult population. In 2009, 12.9% of the United States population consisted of older adults. By 2030, over 20% of the United States population will be comprised of older adults (McInnis-Dittrich, 2014). Bartel (2009) hammers home the point that “strategies are needed that address the ‘whole person’ as an integrated approach to psychosocial rehabilitation for older adults with SMI, including both the mental and physical health needs” (Bartels & Pratt, 2009, p. 382). As we approach an exponential growth of the older adult population and those older adults who are diagnosed with SMI, we need to focus on instituting wellness programs that address improving psychiatric issues as well as address increasing physical health. We must prepare our systems and services now to ensure we are providing the appropriate interventions and treatments which are addressing the changing needs of adult patients who are diagnosed with SMI as they age.

### **Strengths-Based Perspective**

Although older adults who are diagnosed with SMI face many challenges due to their needs, they also possess strengths that can increase their chance for resilience and endurance. Some of these strengths include, for example, a decrease in the positive symptoms of schizophrenia which include hallucinations and delusions. The stress of having a serious mental illness during life can lead the way for improved coping skills (Cummings & Kropf, 2011). A strengths-based perspective may be very useful for professionals who encounter older adults who are diagnosed with SMI in their line of work. By enhancing the individual's strengths, problems become easier to solve and give the individual a hand in creating solutions based on his or her strengths. The professional

can highlight the ways the older adult who is diagnosed with SMI has overcome problems in the past and suggest coping skills and ways for the older adult who is diagnosed with SMI to solve problems. One of the main aspects of this perspective, which comes from the field of social work, is self-determination. Self-determination encourages helping oneself and meeting goals by highlighting the strengths and resources of the client (McInnis-Dittrich, 2014).

One population this perspective is being utilized with is older adults with dementia. The interventions with this population take on a “person-centered” approach, and enhance the “dignity and well-being” of older adults with dementia through “supportive social interactions that capitalize on personal strengths and minimize deficits” (DiNapoli, 2016, p. 263). With this in mind, DiNapoli (2016) conducted a randomized control trial of older adults with dementia in a geriatric psychiatric facility utilizing individualized social activities interventions (ISAI). This was something that had not been done before and we know there is limited research with this population. The results showed that quality of life was improved for those individuals with mild or moderate cognitive impairment. Therefore, social interactions can help improve the quality of life of older adults residing in a geriatric psychiatric facility.

Depression affects 15% of American older adults and is a leading cause of premature death (Nguyen et al, 2014). There is a good chance that between having a serious mental illness, potential for cognitive decline, and low quality of life, that geriatric patients who are diagnosed with SMI may suffer from depression which further complicates their condition. Physical exercise has been shown to benefit patients by helping to alleviate depressive symptoms; severely depressed individuals often receive

the most benefit from exercise. In Nguyen et al.'s (2014) study, conducted with older adults in an acute psychiatric setting, there were three groups to which patients were randomly assigned. The first was exercise and psychotherapy, the second was psychotherapy, and the third was standard care or the control group. The results showed that while participants in all groups improved on their levels of depression, the results of the exercise and psychotherapy group and the psychotherapy alone group were significantly higher than that of the control group. However, it was shown that the most improved depression levels were found in the exercise and psychotherapy group and this was probably caused by the exercise component. Therefore, exercise helped alleviate depression for geriatric patients in a psychiatric setting.

### **Music Therapy with Population Diagnosed with SMI**

Geretsegger et al. (2017) conducted a systematic review which showed that music therapy for patients diagnosed with serious mental illness includes both active and receptive methods and central elements of the music therapy session include musical improvisation and verbal processing. When music therapy is combined with standard care for persons diagnosed with SMI, particularly schizophrenia, that there are several components that are improved within their lives. These components include improved global state, reduced anxiety, decreased depression and negative symptoms, increased social functioning, and increased quality of life over a short to medium amount of time. However, the number of music therapy sessions attended made a difference on the effects of music therapy and the amount of appropriate music therapy sessions depends on each person receiving music therapy.



Music therapy has been shown to be beneficial for patients who are diagnosed with SMI. Individuals diagnosed with SMI often have a lower quality of life, lower self-esteem, and increased anxiety than their peers who do not have a serious mental illness (Chang, Chen, Beckstead, & Yang, 2018). One client-centered music therapy intervention based on a humanistic approach is a music-creation program whereby clients create lyrics, melody, and rhythm. Chang et al. (2018) found that a music-creation program could significantly reduce anxiety and significantly increase self-esteem in patients diagnosed with SMI. The study also showed that the psychological and social domains of quality of life significantly improved, but that there was not a significant difference in regard to physical health and environmental domains.

Music therapy can increase psychosocial functioning and improve psychiatric symptoms for unmotivated individuals with mental health issues. A major issue for persons diagnosed with SMI is loneliness and social isolation, which can lead to increased risk of suicide (Grocke et al., 2014). Grocke et al. (2014) hypothesized that group singing and group songwriting could enhance the quality of life in patients diagnosed with SMI. Their study consisted of a randomized control trial crossover design whereby patients were assigned to group music therapy (GMT) and standard care (SC) followed by SC or SC followed by GMT and SC. The music therapy program lasted thirteen weeks and was led by music therapists utilizing a psychodynamic approach. The music therapy interventions included singing familiar songs, writing new songs, and recording the new songs in a professional studio. The results showed that group music therapy can act as an avenue for increased social interaction, spirituality, self-esteem, and quality of life and can help reduce psychiatric symptoms.

Silverman (2012) explored the effects of group psychoeducational songwriting on depression, quality of life, and treatment perceptions in adult psychiatric patients in an acute setting. The participants of the study were assigned randomly to one of three groups which included group songwriting, psychoeducation, or recreational music therapy. The results were not significant, but did reveal that the participants of the psychoeducational songwriting group had higher levels of quality of life, reduced depression, and improved helpfulness and enjoyment.

Treatment options such as music therapy for patients who are diagnosed with SMI and are receiving inpatient treatment should be explored, especially because this population tends to favor music therapy when compared to other treatment modalities (Silverman, 2010). In an earlier study, Silverman (2010) explored the perceptions' of different types of music therapy interventions for adults diagnosed with serious mental illness residing in an inpatient facility. The five music therapy interventions were an individual game, a team game, a singalong, a lyric analysis, and a songwriting activity. The results showed that the participants found the individual music game as the most helpful and the team game as the most enjoyable, but had positive perceptions of every music therapy intervention. The researcher had much difficulty obtaining informed consent from this population due to the symptoms of their psychiatric diagnosis that required strict instructions from the Institutional Review Board on how to obtain informed consent. These instructions limited the time during the music therapy sessions to actually conduct the interventions and collect data. As shown, conducting research with the population diagnosed with SMI is very difficult.

Songwriting is a commonly utilized intervention for individuals diagnosed with SMI. Some of the goals that have been achieved through songwriting with patients with psychiatric diagnoses include improved self-expression, increased mental functioning, increased emotional awareness, improved self-organization, and increased social interaction. It has also been shown in rehabilitation settings that songwriting can empower individuals to tell their stories (Kooij, 2009). In Kooij's (2009) hermeneutic phenomenological study, songs written by adults diagnosed with SMI were analyzed to determine the themes that arose and what was highlighted of their experience of having a mental illness. The themes that came out of the songs were a journey from mental illness to wellness, the two destinations in the journey which are illness and health, identity and what that means at each destination, control and how control leads an individual to make the journey towards health, and social interaction and support as well as the key element of hope as empowerment to make the journey from illness to wellness. Through this study, professionals in the psychiatric field can further understand what it is like for their clients who are experiencing living with a serious mental illness. This allows the professionals to have more compassion and empathy for their clients and gives insight into how they can better help their clients.

As part of a master's thesis, Salur, Ala-Ruona, Uçar, and Eren (2017) carried out a study in the country of Turkey with patients diagnosed with schizophrenia. The participants received twenty group music therapy sessions in addition to their normal standard care. The researcher utilized music therapy games and improvisation that centered around metaphors of animals to elicit increased emotional awareness. It was also shown that group music therapy increased well-being for the participants, with significant

results showing that their depression improved, their functioning in general increased, their emotional regulation improved, their social and personal performance increased, and their coping skills and ways of dealing with stress improved.

In another study by Silverman (2013) group songwriting was utilized to see if stigma could be improved with psychiatric patients in an acute setting. Stigma is problematic because it can hinder individuals from seeking mental health services and can create social isolation. The participants were assigned randomly to one of three groups consisting of music therapy (group songwriting interventions), education, or a wait-list control. The results showed that there were significantly higher levels of self- and experienced and total stigma for the participants in the music therapy group compared to that of the control wait-list group.

Silverman (2018) carried out a study with inpatient adults with mental illness to see if educational music therapy could enhance coping self-efficacy. The participants were assigned randomly to one of three groups that were educational lyric analysis, educational songwriting, or a control group. The results did not reach statistical significance, but there were positive results that showed a higher mean of coping self-efficacy in both educational music therapy groups compared to the control group. There were no differences between the two educational music therapy conditions.

Silverman (2007) sent a survey to professional members of the American Music Therapy Association (AMTA) to analyze the current trends in psychiatric music therapy. The Dalcroze approach (4.8%) was hardly utilized as well as the Kodaly approach (3.2%), which came in last place. The approach utilized the most was the Behavioral approach (83.1%). When surveyed about objectives of their music therapy sessions

during the past week, most music therapists stated socialization (89.9%). Other objectives mentioned included self-esteem (79.7%), coping skills (76.1%), relaxation (61.6%), and reality orientation (49.3%). The music therapy techniques that were utilized the most included improvisation (66.2%), singalongs (64.7%), and lyric analysis (61.8%), with music and movement (52.9%) close behind. This survey gives insight into the ways in which music therapists are providing treatment to their patients in a psychiatric setting.

Lastly, Gfeller and Thaut (2008) describe certain music therapy interventions utilized in psychiatric settings, including movement and music. An important goal for movement is self-expression and self-awareness. When music and movement are paired, music acts as a catalyst for movement. An example of pairing music and movement includes creating expressive movements to portray the lyrics of a song. Dancing in a group can increase social interaction. Music can also encourage physical exercise. Therefore, there are many interventions and approaches to consider when developing a music therapy program for patients diagnosed with SMI.

### **Dalcroze Approach**

The Dalcroze approach was originally a music education approach developed by Émile Jaques-Dalcroze (1865-1950), but has been transferred to music therapy practice (Habron, 2014). Darrow describes the guiding principle of the Dalcroze approach as, “the synthesis of the mind, the body, and the emotions is fundamental to all learning” (Darrow, 2008, p. 25). In fact, Dalcroze believed that this synthesis was the path to health. The Dalcroze approach involves three core elements. The first element is *solfège rythmique* which is also known as ear training and involves using fixed-*do* along with rhythm and movement to allow students the ability to hear pitches in relation to one

another. The second element is improvisation which is developed through movement with the goal of allowing students the ability to improvise music in an expressive fashion. The third element is eurhythmics which is the reaction of music “through purposeful and spontaneous movement” (Darrow, 2008, p. 28-29).

The Dalcroze approach was originally applied therapeutically to working with children with disabilities, but has since expanded to include work within the field of gerontology, among other populations (Habron, 2014). Dalcroze eurhythmics elicits movement and expression from the client to accomplish goals within the therapeutic setting. The hierarchy of learning employed in this approach is defined as “hearing to moving, moving to feeling, feeling to sensing, and sensing to analyzing” (Darrow, 2008, p. 31). Some goals that are appropriate for the Dalcroze approach in music therapy include increased creative self-expression, social interaction, body awareness, and relaxation (Darrow, 2008).

A main theme of the Dalcroze approach is that music should be experienced by all people and that all people can experience music through various techniques regardless of their ability (Darrow, 2008). Although not specific to music therapy, an interesting research study was conducted on the effect of Dalcroze eurhythmics on physical functioning and fall risk in older adults. This study was a randomized control trial consisting of a six month exercise program for older adults. The goals were to improve gait and balance and decrease fall risk. The interventions for the music-based multitask exercise group consisted of grasping instruments and objects, walking to the tempo of the music, and responding to variances in the rhythm of the music. The exercises also involved shifting weight, walking and turning, and the use of upper limbs while walking

and standing. Dual-task gait performance and balance was improved for the participants in the music-based multitask exercise group (Trombetti et al., 2011). A follow up study was conducted after three years of the original study and the music-based multitask exercise program was maintained by participants after a few years. Their gait and balance had improved significantly and their fall risk had decreased (Hars et al., 2014). This goes to show that the Dalcroze approach can inspire positive interventions that help older adults prevent some of their age related issues.

The Dalcroze approach has also been used in combination with music therapy for patients diagnosed with HIV and AIDS. The interventions addressed certain patient needs in regards to mental, social, emotional, and physical domains and relaxation. The goals for the Dalcroze approach in this therapeutic setting include improvement in body and spatial awareness, relaxation, to empower patients to make their own decisions, to allow patients to feel as though they are part of a group, to improve physical and verbal contact with one another, to allow patients to be more alert and receptive mentally, and to inspire creativity and self-expression (Darrow, 2008).

Habron (2014) offers an interesting connection between Dalcroze and music therapy which include the elements of communication, improvisation, synchrony, and attunement. The Dalcroze approach for music therapy may include recorded music, but mostly includes piano improvisation. Improvisational movement may be spontaneous and free or fixed, depending on the intervention and goals. Due to its holistic nature, well-being is at the crux of the Dalcroze approach. Therefore, a Dalcroze approach goes hand in hand with a Wellness approach.

## **Wellness Approach**

The Wellness approach will be utilized because this approach motivates patients to achieve health by focusing on their strengths, interests, and goals while balancing physical and emotional states. It requires a conscious decision whereby the person makes choices to achieve a better lifestyle (Swarbrick, Anthony, Gill, Hutchinson, & Henry, 2006). Like the Dalcroze approach, the Wellness approach is holistic in nature. The Wellness approach within the mental health setting combines a patient's active participation and internal motivation so that the patient will be able to cope and handle stress so that a crisis is averted. In this way, the goal is to prevent future psychiatric hospitalizations. Wellness aims to achieve health by looking at the patient's strengths and interests versus seeing the patient in terms of his or her mental illness. By maintaining a daily routine, the patient is empowered to be active in his or her health and have control over his or her life (Swarbrick et al., 2006).

A strengths-based perspective is similar to the Wellness approach in that it focuses on the client's strengths rather than his or her problems or limitations. According to McInnis-Dittrich (2014), it is important for professionals working with older adults to embrace the fact that older adults have the ability to grow and face challenges effectively as they age. Older adults should also be included in making their own decisions about their care. Older adults are encouraged to utilize their coping skills and life experience to overcome future challenges. Self-determination, which is an important aspect of work with clients in the field of social work, is the key so that older adults will remain resilient and have the power to make their own decisions as they age. Through the strengths-based perspective, older adults have much to contribute even if they are facing an illness or



have a disability. They may serve as listeners or may give words of wisdom. It is also beneficial for caregivers to take care of older adults because they learn valuable lessons about life and how to be resilient (Hooyman et al., 2015). Although society may impose negative and ageist views about older adults, we as gerontology professionals must overlook these views and practice compassion and empathy with our older adult clients so that we empower them.

Zechner, Kirchner, Cook, and Mueser (2013) conducted a study with geriatric patients diagnosed with SMI utilizing a Wellness approach. The purpose of the study was to design a program to increase wellness in older adults age 65 and over who were residing in a geriatric psychiatric hospital. The program, titled Balanced Life Program (BLP), was created by an interdisciplinary team at the geriatric psychiatric state hospital. The goal was to increase overall wellness in nine different areas, such as emotional, physical, and spiritual domains. The reason for this study was due to the fact that many older adults in this setting have decreased physical health and a greater need for medical services. Participants were selected based on referrals by their treatment team and the fact that they did not have dementia as their main diagnosis. The participants had various diagnoses of schizophrenia, bipolar, major depression, and anxiety disorder. The program was voluntary and contained biweekly 45 minute sessions that addressed all nine areas of wellness. Each session consisted of education on one wellness domain and group discussion of a strengths-based model. The participants had positive reviews of the program and benefits of the group included an improvement in social interactions and self-esteem and increased coping and relaxation skills. This information is beneficial

because it shows what type of group has been successful for improving the domains of wellness with older adults in a psychiatric hospital.

According to the American Music Therapy Association (AMTA), wellness within the context of music therapy focuses on quality of life, well-being, and self-awareness with clients (American Music Therapy Association, 2015). Certain interventions that are used to increase overall wellness include “nutritional awareness, physical fitness, stress management, cognitive fitness, as well as emotional and social support” (Belgrave, Darrow, Walworth, & Włodarczyk, 2011). Belgrave et al. (2011) designed specific interventions for older adults that consisted of moving to music which targeted physical wellness. Some of these interventions included having clients move their scarves to their favorite songs, teaching the clients the hand jive and performing the movements to music, selecting a popular dance and performing it to the song, creating a story as a group and playing various percussion instruments to imitate the sounds in the story.

### **Music Therapy and Dalcroze**

As the literature shows, exercise and movement are vital in bringing about wellness in geriatric patients who are diagnosed with SMI. One master’s thesis combined music therapy interventions with a Dalcroze approach. The thesis explored the effects of rhythmic movement on patients who were diagnosed with chronic schizophrenia. The participants attended a six-week rhythmic movement program that consisted of interventions such as breathing and relaxation, body awareness, rhythmic and creative movement, and interaction with peers. The results showed that the participants had improved mood, increased attention and concentration, improved gross motor skills, and increased social interaction (Gauger, 1995). Therefore, a music therapy program that

utilizes movement combined with music is beneficial for individuals diagnosed with SMI.

## PROPOSED MUSIC THERAPY PROGRAM

### **Project Statement**

The purpose of this project was to create an evidenced-based four session music therapy program consisting of sixty minute sessions for geriatric patients who are diagnosed with SMI. The program will utilize a Dalcroze and Wellness approach to address the unique needs of this population. The founder of the Dalcroze approach, Jaques Dalcroze, was adamant that people should base their practice on research, include other art forms, and adapt their practice to the changing times and for the population they are serving (Navarro Wagner, 2016). With this idea in mind, the current author set out to create an innovative music therapy program that could be used with a population in which little research has been done, geriatric patients who are diagnosed with SMI who are institutionalized. This author will combine two different approaches to develop an evidenced-based protocol for music therapy.

Table 1 shows the theoretical framework developed for the program. The aspects that will be borrowed from the Dalcroze approach include eurhythmics and improvisation. The aspects that will be borrowed from the Wellness approach include patient strengths and the physical domain (movement).

Table 1

Theoretical Framework

<b>Dalcroze Approach</b>	<b>Wellness Approach</b>
<ul style="list-style-type: none"><li>• Improvisation</li></ul>	<ul style="list-style-type: none"><li>• Patient Strengths</li></ul>
<ul style="list-style-type: none"><li>• Eurhythmics</li></ul>	<ul style="list-style-type: none"><li>• Physical Domain (Movement)</li></ul>

**Therapeutic Goals**

The therapeutic goals to be addressed in this music therapy program include increased social interaction, increased self-esteem, and increased quality of life. These goals were chosen with the needs of this population in mind. The research has shown that music therapy has been used with patients diagnosed with SMI to achieve increased social interaction (Gauger, 1995; Geretsegger et al., 2017; Grocke et al., 2014; Silverman, 2010), improved self-esteem (Chang et al., 2018; Grocke et al., 2014), and increased quality of life (Chang et al., 2018; Geretsegger et al., 2017; Grocke et al., 2014; Silverman, 2012). While most of these studies utilized mainly songwriting and singalong interventions with some improvisation interventions, this proposed music therapy program will utilize improvisation and movement interventions.

**Domain**

The domain that will be addressed with the therapeutic interventions in this music therapy program is the psychosocial domain (The Certification Board for Music Therapists, 2015). This domain was addressed in the Board Certification Domains document published by the Certification Board for Music Therapists, which is the organization that oversees music therapy certification in the United States. During

assessment, music therapists use certain domain categories to determine the client's level of functioning, strengths, and needs (The Certification Board for Music Therapists, 2015). The strengths-based perspective is built into music therapy practice, as shown, because a music therapist should document the client's strengths in each domain, not just the client's limitations and needs.

### **Problem Areas**

Problem areas to be addressed with this population include diminished quality of life and well-being, low self-esteem, and social isolation. The geriatric population diagnosed with SMI often faces these problems due to being institutionalized over their lifetime. Movement will be incorporated into the interventions for the proposed music therapy program to address the problem areas. Movement can help improve self-esteem through body awareness (Gauger, 1995) and can help improve quality of life and alleviate depression symptoms (Nguyen et al., 2014). Interventions that incorporate social interaction will also be utilized because social interaction can help improve quality of life and social isolation of patients residing in a geriatric psychiatric facility (DiNapoli, 2016).

### **Advanced Preparation and Materials**

The music therapist will first need to recruit participants for the program and encourage members of the treatment team to refer participants. The optimal number for the program would be five to seven participants so that there are enough participants to illicit social interaction, but not too many so that the music therapist cannot provide individual attention to each participant. The members of the treatment team who are referring the participant should be aware of any past trauma that might be triggered by

the music therapy sessions. For example, a participant who is a veteran might be triggered by the sound of drums which may induce flashbacks of seeing active duty in the military. The music therapist should also read the participants' charts to ensure the music therapy interventions will not trigger any trauma from their past.

Once this is done, the music therapist will decide on an appropriate day and time to hold the sixty minute sessions. The music therapist must take into consideration various elements, such as when patients receive their medications, when there are other activities the patients are expected to attend, and when the patients are the most active. Next, the music therapist will need to enlist the help of an assistant during the sessions, preferably another music therapist or a music therapy intern. The music therapist will make sure the necessary materials are ready for the sessions. Materials will consist of various percussion instruments such as tubanos, thunder drums, rainsticks, wind chimes, shakers, hand drums, and maracas. Scarves will be utilized. The music therapist will also need a piano or keyboard and a guitar. Lastly, the music therapist will need to reserve a group therapy room for the sessions.

### **Data Collection Tools**

There will be three data collection tools to assess the participants' progress throughout the program and measure changes in the participants' quality of life, self-esteem, and social interaction. These tools have been chosen based on previous use in studies with patients diagnosed with SMI which have measured the same goals as this proposed music therapy program. The data collections tools include The Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form (Q-LES-Q-SF) (Grocke et al., 2014; Silverman 2012) and the Rosenberg Self-Esteem Scale (RSES) (Chang et al., 2018;

Grocke et al., 2014). There will also be a checklist that measures social interaction which the current author has developed based on her music therapy practice with the population diagnosed with SMI who are institutionalized (Appendix B). It would be helpful to videotape each session to ensure accuracy of documentation of social interactions. However, considering the delicate nature of working with this population and privacy standards, the recording of subjects might not be possible. Therefore, the assistant to the music therapist will need to tally each type of social interaction during each session in the appropriate boxes.

The assistant will need to be trained on how to score the sessions to ensure accuracy of the social interaction checklist. This is also known as interobserver reliability. The music therapist will conduct training sessions with the assistant and both will view training videos on coding for social interaction. Once the assistant has received clear instruction on this process, the music therapist and the assistant will score the videos independently. Next, they will compare their scores noting both agreements and disagreements. To obtain the percentage reliability, the total number of agreements will be divided by the total number of agreements plus disagreements. Once the acceptable percentage reliability is obtained, the assistant should be able to code the live sessions with accuracy and thereby collect reliable results from the social interaction checklist (Madsen & Madsen, 1998).

### **Intervention Description**

The interventions have been developed with the Dalcroze and Wellness approaches in mind. The interventions are created to achieve the goals of increased social interaction, increased self-esteem, and increased quality of life for geriatric patients

diagnosed with SMI who are institutionalized. The interventions will gradually become more complex each session and will encourage movement and social interaction in the participants. The sessions will be conducted in a group therapy room of the facility. Each session begins the same way. The music therapist will introduce the music therapy program. After the introduction, the assistant will begin to collect social interaction data during each intervention (See Appendix B).

### **Session 1**

**Warm up.** The participants will be invited to do some deep breathing and light stretching to begin the session and prepare for movement activities. The music therapist will tell the participants not to overdo any physical movements and remind them that if something hurts while they are stretching or moving that they should stop and not continue with the movement. The strengths of the participants should be emphasized, but the participants need to realize their physical limitations because overdoing physical activities could result in pain or injury.

The participants will then be asked to sit in a circle using chairs and be given a tubano drum for an icebreaker activity. A tubano will be used rather than a djembe since the tubano is already raised from the floor and will produce sound without having to tilt it forward, unlike what is required to produce sound from a djembe drum. Therefore, all participants regardless of ability level will be able to play the tubano drum. The music therapist will instruct the participants to go around the circle, state their names, and create a rhythm for their name on their drum. Once the participant demonstrates the rhythm, the rest of the group will repeat the participant's name and play the rhythm. The music therapist will then model this activity for the participants before they begin in order to



reduce any potential anxiety related to playing the drum in front of their peers. This activity will help the participants get to know one another, especially if they are not familiar with one another, and learn the names of everyone in the group. It will also allow the participants to creatively express themselves by creating a rhythm for their name.

**Improvisation.** The improvisation will consist of an introductory Dalcroze-based intervention in which the participants will respond to the tempo and dynamic changes of improvised music (Darrow, 2008). The music therapist will play chords on the piano and have the participants walk in a circle to the beat of the music. If the participants cannot ambulate, they will be given the task of stomping to the music or moving their arms to the music. The music therapist will vary aspects of the music, such as tempo, dynamics, and rhythm. The participants will respond physically to the changes in the music through their movements. Movement to music will allow the participants greater body awareness and socialization, which can help improve self-esteem. This improvisation will also serve as a stepping stone for more complex interventions.

**Movement.** The movement intervention will consist of moving scarves to patient-preferred songs (Belgrave et al., 2011). The music therapist will pass out scarves to each participant, one for each arm if they are capable of moving each arm. The music therapist will then ask the participants to name some of their favorite songs. The music therapist will play these songs or if the participants cannot name their favorite songs (for example, if they cannot think of the song title) then the music therapist will play songs that were popular in the participants' teen years. As we know, patient-preferred music should be utilized with patients if possible because it has been shown to have more of an impact on music therapy goals. Likewise, live music versus pre-recorded music has been shown to

be more effective, especially when it comes to a patient's quality of life (Silverman et al., 2016). Due to these factors, the music therapist will play the patient-preferred songs on guitar.

The music therapist will invite the participants to move their scarves in spontaneous ways. The music therapist will also invite the participants to sing along to the songs while moving their scarves. This will allow the participants the opportunity to connect with the music and express themselves by moving their scarves and singing. By utilizing patient-preferred, live music, quality of life will be increased.

**Closing.** The music therapist will lead a relaxation intervention to close the session. The music therapist will guide the participants in a deep breathing exercise while playing soft, relaxing music on the guitar. After the session the two data collection tools, the Q-LES-Q-SF and the RSES will be administered to gather a baseline of the results of the participants' quality of life and self-esteem scores. The assistant will share the results of the social interaction checklist with the music therapist to determine which interventions elicited the most social interactions and gather a baseline for how many social interactions occurred during the first session.

## **Session 2**

**Warm up.** The participants will be invited to do some deep breathing and light stretching to begin the session and prepare for movement activities. The participants will be asked to state their name and one word of how they are feeling that day. Hearing the names of their peers will help cue the participants in case they did not remember their peers' names from last session. This way the participants will not have to admit if they

forgot someone's name. This will prevent the participants from feeling embarrassed which could lead to lower self-esteem.

**Improvisation.** The improvisation intervention will consist of creating a rainstorm. The participants will be asked to choose an instrument of their choice that represents a certain aspect of a rainstorm (body percussion, thunder drums, rainstick, wind chimes, etc.). Once the participants have selected their instruments, the music therapist will lead each group of instruments to come in, gradually increasing the level of dynamic of the instruments. For example, the music therapist would invite the body percussion group to start patting their legs softly, next the wind chimes would come in, after that the rainsticks would join, and lastly the thunder drums. The music therapist would then use hand movements to increase or decrease the level of dynamics of the instruments or cue certain instrument groups to play louder or softer. After the music therapist has led the group, the music therapist would invite participants up one at a time to lead the group by raising or lowering their arms to signal for the group to get louder or softer.

“Musical instruments are an extension of the human body” (Gardstrom, 2007, p. 50). Therefore, instruments when used for improvisation are a way for participants to further create expression with their bodies. The improvisation will allow the participants to increase their self-esteem by giving them the opportunity to lead a group. This will help them feel empowered to take control of a situation and make decisions of how to change the dynamics. This will also increase their social interaction and encourage eye contact with other participants. Participants of the same instrument group will interact with one another to create the appropriate dynamics that the group leader is conducting.

Therefore, this intervention will focus on the goals of increased self-esteem and social interaction.

**Movement.** This session's movement intervention will consist of spontaneous movement to a piano improvisation. This technique is also known as Dalcroze Eurhythmics. The music therapist will invite the participants to spread out around the room and either stand or sit in a chair or wheelchair, depending on the participant's ability level and comfort. The music therapist will then tell the participants to move to the music in any way they feel expresses themselves or that aligns with the musical style. The participants will be reminded to be mindful of their space as they move and to make sure they do not run into anyone else as they move.

The music therapist will play a piano improvisation while the participants move expressively to the music. The music therapist will allow at least five minutes for the intervention to ensure the participants are able to fully express themselves. Next, the participants will be asked to find a partner and face their partner. The music therapist will then play another piano improvisation while the participants move and interact with one another. This activity will encourage social interaction between the participants.

**Closing.** The music therapist will invite the participants to engage in deep breathing exercises to relax after the movement intervention. The music therapist will play soft, relaxing music on the guitar while leading the breathing exercises. The music therapist will ask the group how they felt after the improvisation and movement interventions. The music therapist will administer the Q-LES-Q-SF and the RSES to the participants. The assistant will share the results of the social interaction checklist.

### Session 3

**Warm up.** The participants will be invited to do some deep breathing and light stretching to begin the session and prepare for the movement activities. The participants will be asked to state their name and one word of how they are feeling that day. This will allow the music therapist to check in with the participants and see how they are doing this session.

**Improvisation.** The improvisation intervention will consist of a referential improvisation. A referential improvisation is defined as “one that is created in reference to something other than the music itself for example, an image, title, story, feeling, or work of art. During referential improvisation, meaning is formed from and revolves around the *referent*, which is preselected” (Gardstrom, 2007, p. 27). The participants will be given the referent “a beautiful day.” The music therapist will ask the participants to name various aspects of a beautiful day, such as the sunshine, flowers, friends, etc. This will give participants an idea of which instrument they would like to play. The music therapist will then invite them to choose an instrument to play for the intervention. They may choose various percussion instruments, such as drums, shakers, maracas, etc. and may choose more than one instrument so that they may switch their instruments during the improvisation.

Once everyone has gathered their instruments, they will sit in a circle with the music therapist. The music therapist will then play a major chord progression on guitar to musically support the participants. The participants will be given five minutes to play their instruments for the improvisation. This will give enough time for the participants to

fully experience the improvisation. By improvising on a positive idea, such as a beautiful day, quality of life will be improved for the participants.

**Movement.** This session the group will participate in a group dance. The dance will be the YMCA and has been chosen because it can be done sitting down for those who might not be able to stand. The YMCA was released in 1978 and is a popular dance in the United States performed at social gatherings. The participants will make the popular arm motions for the letters “YMCA” during the chorus and clap during the rest of the song (Belgrave et al., 2011). Currently, this song is appropriate for older adults ages 56 to 61 because it was popular during their teen years. It is likely that even if these older adults did not experience the song at a social gathering during their lifetime due to their mental illness and probable institutionalization, they would have heard it on the radio. They may have also experienced the dance during recreational groups during their treatment at a psychiatric facility.

The music therapist will first teach and review the movements to the song. Even if the participants never learned the dance or cannot remember it, the movements are easy to learn. The music therapist will inform the participants to clap when they are not doing the movements and to sing during the chorus to further engage them. The music therapist will play the song on guitar and sing. The music therapist will nod to cue the participants when to start the movements. This intervention will increase social interaction between participants.

**Closing.** The music therapist will invite the participants to engage in deep breathing exercises to relax after the movement intervention. The music therapist will play soft, relaxing music on the guitar while leading the breathing exercises. The music

therapist will ask the group how they felt after the improvisation and movement interventions. The music therapist will remind the participants that they only have one session left of the program. The music therapist will administer the Q-LES-Q-SF and the RSES to the participants. The assistant will share the results of the social interaction checklist.

#### **Session 4**

**Warm up.** The participants will be invited to do some deep breathing and light stretching to begin the session and prepare for the movement activities. The music therapist will invite the participants to share one positive comment about each other in the group. The music therapist will go around the circle, have the participant state his or her name and then have each participant state one positive comment about that person. The music therapist will then model this activity by making one positive comment for each participant. This will help increase self-esteem of each participant and improve social connection in a way that creates a positive culminating experience. This will also highlight the strengths of the participants and reveal some of the strengths they may not have realized about themselves. In this way, the Wellness approach will be emphasized.

**Improvisation.** The final improvisation will consist of a *Plastique Animée* which is also known as the final project in a Dalcroze class (Darrow, 2008, p. 30). The participants in the group will create choreographed and spontaneous movements to tell the story of their journey. The theme of the improvisation will be the journey from illness to wellness, which was a theme presented in the songs written by adults diagnosed with serious mental illness (Kooij, 2009). The participants will be prompted by the music therapist to think of their mental illness and the path they can take to wellness,

incorporating the strengths they have identified either in themselves or that their peers identified about them in the warm-up activity. In this way the participants can think about their journey and how they would like to progress towards health and wellness.

The music therapist will play a piano improvisation that starts in a minor key and ends in a major key (for example, the key of A minor which ends in the relative major key of C) to signify the journey of illness to wellness. The group will listen to the piano improvisation and decide on certain core movements to accompany the music. Once this has been done, the group will perform the movements to the music and add their own creative movements in addition to the choreographed movements while the music therapist plays the piano improvisation. This intervention will improve self-esteem by addressing personal strengths, social interaction by encouraging group interaction and creation, and quality of life by empowering the participants to overcome their mental illness through use of their strengths and creativity.

**Movement.** The movement intervention will consist of executing hand motions to the lyrics of the song “I Love the Mountains.” This is a great intervention for older adults because the movements can be performed sitting down, such as in a wheelchair. It allows older adults of all ability levels the opportunity to participate in the group. First, the music therapist will teach the song to the participants. The music therapist will sing the song acapella and have the participants repeat the song, one line at a time in a call and response form, until the participants can all sing the song. The music therapist will then teach the hand movements to the participants. The hand movements include movements to the lyrics “mountains,” “rolling hills,” “flowers,” “daffodils,” and “fireside.” The music therapist will then teach the hand jive for the section of the song that repeats



“boom-de-ah-dah.” The music therapist will break down each movement of the hand jive for the participants and gradually add on to the song so as not to overwhelm the participants. After the group has learned the song, the group will perform the song together.

This intervention will include a Dalcroze approach because it involves making purposeful movements to music. The lyrics cue the participants when to make the movements during the song. It will encourage social interaction through singing along with the group and will increase self-esteem and self-expression through singing and moving to the music. Quality of life will be improved through social connection and physical movement.

**Closing.** The music therapist will invite the participants to share their experiences of the music therapy program. The music therapist will ask the group questions such as which interventions they enjoyed the most and why. The music therapist will also ask what the participants got out of the program and how they believed the program has helped them. This will give some insight into how the program affected the participants from their point of view. The music therapist will thank the group for their participation and, if available, provide information of music therapy groups they may attend at the facility to continue with music therapy as part of their treatment. The participants will also be given a list of community resources for music therapy services upon discharge, such as private music therapy, music therapy clinics, or community drum circles.

### **Recommendations for Evidence-Based Clinical Practice**

It should be noted that this author would eventually like to see this program put into effect with this population. As a music therapist working in a psychiatric facility, this

author intended to perform human research with geriatric patients who are diagnosed with SMI directly. However, this author soon found out that obtaining informed consent for the population who is diagnosed with SMI at the psychiatric facility was impossible. This author's hope is that this project could be implemented with geriatric patients who are diagnosed with SMI in the future, perhaps at another facility that allows research with patients who are diagnosed with SMI. Silverman (2007) too noticed this unfortunate lack of research for music therapy with psychiatric patients. His statement rings true for the psychiatric music therapist and serves as a warning for those of us music therapists working in mental health, "Continued research evaluating treatment is imperative if music therapy is to continue to survive in psychiatric care" (Silverman, 2007, pg. 411).

This program used in the current study serves as a guide for future music therapists interested in researching this population who find themselves able to conduct human research with this population. The author's hope is that the approaches used in the current study will be researched further and that meaningful results will be discovered from the research. Older adults with SMI have many unique needs and music therapy is a positive treatment modality that can help with these needs. Music therapy is a great way to engage older adults diagnosed with SMI and is a treatment modality that does not have many foreseeable risks, unlike some other treatment options, such as the risk of serious side effects from psychiatric medications. If we as music therapists can help even just one person through music therapy, especially someone who is vulnerable and has been outcast by society, we as music therapists have done meaningful and fulfilling work.

Clinicians must pull from different theories and approaches to tailor interventions in clinical practice to the clients' needs. As we have seen, the geriatric population

diagnosed with SMI is very specialized and the clinician needs a broad perspective and scope from which to work in developing individualized treatment. We must step out of the realm of music therapy and borrow approaches and techniques from other disciplines, such as counseling, social work, and other helping professions. By doing so, we grow as clinicians and open our minds to other treatment modalities that may be combined with music therapy to help our clients in the most beneficial way to them.

We must create ways to observe the similarities and differences of different research studies to see which interventions have worked for clinicians in the past and what can be borrowed from the studies when creating a new evidence-based music therapy program. This was the reason for creating the table for music therapy studies with the population diagnosed with SMI. A table is a great tool that clinicians can use to synthesize and easily observe the research from the literature when designing an evidence-based protocol.

Lastly, advocacy for music therapy is imperative if we are to continue growing as a respected profession. Evidence-based practice gives music therapists credibility. Clinicians should explain the benefits of music therapy for the population with which they are working and the research behind why they are implementing certain interventions. By creating programs based on research, music therapists can assist in job development, new programming for their clients, and future research projects.

## REFERENCES

- American Music Therapy Association. (2015). American Music Therapy Association Standards of Clinical Practice. Retrieved March 4, 2019 from <https://www.musictherapy.org/about/standards/>
- American Psychiatric Association. (2014). Schizophrenia Spectrum and Other Psychotic Disorders. Retrieved March 10, 2019, from <https://doi-org.ezproxy1.lib.asu.edu/10.1176/appi.books.9780890425596.dsm02>
- Bahorik, A., Satre, D., Kline-Simon, A., Weisner, C., & Campbell, C. (2017). Serious mental illness and medical comorbidities: Findings from an integrated health care system. *Journal of Psychosomatic Research, 100*, 35-45.
- Baker, A. (2005). Palliative and end-of-life care in the serious and persistently mentally ill population. *Journal of the American Psychiatric Nurses Association, 11*(5), 298-303.
- Bartels, S. J., & Pratt, S. I. (2009). Psychosocial rehabilitation and quality of life for older adults with serious mental illness: Recent findings and future research directions. *Current Opinion in Psychiatry, 22*(4), 381-385.
- Belgrave, M., Darrow, A., Walworth, D., & Wlodarczyk, N. (2011). *Music therapy and geriatric populations: A handbook for practicing music therapists and healthcare professionals*. Silver Springs, MD: American Music Therapy Association. 115, 153-158.
- Chang, B., Chen, B., Beckstead, J., & Yang, C. (2018). Effects of a music-creation programme on the anxiety, self-esteem, and quality of life of people with severe mental illness: A quasi-experimental design. *International Journal of Mental Health Nursing, 27*(3), 1066-1076.
- The Certification Board for Music Therapists. (2015). Board Certification Domains. [PDF file]. Retrieved March 4, 2019 from [https://www.cbmt.org/upload/CBMT\\_Board\\_Certification\\_Domains\\_2015.pdf](https://www.cbmt.org/upload/CBMT_Board_Certification_Domains_2015.pdf)
- Cummings, S., & Kropf, N. (2011). Aging with a severe mental illness: challenges and treatments. *Journal of Gerontological Social Work, 54*(2), 175-188.
- Darrow, A. (2008). *Introduction to approaches in music therapy* (2nd ed.). Silver Spring, MD: American Music Therapy Association. 25-36.
- DiNapoli, E. A. (2016). Effect of individualized social activities on quality of life among older adults with mild to moderate cognitive impairment in a geriatric psychiatry facility. *Aging & Mental Health, 20*(3), 262-271.

- Evenblij, K., Widdershoven, G., Onwuteaka-Philipsen, B., Kam, H., & Pasman, H. (2016). Palliative care in mental health facilities from the perspective of nurses: A mixed-methods study. *Journal of Psychiatric and Mental Health Nursing*, 23(6-7), 409-418.
- Gardstrom, S. C. (2007). *Music therapy improvisation for groups: Essential leadership competencies* [iBook]. Retrieved from Barcelonapublishers.com
- Gauger, L. A. (1995). *An investigation of the effect of rhythmic movement on patients with chronic schizophrenia* (Order No. 1375858). Available from ProQuest Dissertations & Theses Global. (231598778). Retrieved from <http://login.ezproxy1.lib.asu.edu/login?url=https://search-proquest-com.ezproxy1.lib.asu.edu/docview/231598778?accountid=4485>
- Gfeller, K. E., & Thaut, M. (2008). Music therapy in the treatment of behavioral-emotional disorders. In W.B. Davis, K. E. Gfeller, & M. Thaut (Eds.), *An introduction to music therapy: Theory and practice* (3rd ed., pp. 209-246). Silver Spring, MD: American Music Therapy Association.
- Gold, C., Assmus, J., Hjørnevik, K., Qvale, L., Brown, F., Hansen, A., . . . Stige, B. (2014). Music therapy for prisoners: Pilot randomised controlled trial and implications for evaluating psychosocial interventions. *International Journal of Offender Therapy and Comparative Criminology*, 58(12), 1520-1539.
- Geretsegger, M., Mössler, K., Bieleninik, L., Chen, X., Heldal, T., & Gold, C. (2017). Music therapy for people with schizophrenia and schizophrenia-like disorders. *The Cochrane Database of Systematic Reviews*, 5(5), CD004025.
- Grocke, D., Bloch, S., Castle, D., Thompson, G., Newton, R., Stewart, S., & Gold, C. (2014). Group music therapy for severe mental illness: A randomized embedded-experimental mixed methods study. *Acta Psychiatrica Scandinavica*, 130(2), 144-153.
- Habron, J. (2014). 'Through music and into music,' through music and into well-being: Dalcroze eurhythmics as music therapy. *The Journal for Transdisciplinary Research in Southern Africa*, 10(2), 90-110.
- Hars, M., Herrmann, F., Fielding, R., Reid, R., Rizzoli, A., & Trombetti, K. (2014). Long-term exercise in older adults: 4-year outcomes of music-based multitask training. *Calcified Tissue International*, 95(5), 393-404.
- Hooyman, N., Kawamoto, K., & Kiyak, H. (2015). *Aging matters : An introduction to social gerontology* [Kindle for iPad]. Retrieved from Amazon.com

- Jones, D., Macias, C., Barreira, P., Fisher, W., Hargreaves, W., & Harding, C. (2004). Prevalence, severity, and co-occurrence of chronic physical health problems of persons with serious mental illness. *Psychiatric Services*, 55(11), 1250-1257.
- Kooij, C. (2009). Recovery themes in songs written by adults living with serious mental illnesses/Thèmes de rétablissement dans des chansons écrites par des adultes ayant une maladie mentale sévère. *Canadian Journal of Music Therapy*, 15(1), 37-58.
- Madsen, C. K., & Madsen, C. H. (1998). *Teaching/discipline: A positive approach for educational development* (4th ed.). Raleigh, NC: Contemporary Pub. Co. 269.
- McInnis-Dittrich, K. (2014). *Social work with older adults* (4th ed.). Boston, MA: Allyn & Bacon. 3, 7-8.
- Millman, J., Galway, K., Santin, O., & Reid, J. (2016). Cancer and serious mental illness – patient, caregiver and professional perspectives: Study protocol. *Journal of Advanced Nursing*, 72(1), 217-226.
- Morgan, B. (2016). “No right place to die”: Nursing attitudes and needs in caring for people with serious mental illness at end-of-life. *Journal of the American Psychiatric Nurses Association*, 22(1), 31-42.
- Navarro Wagner, A. (2016). Health-musicking through dalcroze eurhythmics. *Approaches: An Interdisciplinary Journal of Music Therapy*, 8(2), 118-133.
- Nguyen, S. D., Marshak, H. H., Dos Santos, H. M., Luu, S. S., Berk, L. T., McMahon, P., & Riggs, M. (2014). The effects of simultaneous exercise and psychotherapy on depressive symptoms in inpatient, psychiatric older adults. *Advances in Mind-body Medicine*, 28(4), 8-17.
- Salur, Ö., Ala-Ruona, E., Uçar, S., & Eren, N. (2017). Enjoying expression: Exploring the benefits of music therapy on patients diagnosed with schizophrenia and using metaphor games/improvisations for increasing emotional awareness level. *European Psychiatry*, 41(SS), S835.
- Silverman, M. (2007). Evaluating current trends in psychiatric music therapy: A descriptive analysis. *Journal of Music Therapy*, 44(4), 388-414.
- Silverman, M. (2010). Perceptions of music therapy interventions from inpatients with severe mental illness: A mixed-methods approach. *The Arts in Psychotherapy*, 37(3), 264-268.
- Silverman, M. (2012). Effects of group songwriting on depression and quality of life in acute psychiatric inpatients: A randomized three group effectiveness study. *Nordic Journal of Music Therapy*, 22(2), 1-18.

- Silverman, M. (2013). Effects of music therapy on self- and experienced stigma in patients on an acute care psychiatric unit: A randomized three group effectiveness study. *Archives of Psychiatric Nursing*, 27(5), 223-30.
- Silverman, M. (2018). Music Therapy for Coping Self-Efficacy in an Acute Mental Health Setting: A Randomized Pilot Study. *Community Mental Health Journal*, 1-9.
- Silverman, M., Letwin, L., & Nuehring, L. (2016). Patient preferred live music with adult medical patients: A systematic review to determine implications for clinical practice and future research. *The Arts in Psychotherapy*, 49, 1-7.
- Stahl, S. T. (2017). Psychiatric Diagnoses Among Older Recipients of Publicly Funded Mental Health Services. *Journal of the American Geriatrics Society*, 65(7), 1569-1573.
- Swarbrick, M., Anthony, W. A., Gill, K. J., Hutchinson, D., & Henry, A. (2006). A Wellness Approach. *Psychiatric Rehabilitation Journal*, 29(4), 311-314.
- Tidey, J. (2012). Using incentives to reduce substance use and other health risk behaviors among people with serious mental illness. *Preventive Medicine*, 55(S1), S54-S60.
- Trombetti, A., Hars, M., Herrmann, F., Kressig, R., Ferrari, S., & Rizzoli, R. (2011). Effect of Music-Based Multitask Training on Gait, Balance, and Fall Risk in Elderly People: A Randomized Controlled Trial. *Archives of Internal Medicine*, 171(6), 525-533.
- Yu, C., Sylvestre, J., Segal, M., Looper, K., & Rej, S. (2015). Predictors of psychiatric re-hospitalization in older adults with severe mental illness. *International Journal of Geriatric Psychiatry*, 30(11), 1114-1119.
- Zechner, M., Kirchner, M., Cook, J. A., & Mueser, K. T. (2013). Balanced Life: A Pilot Wellness Program for Older Adults in Psychiatric Hospitals. *Psychiatric Rehabilitation Journal*, 36(1), 42-44.

## APPENDIX A

### MUSIC THERAPY INTERVENTIONS FOR POPULATION DIAGNOSED WITH SMI



<b>Category</b>	<b>Authors</b>	<b>Intervention</b>	<b>Patient Needs</b>	<b>Evaluation Measures</b>	<b>Results</b>
Quality of Life	Chang et al. (2018)	Music-creation program	Self-esteem	Rosenberg Self-Esteem Scale (RSES)	Increased self-esteem
			Anxiety	Hamilton Anxiety Rating Scale (HAM-A)	Reduced anxiety
			Quality of life	World Health Organization Quality of Life-BREF (WHOQOL-BREF)	Increased quality of life (psychological and social domains)

<b>Category</b>	<b>Authors</b>	<b>Intervention</b>	<b>Patient Needs</b>	<b>Evaluation Measures</b>	<b>Results</b>
Quality of Life	Grocke et al. (2014)	Group singing Group songwriting	Quality of life	Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-18)	Increased quality of life
			Social enrichment	Enhancing Recovery in Coronary Heart Disease Patients (ENRICHD)	Increased social connections
			Self-esteem	Rosenberg Self-Esteem Scale (RSES)	Improved self-esteem
			Spirituality	Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being (FACIT-Sp-12)	Increased spirituality
			Psychiatric symptoms	The Brief Symptom Inventory (BSI)	Improved global severity of illness

Category	Authors	Intervention	Patient Needs	Evaluation Measures	Results
Patient Perceptions of Treatment	Silverman (2010)	Individual game Team Game Singalong Lyric analysis Songwriting	Patient preferences of interventions          Team building and socialization   Knowledge of discharge and stabilization in community	Patient interviews including Likert-type scales and open ended questions	Patients perceived the individual game as the most helpful and the team game as the most enjoyable, although all five interventions were perceived as positive          Increased socialization during music-based games   Increased knowledge of purpose and goals of the music therapy interventions

<b>Category</b>	<b>Authors</b>	<b>Intervention</b>	<b>Patient Needs</b>	<b>Evaluation Measures</b>	<b>Results</b>
Patient Perceptions of Treatment	Kooij (2009)	Songwriting	Identifying the lived experience of serious mental illness	Song lyric analysis Open ended interviews	<p>Many themes found for patients' diagnosed with serious mental illness.</p> <p>Themes related to ends of a spectrum on the journey:</p> <p>Illness and health</p> <p>Lost identity and restored identity</p> <p>No perceived control and taking control</p> <p>Social isolation and social connection</p> <p>Hopeless and hopeful</p>

<b>Category</b>	<b>Authors</b>	<b>Intervention</b>	<b>Patient Needs</b>	<b>Evaluation Measures</b>	<b>Results</b>
Emotional Awareness	Salur et al. (2017)	Group music therapy games and improvisations	Emotional awareness	Pre-post clinical psychological tests	<p>Improved emotional regulation and awareness</p> <p>Improved well-being</p> <p>Increased general functionality</p> <p>Increased personal and social performance</p> <p>Improved depression levels</p> <p>Increased coping skills</p>
Stigma	Silverman (2013)	Group songwriting	Self- and experienced stigma	The Stigma Scale	<p>Reduced disclosure (Self-stigma)</p> <p>Reduced discrimination (Experienced stigma)</p> <p>Reduced total Stigma</p>

Category	Authors	Intervention	Patient Needs	Evaluation Measures	Results
Coping Self-efficacy	Silverman (2018)	Educational lyric analysis Educational songwriting	Coping self-efficacy	The Coping Self-Efficacy Scale (CSES)	Increased coping self-efficacy
Music Therapy and Dalcroze	Gauger (1995)	Rhythmic movement to music	Mood	Mood Check	Improved mood
			Attention and concentration	Attention and Concentration Evaluation	Increased attention and concentration
			Gross motor skills	Evaluation of Gross Motor Movement Videotape Analysis	Improved gross motor skills
				Beat Coordination Screening Test	
	Walking Tempo				
		Social interaction	Nurses Observation Scale of Inpatient Evaluation (NOSIE)	Increased social interaction	

APPENDIX B

SOCIAL INTERACTION CHECKLIST

## Instructions

Tally how many times patients engage in an unprompted social interaction which means patient engages with a peer by completing one of the following behaviors without a prompt from the music therapist:

Hand shake (HS) means patient initiates shaking hand of peer.

Eye contact (EC) means patient clearly turns to peer and looks peer in the eye.

Conversation (CONV) means patient makes a comment to a peer or asks peer a question.

High five or fist bump (HF/FB) means patient high fives or fist bumps another peer.

### Peer to Peer Interaction

	HS	EC	CONV	HF/FB	Other
1: Warm-up					
2: Improvisation					
3: Movement					
4: Closing					

### Peer to Staff Interaction

	HS	EC	CONV	HF/FB	Other
1: Warm-up					
2: Improvisation					
3: Movement					
4: Closing					