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The Effect of Music Therapy Interventions to Increase the Psychosocial Well-Being of Older Adults Living in Independent and Assisted Living Communities

You Lee Sun



## THE FLORIDA STATE UNIVERSITY COLLEGE OF MUSIC

# THE EFFECT OF MUSIC THERAPY INTERVENTIONS TO INCREASE THE PSYCHOSOCIAL WELL-BEING OF OLDER ADULTS LIVING IN INDEPENDENT AND ASSISTED LIVING COMMUNITIES

By

YOU LEE SUN

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Youlee Sun defended this thesis on September 26, The members of the supervisory committee were:	2012.
The members of the supervisory committee were.	
	Alice-Ann Darrow
	Professor Directing Thesis
	Dianne Gregory
	Committee Member
	Jayne Standley
	Committee Member
The Graduate School has verified and approved the	
certifies that the thesis has been approved in accord	uance with university requirements.

This thesis is dedicated to my aunt Sook Hee eemo, for loving and supporting me throughout my life.

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#### **ABSTRACT**

The purpose of this study was to examine the effect of group music therapy interventions on the psychosocial well-being of older adults living in assisted and independent living communities. A secondary purpose of the study was to determine whether participants' age, gender, and status of independence would influence their susceptibility to music therapy interventions implemented to increase psychosocial well-being. Twenty-one participants engaged in group music therapy sessions for eight consecutive weeks. All sessions included the following interventions: music listening, singing, lyric analysis, and music-assisted movements. The researcher analyzed pre- and posttests of participants' scores on the following rating scales: Satisfaction with Life Scale, the Subjective Happiness Scale, the Rosenberg's Self-esteem Scale, and the Social Interaction Anxiety Scale. To determine the degree of relatedness among the four rating scales, Pearson's correlation test was computed using pretest scores for the four rating scales. Analysis indicated the four ratings scales were significantly related and thus, appropriate for the purposes of this study. Results of the paired t-test revealed that older adults living in both independent and assisted living communities improved significantly from pre- to posttest on three out of four rating scales used to measure their psychosocial well-being. Significant increases were found for level of life satisfaction, self-esteem, and a decrease found for social interaction anxiety. Although not significant, an increase was also found for subjective happiness. Further analyses revealed that gender as a demographic variable did significantly influence participants' scores on two out of the four measures of psychosocial well-being. These analyses may indicate that women are more susceptible to the influence of group music therapy interventions on measures of self-esteem and social interaction anxiety than men. Final analyses indicated that one's status of independence might also be a significant factor when examining the influence of music therapy interventions on older adults' life satisfaction. These analyses may indicate that individuals who are living independently may be more susceptible to the influence of music therapy interventions than individuals who are in assisted care.

#### **CHAPTER I**

#### INTRODUCTION

The US has seen a dramatic surge in the number of elderly adults. Since 1999, 5.4 million people have been added to this population, representing 15.3% increase. In 2010, the elderly population totaled 40.4 million, making up 13.1% of the entire U.S. population (Administration on Aging, 2011). As the senior population increased at a rate faster than the younger population, the nation's median age rose from 35.3 in 2000 to 37.2 in 2010 (U.S. Census Bureau, 2010). Furthermore, those over the age of 85 and above are the fastest growing group within the elderly population. The Administration on Aging (2010) predicts that the number of adults over 85 will triple by 2050. Baby boomers, those born from the end of World War II uptill 1964, will be between 66 and 84 in 2030 and roughly number 61 million. The very first baby boomers turned 65 in 2011 (Knickman & Snell, 2002).

#### **Older Adults and the Aging Process**

The aging process impacts the human body and its functions. Although individuals experience different rates of functional decline, most undergo similar physical changes in the sensory, musculoskeletal, and respiratory systems (Saxon & Etten, 2002). In 2010, 37% of older adults reported some type of disability related to hearing, vision, or independent living. In 2009, over 27% of the community-resident Medicare beneficiaries above the age of 65 faced challenges in performing one or more activities of daily living (Administration on Aging Handook, 2011).

The aging process also impacts and is influenced by social circumstances. Older adults experience a number of losses and disruptions to their social networks over time. They gradually become lonely and isolated as they move away from their home, sell their houses, or part with their children. The experience of moving away from familiar people and communities can mean a loss of social connection for older adults (Grundy & Bowling, 1997). Other kinds of loss

confronting aging individuals are the death of spouse and friends. Moreover, retirement reduces social relationships related to work. The changes that older adults have to confront may result in decreased feelings of usefulness and lack of purpose in life (Alpass & Neville, 2003; Onishi et al., 2006; Solé et al, 2010). Physical disabilities and social distresses can affect older adults in negative ways. Older adults can experience psychological disorders, such as depression, as well as psychosocial distresses including lowered self-esteem and possible abandonment of life-long pursuits (Clark, Carlson, & Hessel, 1997). These physical changes and psychosocial distresses may lead aging individuals to decreased self-esteem and overall well-being.

Among social theories of aging, activity theory and continuity theory explain the relationship between older adults' aging process and their engagement with society. Activity theory suggests that engagement with more activities may help older adults to experience greater quality of life. Continuity theory, an extension of activity theory, posits that older adults are able to adapt to new environments by substituting new roles for lost ones (Bengtson & Burgess, 1997). Although many researchers and philosophers have recognized and emphasized that the aging process should not be confused with illness (Cicero, 44BC, reprinted 1979), some still perceive older adults as depressed, having poor health, and dependent on others (Grundy & Bowling, 1997). It is important to view aging as a natural process of life and provide effective interventions to help elderly adults participate in activities that positively influence their well-being.

Older adults living in independent and assisted living communities. Since the number of the elderly people is dramatically on the rise, the number of older adults living in independent and assisted living communities is also correspondingly rising. The independent living communities, also called retirement communities, are any housing arrangements designed for seniors who are able to complete the activities of daily living (ADLs). Though these seniors do not require assistance with ADLs, these communities may provide assistance for instrumental activities of daily living activities (IADLs), such as shopping or cleaning. Assisted living communities are based on the residential care fields which provide a measure of independence, autonomy, and privacy for senior residents. However, compared to independent living communities, older adults residing in assisted living communities need more individualized assistance with regard to physical activities of daily living, such as bathing, dressing, taking medication, and eating (Michell & Kemp, 2000; Knickman & Snell, 2002).

Both independent and assisted living community attempt to offer various activities that can fulfill the psychosocial well-being of its residents. However, some researchers have indicated that older adults living in these settings may often feel the loss of autonomy, choice, and decision making due to many restrictions and lack of choices in daily activities (Kane, 1991; Wetle, 1991). These feelings of loss may directly impact the psychosocial well-being of older adults. They may feel more depressed and out-of-control, as well as experiencing decreased quality of life.

Older adult's psychosocial well-being. The aging process may potentially affect psychosocial well-being, in the areas of personal autonomy, environmental mastery, personal growth, self-perception, and relations with others. Physical well-being relates to an individual's ability to complete daily living activities without assistance. Psychological well-being indicates that a person's cognitive faculties are intact and that the person has no concerns resulting from fear, anxiety, stress, or other negative emotions. Social well-being is concerned with an individual's ability to participate in society, engage in interactions with others, and fulfill roles as a member of society (Frytak, 2000; Williamson & Robinson, 2006). As people age, they often experience decreased capacities in one or more areas of psychosocial well-being (Belgrave, Darrow, Walworth, & Woldarcyzk, 2011).

Psychosocial well-being is also acknowledged as a subjective measure that can be defined by feelings of helpfulness, usefulness, happiness, self-esteem, and life satisfaction (Bowling, 1997; Inglehart, 1990; Keyer, 2002; Proller, 1989; White, 2008). To enhance older adults' psychosocial well-being, they should be provided opportunities to participate in social activities and productive activities. Some studies have found that social activities allow older adults to maintain interpersonal relations, while productive activities contribute to the maintenance of social life and personal growth. Participating and engaging actively in social and productive activities have a positive impact on the psychosocial well-being of older adults. Many researchers advocate that remaining active is a key component of successful aging. Participating in musical activities may improve the quality of life for older adults (Chung, 2004; Rowe & Kahn, 1997; Solé, Mercadal-Brotons, Gallego, & Riera, 2010).

#### **Music Therapy Interventions for Older Adults**

Musical activities have a positive impact on physical, psychological, and social dimensions of older adults' lives. Researchers have reported that older adults can learn to value their lives through musical activities. Music activities ease physical exercise, facilitate rehabilitation, provide social interaction, and prompt sharing of lives (Coffman, 2002; Cohen, Bailey, & Nilsson, 2002; McCaffrey, 2008; Prickett, 2000; Ruud, 1997). Kneasfsey (1997) described music as "unique in that it can penetrate both the mind and the body whatever the individual's intelligence or condition," and also stated that music may reduce social and emotional disabilities by eliciting positive psychological and social responses (Knesafsey, 1997).

Many literatures have confirmed the effectiveness of music therapy for older adults (O'Callaghan, 1993, 1996; Porchet-Munro, 1993). There are also theoretical articles that encourage the use of music therapy to increase the quality of life of older adults by providing opportunities for emotional expression, reminiscence, communication, and social support (Bowers, 1998; Salmon, 2001). Music has been suggested as an effective social agent because most people enjoy music. Even people with different musical skills and backgrounds can often play together. Studies have shown that following musical interventions can be effective with the elderly population: singing; music listening; music-assisted movement; and lyric analysis (Batt-Rawden, 2006; Bowers, 1998; Ericson & Theorell, 2003; Hamburg & Clair. 2003; Sloboda & O'Neill, 2001; O'Callaghan & Grocke, 2009).

#### Music Therapy Interventions to Increase Psychosocial Well-Being

Wellness. People of all ages enjoy music. While older adults are content with listening to music, some are still interested in making music. Music is highly flexible in regard to type, style, or age-appropriateness. As such, music is a useful medium for promoting and maintaining engagement in health-related activities. Music can facilitate socialization and physical activities. Music may also motivate people to engage in activities that promote general wellness. Because music is pervasive and flexible, it can accompany diverse physical, cognitive, and social activities (Belgrave et al., 2011). Music therapy interventions have been employed to decrease agitation (Bittman et al., 2005; Pelletier, 2004), motivate physical rehabilitation (Otto & Clair, 2001), improve gait and balance (Hamburg & Clair, 2003), and reduce symptoms of depression in the elderly (Hanser, 1990).

Lifelong Learning. Lifelong learning is the pursuit of knowledge at any age in any context. Lifelong learning tends to be learner-centered and provide appropriate instruction and adaptations for learners. Older adults can receive adaptations such as large print, amplification, or hand-over assistance. Music is often employed in lifelong learning programs for older adults. Learning a new instrument, taking voice lessons, or writing music with other people are all good opportunities that provide a sense of accomplishment, self-esteem, and increased well-being. Zelazny (2001) employed strategy of lifelong learning by providing instrumental playing for older adults in physical rehabilitation and memory improvement sessions.

Music in group settings not only promotes musical development, but also encourages socialization for older adults. Since music is generally non-threatening, participation in group music therapy activities can help older adults to build relationships with others. Lyric analysis and other music therapy interventions can facilitate older adults' identification and expression of feelings of self-worth (Belgrave et al., 2011).

#### **Purpose of the study**

Many older adults suffer from low levels of psychosocial well-being resulting from loss of independence, illness, and other aging factors. Losing social connections and feeling of isolation are often causes of negative emotions (Grundy & Bowling, 1997; Bengtson & Burgess, 1997). According to the related literature, it seems possible that older adults living in independent and assisted living communities may experience higher levels of psychosocial wellbeing with the application of music therapy interventions. Many researchers who have examined the effect of music therapy interventions on older adults found increased overall quality of life (O'Callaghan, 1993, 1996; Porchet-Munro, 1993; Salmon, 2001). Music therapy interventions may be particularly useful for older people because it is nonthreatening and easily adaptable for the elderly who are sometimes averse to group activities (Netz et al., 2005). Studies have revealed that older adults are fully competent to learn new knowledge and skills, to do them well, and to enjoy them (Belgrave et al., 2011; Clair, 1996). In light of the music therapy's important role in increasing the psychosocial well-being of the older adults, the purpose of this study was to examine the effect of music therapy interventions on improving the psychosocial well-being of older adults living in independent and assisted living communities. This study adds to the literature by examining the role of gender, age, and status of independence.

#### **CHAPTER II**

#### REVIEW OF LITERATURE

#### **Psychosocial Well-being**

Well-being. According to the Merriam-Webster dictionary (1964), "well-being" is the state of being happy, healthy, or prosperous. The Oxford Educational Dictionary (1884) defines it as a good or satisfactory condition of existence; a state characterized by health, happiness, and prosperity. Well-being is also defined in the literature as "an umbrella construct comprising various affective and cognitive dimensions such as happiness, life satisfaction, and congruence between expected and achieved life goals" (George, 1981), and as "an umbrella term for different valuations that people make regarding their lives, the events happening to them, their bodies and minds and the circumstances in which they live" (Diener, 2006 p. 400).

Abas, Punpuing, Jirapramupo, Tangchonlatip, and Leese (2009) conceptualized well-being as the state of having a positive mental health that allows individuals to cope with and contribute to external environments, and realize their abilities. As such, increased or sustained well-being should also lead to enhanced social relationship with other people. According to Diener (2000), well-being is an individualized concept. Individuals have different experiences, expectations, and sense of what is good for them. Along the same vein, WHO (1993) defined well-being "as the individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns." Diener (2006) stated in his study that individuals are affected and influenced by social aspects as they interact within the social boundary (Bengtson et al, 1997; Diener, 2000).

In a sociological perspective of well-being, Bengtson et al. (1997) employed social constructionist perspectives and social exchange theories to an individual and his or her social interactions. Social constructionist perspectives focus on individuals and their social behaviors within larger structures of society. These theories support the statement that individual processes

of aging are influenced by social definitions and social structures. Correspondingly, social exchange theories account for behaviors of individuals at different ages and their shift in roles, functions, and skills as a result of aging. These theories also recognize how individuals maintain social meaning for themselves and for those around them.

Aging and psychosocial well-being. There has been a significant increase in the life expectancy and longevity of the elderly. In 2008, there were approximately 38.8 million adults over 65 years old, and this number is expected to more than double to 88.5 million in 2050 (U.S. Census Bureau, 2008). Modern medical technology has made it possible for people to live longer; however, living longer and successful aging are not synonymous (Ferrand, Nasarre, Hautier, & Bonnefoy, 2012). As individuals age, they often lose the existing support system and a sense of connection to others, leading to feelings of isolation and negative emotions. Physically, while the average life expectancy might have risen, 25%-50% of the elderly experience forms of chronic pain. The consequences of chronic pain include loneliness, uselessness, social isolation, and depression.

Lauder, Mummery, and Sharkey (2006) surveyed older adults over 65 years old living in community settings. They reported that 55%-84% of the participants have had one or more of the following feelings: loneliness, depression, and isolation. Wang et al. (2001) suggested that approximately 60.2% of the elderly have reported feelings of severe loneliness. Penninx et al. (2002) found that 12%-20% of older adults living in independent or assisted living communities suffer from significant symptoms of depression. They emphasized that depression often affect older adults' well-being and ability to function. In addition, physical disability among people with depression is often worse than others without depression. Consequently, depression and physical disability works in tandem to drive older adults to feel isolated and to inhibit their expression of feelings (Tse et al., 2010).

Older adults may fulfill their emotional needs by participating in group activities (Belgrave et al., 2011). Seniors who actively engage in activities maintain better health. Miler (1991) demonstrated that exercise, socialization, nutrition, and components of a well-being program increased the quality of life in older adults. Other studies indicate that elderly people who experience higher levels of happiness generally have healthier psychological and physical lives than others. For instance, those with higher levels of happiness reported stronger immune systems and higher resistance to pain (Pressman & Cohen, 2005; Ryff & Singer, 1998).

Other researchers have focused on how people come to terms with the concept of well-being during the aging process (Ingelehart, 1990; Beurs et al, 1999). Inglehart (1990) proposed that individuals become more concerned about self-fulfillment when their basic material needs are met. A study involving 7,204 international respondents in 42 different countries concluded that 'happiness' and 'life satisfaction' were very important to individuals. The respondents reported that they think about 'happiness' and 'life satisfaction' often. Consequently, among the total sample, only 6% of respondents rated money above 'happiness'. Furthermore, 69% rated 'happiness' at the top of the importance scale, while only 1% claimed to have never thought about it. Additionally, 62% rated 'life satisfaction' at the top of the importance scale, and only 2% reported never having thought about it. As people's basic material needs are increasingly fulfilled, it is likely that 'happiness' and 'life satisfaction' will be people's primary concern. In addition, Beurs et al. (1999) conducted a longitudinal study to determine anxiety's effect on older adults' well-being. The study included data that had been collected as part of a larger study with a random sample of 659 older people. The results indicated 'anxiety' was associated with diminished well-being, while 'happiness' was associated with increased well-being.

Subjective Happiness. Happiness is fundamental to the well-being. According to OECD (2012), happiness is the presence of positive experiences and feelings, and/or the absence of negative experiences and feelings. Moreover, happiness has been found to relate to many positive outcomes including relationship, friendship, health, marriage, and work performance. Happiness is also associated with desirable behaviors, sociability, positive perceptions of self and others, coping, and pro-social behaviors. Henricksen and Stephens (2010) conducted a longitudinal study and found that happiness accompanied successful outcomes and desirable states such as marriage, health, relationship, and job status.

Previous researches exploring determinants of happiness have focused mainly on genetic inheritance and life circumstances, with little room for individual change. Sheldon and Lyubomirsky (2006) suggested that some people are predisposed to be happier than others due to generic inheritance; the implication of this view is that well-being also has a moderate amount of heritability. However, Diener et al. (2006) reviewed three decades of subjective well-being research and concluded that the heritability of happiness range only from around 25% to 55%. He found that the impact of life circumstances on people's well-being is less than 10%. Lukas

(2007) stated in his study that interventions can significantly increase one's level of happiness, even after putting life circumstances into the metric.

Life Satisfaction. Subjective age is an age as experienced by an individual rather than his or her actual age. Subjective age has become an important marker for the aging population (Stephan et al., 2011). Montepare (2009) found that the majority of older adults reported a youthful subjective age. This tendency to see one's self as younger often functions as a self-enhancing positive illusion that promotes important well-being indicators such as life satisfaction. Life satisfaction defines how people evaluate their live as a whole, not just their current state. Since individuals have different capacities of their functioning, they have different prerequisites to deal with daily living activities as well as to achieve any developmental goals. Older adults coping with the aging process face an uphill battle to promote and maintain their life satisfaction. They are more likely to experience decreased life satisfaction due to reduced physical and cognitive functioning (Stephan et al., 2011). Necessarily, it is essential to help older adults achieve personal goals and fulfill basic physical and psychological needs in later life (Diner & Fujita, 1995; Lang et al., 2002). When older adults perceive themselves as productive members of society, they tend to rate their well-being satisfactory regardless of physical and cognitive declines (Hooyman & Kiyak, 2008; Lau & Molzahn, 2007).

Social Interaction. Staying socially active and maintaining interpersonal relationships can help people sustain good physical and emotional health and cognitive functioning. The ability to love is considered a central component of mental health. Older adults who continue to maintain close friendships and interact frequently with others live longer than those who don't. Ryff (1989) acknowledged that people with greater levels of well-being often have strong feelings of empathy and affection for others. They show greater love, have deeper friendships, and identify easily with others. Being involved in social activities is associated with improvements in the capacity to regulate emotions (Gross et al., 1997; Dean, 1992). Gross et al. (1997) acknowledged that by interacting with others, older adults can become more aware of what is going on inside their minds and deal with it.

The benefits of social interaction not only include less frequent negative emotions and stronger feeling of empathy and affection for others, but also improved physical functioning. Some of the benefits of physical functioning are potentially reduced risks for cardiovascular problems, rheumatoid arthritis, Alzheimer's disease, mental health problems, and high blood

pressure. Social interaction can also strengthen individual's relationships and their self-esteem (URMC, 2012).

Self-esteem. Self-esteem has been considered a key aspect of psychosocial well-being. It can play a role in maintaining close interpersonal ties. Leary (2005), applying postulated that self-esteem is a core part of psychological system that monitors social relationships for negative cues such as disapproval, rejection, or lack of interest from others. Moreover, people who feel they belong in a web of lasting and positive social relationships tend to have greater feelings of self-worth (Baumeister & Leary, 1995). A number of researchers suggested that greater involvement in meaningful activities is closely associated with higher self-esteem (Degrance et al., 2005; Lauterbach, 2008.)

Proller (1989) conducted a two-part study that engaged older adults residing at a nursing home in a meaningful social activity with elementary-age children. A pre-posttest control design was used to assess older adults' feelings of self-esteem and self-worth through the *Rosenberg Self-Esteem Inventory* (Rosenberg, 1965). At first, older adults did not show any improvement in self-esteem or self-worth. But after the researcher changed the frequency of the program from monthly to weekly, improvements were quickly made. Other researchers have indicated that increased feelings of self-esteem can also culminate in positive health-related outcomes such as better physical health, fewer symptoms of depression, and a greater probability of adopting preventive or beneficial health behaviors (Merrell et al., 2003; Dergrance et al., 2005; & Fernandez e al., 1998).

Measuring psychosocial well-being. Well-being or quality of life is a multidimensional concept. It comprises the social, physical, and emotional functioning of individuals and the environments surrounding them. The term 'quality of life' is often used to illustrate individuals' needs in medical or clinical settings. Many researchers have attempted to measure quality of life. Initially, objective measures of factors such as health, function, economic, and social status were used by the researchers. But as time passed by, it has been widely received that quality of life is subjective in nature, and it can only be determined and experienced by the individual (Hamming & De Vries, 2007). Subjective perceptions of well-being are critical to understand the experiences of older adults because the definition of well-being can vary by individuals and their cultures (Ku, Fox, & McKenna, 2008; Stathi, Fox, & McKenna, 2002).

Moreover, as of late, researchers have begun to demonstrate that subjective well-being can be measured with reliability and validity, using relatively simple self-rating questionnaires about one's current psychosocial status (Diener et al., 1999; Diener, 2000; Donovan et al., 2003). Although scores on the rating scales or questionnaires do not have dimensions or units, rigorous assessment is still possible by comparing scores over time rather than comparing scores against those of other individuals (Hamming & De Vries, 2007).

#### **Older Adults Living in Independent and Assisted Living Communities**

Older Adults and their experiences with dysfunctions. There is a wide interest in the enhancement of well-being for the older adults, and there are high expectations for the society to take an active role in managing their well-being (World Health Organization, 2002). Van Wynan and Ruholl (2003) stated that older adults experience an age-related decline in mental capacity due to loss of neurons and decreased blood flow. These biological changes often affect elder peoples' ability for abstract thinking and memory. Adjusting to physical and mental changes associated with the aging process can put older adults at risk for developing chronic illnesses that may interfere with their lifestyle.

According to Belgrave et.al. (2011), older adults experience a heightened level of physical impairments and functional disabilities with aging. Nearly 80% of older adults in the U.S. have at least one chronic condition, and approximately 50% have at least two. Chronic diseases or disabling conditions can combine with personal and economic burdens to cause a drop in quality of life for older adults (Administration on Aging, 2008). Consequently, Aging brings about diminished physical abilities for older adults. Knickman and Snell (2002) discovered from their study that among the 31 million community-residing elderly, 1.8 million have difficulties with performing instrumental activities of daily living (IADLs) and 3.3 million with activities of daily living (ADLs). Among those who have difficulties with activities of daily living, 1.5 million needed help with three or more ADLs. Other researchers have shown that older adults also experience decline in mental capacities, such as reduction in explicit memory and retention of materials (Van Wynan & Ruholl, 2003; Wagner, 2001). Researchers have emphasized that reducing the effects of aging and diminishing the dysfunctions are the primary health concerns of the elderly. Moreover, maintaining physical and mental health can provide the

elderly increased self-esteem and feelings of well-being (Butler & Lewis, 1977; Barbaro & Noyes, 1994).

Living in independent and assisted living communities. Studies report that people prefer to stay in familiar surroundings as they approach the later stages of life. They also favor remaining independently within their home. U.S. General Accounting Office (1999) stated that older adults choose to stay home and do not prefer to relocate if they have control over the decision. However, older adults often end up moving away from familiar surroundings for reasons such as economic hardship, diminishing health status, lack of support services, and poor housing care (Dye, Willoughby & Battisco 2011; AARP, 2003). Also, once older adults become too frail to make the decision, their families make decisions for them. The loss of control over the decision to move can affect older adults' satisfaction with services as well as their well-being (Dobbs, 1998). According to the American Associate of Retired Person's survey (2000), 92% of 65 to 74 year olds and 95% of those over 75 years old residing in single family detached homes answered that they prefer to remain in their current residence as long as possible. When AARP surveyed these same people 3 years later, only 4% of those over 65 and 46% over 85 were moved into a nursing home.

The benefits of staying near familiar surroundings include autonomy, self-sufficiency, independence, and sense of identity. It can also provide psychological well-being and comfort. As such, moving to retirement home or independent and assisted living communities can be a huge stress for them (Pastalan, 1999; Despres, 1991; Cooper, 1995). This is especially true in the case of the elderly living in rural settings who have particularly strong existing bonds with their homes, neighbors, and communities. Those with lower educational attainment and long history of living in one place expressed the strongest expectations and willingness to age in familiar surroundings. But they acknowledge that doing so would be challenging (Robinson & Moen, 2000).

Mitchell and Kemp (2000) found a 37% increase in assisted living facilities from 1990 to 1998. They reported approximately 500,000 older adults have moved to these facilities. The American Seniors Housing Association (2000) reported 55,273 senior housing communities in its 1998 study. It included 6,085 assisted living units in freestanding communities, 21,273 congregated housing units, and 27,915 continuing care retirement community housing units. The

study also reported assisted living national occupancy rates varying from 84% to 94% full capacity (ASHA,2000).

#### **Participation and Interventions**

Participation is defined as involvement in life situations such as work, school, play, sports, and learning. The World Health Organization (WHO, 2001) recognized that participation is the key indicator of human health and well-being. Developmental theories suggest that participation patterns change over the life course and it is most recognizable among the elderly (Edward & Christiansen, 2005). Older adults often experience declined in diversity of participation due to the aging; therefore, resulting in less leisure and productive activities (Desrosiers et al., 2004). Edward and Christiansen (2005) indicated that active participation in social activities can positively affect well-being of older adults. However, older adults often engage in more passive activities. Moreover, the participation restriction becomes more profound when chronic health conditions are involved for older adults. Since older adults with chronic conditions are at risk for lower participation resulting in lower well-being, it is critical to motivate and examine the way to help them (Sprangers et al., 2000)

Having and maintaining social relationship is a good predictor of an individual's psychosocial well-being (Mohrota, 2003). Bishop, Martin, and Poon (2006) suggested that social support is a resource of social networks that enhances individual's ability to cope with daily life events. This is not only related to psychosocial well-being, but also linked to participation. Onishi, Masauda, Suzuki, Gotob, Kawamura, and Iguchi (2006) found that older adults who participated in activities have shown better psychosocial well-being than those who don't. Netz, Wu, Becker, and Tenenbaum (2005) revealed that physical activities may improve physiological and psychological well-being of older adults; so, the real issue is getting them to engage in physical activities. Using interventions of treatment or educational and clinical activities can provide older adults motivation to exercise.

Active participation in activities is important to maintain and sustain well-being. Active participation particularly at a time of life when older adults are experiencing number of losses can have a positive impact on their well-being (Sole et al., 2010). Creative writing, drawing, or lyric analysis can help older adults to identify feelings. These may elevate mood and raise energy level. Activities such as moving or dancing to music provide opportunities for socialization and

support building that can lead to reduced stress and elevated mood (Belgrave et al., 2012). Moreover, engaging in musical activity is the other commonly used intervention among elderly population. It can help physical activity, improve mood, and rebuild social links. Participating in choir, playing small instruments in a group setting, and performing in band are good social activities that can have positive impact on the well-being of older people. Community choirs, bands, and music classes offered at senior centers are all examples of musical organizations that serve as musical interventions for older adults. These structured educational musical activities can help promote learning, and address important aspects of social well-being (AMTA, 2005; Belgrave et al., 2011; Koga & Tims, 2001).

Lifelong Learning. Learning is available to anyone for either personal or professional reasons; people achieve learning for personal development, fulfillment, enjoyment, and socialization. Lifelong learning is an opportunity for people to pursue knowledge or gain skills at any age, in any context. Learning is not only confined to schools or degrees, but it happens throughout life in many different situations and in different formats. (Belgrave et.al., 2011; Sharples, 2000).

As of late, lifelong learning has been steadily drawing attention as the increasing aging population is becoming more interested in enriching the later stage of their life. Also, many older adults have time to take up new and different learning opportunities. Moreover, when older adults become retirees, they not only have time available, but also mind full of passion and desires. Engaging in educational activities is one of good ways to fill their time and also satisfy their quality of life (Merriam & Lumsden, 1995; Montelpare, 1998). Montelpare (1998) acknowledges that it is beneficial for the elderly to have some form of education for leisure and personal development. Exercise, challenge, and stimulation from learning can contribute to improved physical and mental health. Since lifelong learning experiences are mostly initiated by the learner's desires, these experiences are often learner-centered and directed by the learner's intentions. Satisfying, productive experiences, such as those related to education, can be beneficial for older adults (Belgrave, Darrow, Walwok, & Woldarcyzk, 2011). The pace of learning for older adults often becomes slower due to age (Palmore, 1998), but recent research shows that elderly people can learn new skills, and do them well (Rowe & Kahn, 1998). Researchers have indicated that older adults are capable of achieving equivalent learning outcomes to younger learners (Boulton-Lewis, 2010).

Researchers have explored engaging in lifelong learning is important and beneficial for older adults as it can assist in maintaining and improving physical, social, and cognitive functions. Older adults experience a gradual constriction of social circles as they lose friends to old age while opportunities to make new acquaintance become limited. Participating in activities such as music classes may offer them a new circle of friends and positive experience of socialization. It may also serve as a means of preventing the potential loneliness and isolation associated with the aging (Mehrotra, 2003). Moreover, older adults in any state of health can benefit from these activities and even individuals with cognitive defects can learn to engage in lifelong learning activities to some degree (Adamek, 2001; Coffman, 2002; Coffman & Wagner, 2001, Weinstein, 2004). Research have also indicated that elderly who are socially involved are more likely to have a higher level of cognitive functioning than those less socially involved (Rowe & Kahn, 1998).

Wellness program. Wellness programs are mostly combined with organizational and educational activities to support people's behaviors that are conducive to good health and wellbeing. Many wellness programs aim for nutritional awareness, stress management, physical and cognitive fitness, emotional and social support. Although wellness programs are beneficial for most anybody, they are especially important for older adults. Wellness activities may counteract the natural effects of the aging process by providing educational moments for older adults to adopt healthy behaviors and minds to acknowledge better ways of managing chronic health conditions. Health education programs help the elderly population living in life care communities to make adjustments and retain their feelings of control. They identify health factors over which residents have control and provide them with the knowledge to make appropriate choices about health behaviors (Barbaro & Noyes, 1994; Belgrave et. al., 2011). Moreover, wellness programs are cost effective compared to medical treatment (Belgrave et.al., 2011).

Matuska, Giles-Heinz, Flinn, Neighbor, and Bass-Haugen (2003) conducted a pilot study of wellness program designed to teach older adults the importance of participation in meaningful social activities for an increased well-being. Working with 26 older adults from 3 different retirement senior apartments, they measured health-related well-being surveys. They concluded the study with significantly different scores on the surveys. Participants reported an increased frequency of socialization and community participation from average of 55% to 66% after

wellness program. The researchers also found that participants who benefited the most were older, attended more classes, and were non-drivers.

Music has been employed to help older adults feel a sense of well-being. Researchers employed music to facilitate well-being and examined the importance of music and its contribution to older adults' quality of life. They utilized qualitative interviews and derived data that indicated music made the interviewees feel competent, less isolated, connected to others, and healthy. They concluded that music functions as facilitator for meaning in peoples' lives and their well-being (Hays, 2006; Laukka, 2007). Music therapy interventions have also been shown to provide opportunities for meaningful interactions with peers, to reduce isolation, to serve as an outlet for emotional expression, to reduce anxiety and stress, and to stimulate active cognitive functioning. These music-assisted wellness programs supported older adults and facilitated increased psychosocial well-being (Coffman, 2002; Coffman & Adamek, 1999; Gregory, 2002; Raglio et al., 2008; Tokiko & Takayoki, 2007).

#### **Music Therapy Interventions and Older Adults**

The American Music Therapy Association (2005) describes music therapy as the evidence-based, clinical use of music interventions to achieve individualized goals for each individual. Musical interventions are used to promote wellness, manage stress, improve communication skills, and provide opportunities for social interactions. The effectiveness of music therapy to achieve such goals is well documented. In the area of wellness, music therapy is considered to be "the specialized use of music to enhance quality of life, maximize well-being and potential, and increase self-awareness in individuals seeking music therapy services" (AMTA, 2005).

The effect of music therapy interventions and its unique contributions to the health and well-being of older adults has drawn the health care professionals' attentions. In reauthorizing the Older Americans Act, the US government included music therapy as one of cited services that is appropriate for the elderly population. This general societal shift has in turn influenced the way music therapists view their own profession in relation to the elderly as well. Music therapists have begun to better understand the challenges and concerns of older adults and the importance of music therapy in their lives (Adamek et al., 2000).

Many seniors in America engage in music in many different ways. It's been reported that approximately 90% of seniors listen to music at least twice a week and more than 70% listen daily (Cohen, Bailey & Nilsson, 2002). Music favored by older adults often covers a broad range of styles, with preferences for music from earlier rather than the later decades of life (Cohen, Bailey & Nilsson, 2002; Gilbert & Beal, 1982). Big Band, popular standards, songs from musicals have ranked high among older adults' preferred musical styles (Flowers & Murphy, 2001; VanWeelden & Cervasco, 2007). Other preferred genres were classical, opera, country, folk, patriotic, religious, and rock (Flowers & Murphy; VanWeelden & Cervasco, 2007). Moreover, some older adults have also reported their active participation in various musical activities. Community or church choirs, orchestras, intergenerational ensembles, music school organizations, bands, and other various instrumental ensembles are some of the non-formal musical opportunities that are available for older adults. Furthermore, choral organizations ranked highest as older adults' preferred performance organization (Bowles, 1991; Mitak, 2011).

Music therapists have begun to employ music to address the various dimensions of wellness for older adults. Physical fitness, psychosocial well-being, and cognitive stimulation are some of the goal areas for music therapists working with older adults (Koga & Tims, 2001). Music is often used to evoke emotions, or prompt memories and images that are associated with the musical stimuli. Music often acts as a powerful catalyst in precipitating memories. Therefore, many researchers have supported the notion that music can function as an effective agent for improving the quality of life and well-being of elderly adults (Vanderak, Newman, & Bell, 1983; Hays, 2006; Hays, Bright, & Minichiello; 2002; Laukka, 2007).

Music therapy is particularly effective for older adults because it is flexible in style, tempo, and loudness, and these musical elements can be matched to individuals' musical preferences and abilities (Belgrave, Darrow, Walworth, & Woldarcyzk, 2011). Music can also serve as a social agent for older adults who become isolated or lost in their social networks. Most people enjoy music and will congregate to hear music or to participate in music making.

Coffman (2000) surveyed 52 older people who enrolled in a community wind band in the Midwest and found that the participants' main purpose in joining the band was a combination of continuing active music making and socialization. Coffman and Adamek (2002) found that of 152 non-institutionalized elderly people, 84% wished to develop better musical skills while maintaining the social bond.

Authors have acknowledged that participation in music sessions is open to older adults with established music skills and to those with little to no musical background (Coffman, 2002; Cohen, Bailey, & Nilsson, 2002). Musical interests of older adults have been reported to be strongly related to their past involvements with music (Bowles, 1991; Cohen, Bailey, & Nilsson, 2002; Flowers & Murphy, 2001). Adults have reported their main motivating factors for joining musical activities as 'to acquire new knowledge' and 'to broaden their social network' (Sole et al., 2010). Some researchers have found that singing is the most accessible musical medium for older adults; however, other types of musical interventions are also known to be effective for the elderly population. These include activities such as music listening, music-assisted movement, and lyric analysis (Bowers, 1998; Ericson & Theorell, 2003; Batt-Rawden, 2006; Sloboda & O'Neill, 2001; Hamburg & Clair, 2003; O'Callaghan & Grocke, 2009).

Music therapists use various types of therapeutic interventions in working with older adults. After an initial assessment, music therapists may use one of two broad types of music therapy activities: receptive music therapy and active music therapy. Receptive music therapy consists of participants listening to music selected by the therapist or client, while active music therapy involves having clients actively participate in musical activities. These activities may include any type of music-making, such as playing instruments, singing, and dancing. Participation in music-making may promote memory retention and also delay any kind of neurologic losses. Singing songs may promote memory retention and delay neurologic problems in older adults. Playing instruments may improve gross and fine motor coordination in individuals with motor impairments or neurological trauma related to a stroke or head injuries. Singing may be exploited to facilitate speech reconstruction for patients with aphasia, while dancing can be provided to increase gross motor coordination (Adamek et al., 2000; Bowers, 1998, Hamburg & Clair, 2003).

Singing. Singing can promote active participation, enhance mood, and reduce perceived pain. Davis, Kenny, and Unwin (2002) examined the effect of singing on participants residing in community-related livings facilities. They found that a single half hour session of active singing produced immediate improvements in participants' mood. Riecker (2000) reported that singing also facilitated speech reconstruction and improved articulation for older adults in rehabilitation settings. He also suggested that singing may be a simple and cost-effective therapeutic intervention for older adults with chronic pain. Singing as a therapeutic intervention can reduce

the cost of health care by replacing drugs used to manage chronic pain. Moreover, singing can be conducted in a group setting to improve social skills and encourage a greater awareness of the others. Individuals can also experience reduced anxiety and fear while singing familiar songs that they have sung in the past (WFMT, 2010).

Swanson (2003) reported that singing familiar, nostalgic songs induced an emotional reaction and stimulated the cognitive and psychological functions of older adults with dementia. Although cognitive and language functions decline as people age, many musical abilities appear to be stored for a longer period. In this light, singing is a particularly valuable intervention tool for those with cognitive disorders. Clair (1996) emphasized that singing not only increased overall well-being of patients with dementia, but also their relationships with other patients.

Music Listening. Music listening is one of many music therapy interventions that is commonly used in the field of music therapy. Listening to music has been found to be effective in decreasing stress hormones like cortisol (Chlan, 1995). It can be used to reduce pre-operative anxiety, promote relaxation in ill-patients, and alleviate tension headaches (Snyder & Chlan, 1999). Listening to music also provides a purposeful distraction. Moreover, music listening enables the mind to recall important life experiences. Since individuals often have specific music linked to life events, music listening may trigger memories, rebuild social links, and promote reminiscence for older adults (Kaminski & Hall, 1996; Hanser & Thompson, 1994).

Although people may pay attention to different elements while listening to music, researchers have suggested that most people respond to music affectively (Cutshall et al., 2007; Madsen & Geringer, 1990; Rentz, 1992). For older adults, music listening can be specifically used to promote relaxation, decrease anxiety, and prompt positive reminiscence (Madsen, Byrnes, Capperella-Sheldon, & Brittin, 1993). Laukka (2007) found that listening to music can promote positive emotions in older adults. Participants of the study reported that music listening allowed them to regulate mood, gave them pleasure, and facilitated relaxation. For aging individuals unable to recognize words, music without lyrics may be provided to encourage a sense of safety and well-being. Cowles (2003) suggested playing music to older adults with dementia since musical and rhythmic skills often remain with them even after the loss of word recognition.

*Music-assisted movement.* Exercise is an important aspect of people's everyday lives. There are strong indications that physical activity and regular exercise contribute to increased independence, improved physical function and overall health, and enhanced sense of well-being.

Moreover, physical activity and regular exercise during early years can prevent, and even reduce, the chance of developing physical disabilities in later years (United Sates Department of Health and Human Services, 1996). As the risk for functional decline accompanies old age, it is important to encourage older adults to engage in daily exercise. Functional decline such as frequent falls can make every day activities difficult. Also, falls can even lead to morbidity and even mortality if not addressed by improving balance and gait (Cho & Kamen, 1998; Povince et al., 1995).

Many researchers and clinicians have designed interventions to motivate adults to engage in physical exercises (Weideman, 1982; Johnson et al., 2001). Researchers have found that music can motivate older adults to exercise (Clair, 1996; Hamburg & Clair, 2003). Johnson et al. (2001) studied the effect of using music in a physical rehabilitation exercise program with older adults. The findings indicated that music added interest and motivated the older adults in the program to exercise. Hamburg and Clair (2003) examined the effects of music-assisted movement on measures of balance and gait speed in healthy older adults. The researchers used Laban Movement Analyst with 16 healthy older adults for 14 weeks. The participants showed significant differences in measures of one-foot stance balance, gait speed, and functional reach after 5 weeks of study. Moreover, various researchers also found that using music for exercise can result in higher recovery of heart rates, greater breath capacity, longer periods of exercise, and greater commitment to exercise (Beckett, 1990; Johnson et al., 2001; Hagen & Armstrong-Esther, & Sandilands, 2003).

Lyric analysis. Lyrics or words of songs provide a comfortable medium for individuals to discuss feelings. Lyrics can prompt individuals to consider meaning in a direct but nonthreatening manner. Lyric analysis is often employed in conjunction with other interventions to help individual feel more comfortable sharing their ideas or experiences. Lyric analysis requires participants to concentrate better and to be more receptive to the text (Stratton & Zalanowski, 1994). Vaughn (1993) suggested that song lyrics can also be useful for people who are not able to verbally express their feelings. It may allow them to express their own feelings and thoughts.

Lyric analysis can also act as a facilitator for interpersonal communication (Mark, 1988). Gardstrom (1996) indicated that analyzing the lyrics of songs can facilitate intense discussion of peoples' own feelings and thoughts. Gardstrom stated that "they can begin to gain control over

their lives and learn the advantages of becoming disciplined participants in society through this process of lyric analysis." James (1998) conducted a research study by dividing 60 chemically dependent adults into control and experimental groups. Both groups attended 1 hour session for 4 times. The experimental group participated in music therapy discussion sessions while the control group participated in an occupational therapy craft activities. The results indicated that lyric analysis sessions positively influenced the participants' feelings of control.

#### Rationale and Purpose of the Study

Though music therapy interventions are often used with older adults, the interventions are often directed toward individuals with dementia, or individuals in rehabilitation. The potential contributions of music activities to the lives of healthy older adults have received less attention than its clinical applications to older adults who are institutionalized (Adamek et al., 2000). Even healthy older adults experience functional disabilities and physical impairments throughout the aging process. They often experience negative emotions and feelings of isolation, lack of a support system, and a loss of connection to others, all which can diminish older adults' psychosocial well-being (Belgrave et al., 2011).

Though some studies have already examined the effect of group activities on older adults (Netz et al., 2005), few have taken into account the different environmental and demographic status of older adults. While it is established that participating in group music therapy activities can help older adults build closer relationships and have positive experiences with others (Netz et al., 2005; Onishi et al, 2006), there is a need for research exploring the effect of group music therapy on older adults who are isolated and detached from formal social networks. The purpose of this study is to investigate how music therapy sessions can affect the psychosocial well-being of older adults living in independent and assisted living communities. This study will add to the literature by examining the role of gender, age, and status of independence.

#### **Research Questions**

- 1. Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions?
- 2. Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions based on participants' gender and age?
- 3. Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions based on participants' status of independence?

#### **CHAPTER III**

#### **METHOD**

#### **Participants**

Participants for this study were recruited from two assisted and independent living communities. (N=21). Eleven participants were recruited from an assisted living community and ten participants were from an independent living community. Criteria for inclusion in this study were: adult (male or female) at least 60-years-old living in assisted and independent living communities and capable of participation in group music therapy. The researcher required potential participants to have reasonable sight and hearing, and no dementia. The researcher provided the activity directors of the communities with information about the research project along with criteria for participation in the study. Once it was determined which participants met the criteria to be included in this study, a written description of the protocol was given to the participants. Approval was given by each participant by a letter of consent. Twenty-five individuals were identified as possible participants in this study. Individuals were contacted, and permission was granted from 23 individuals. Some possible participants did not want to participate in the pre- and posttest. Moreover, two participants were not able to complete the posttest since they missed more than two group music therapy sessions. Demographic data on the twenty-one participants (age and gender) are reported in Table 1.

#### **Setting**

All sessions were conducted either in the activity room or dining room of the two communities located in Tallahassee, Florida. The sessions were scheduled and notices were placed on the monthly and weekly calendar in each community. All participants came to the designated area for each session every week and were seated in a chair sharing a table with other participants. The music therapist stood in front of the room and near the participants.

#### **Equipment**

An acoustic guitar was used to provide live accompaniment while the therapist and participants were singing. Recorded music was played on an iPhone with a portable speaker and used when the therapist directed a music assisted-movement activity with participants. The researcher provided a folder with lyric sheets for each participant for singing activities. Music was chosen by the therapist prior to the study. Subsequently, more songs were added that participants requested. Most of the music used in sessions was popular songs from the 1930s through the 1950s and other songs from later eras. The song list is provided in Appendix A. Additionally, the researcher used SPSS program and Microsoft Access programs to enter all questionnaire and rating scale data in researcher's own computer. All data were entered twice to ensure accuracy of data entry.

#### **Design and Procedures**

This study included 30-minute music sessions for 8 consecutive weeks. Participants met as a group with the researcher each week in the activity room or the dining room at each facility. Each week, the researcher greeted participants, gave them name tags, and sheet music folders. The participants sat where they wanted but had limited choices as the researcher only used 3 tables in the rooms provided. Participants were encouraged to seat with different community members each week.

Participants participated in music sessions by engaging in all of the music therapy interventions provided for the day. The participants experienced various music therapy interventions in a group setting and the order of intervention was randomized for each week. The schedule for sessions is summarized in Table 2, and a session plans are in Appendix B. The researcher thanked participants for their participation before dismissing them from the sessions. This study was designed as one group, pre- and post- test. At the first session, the researcher introduced herself and the purpose of the study. Participants agreed and signed on the consent forms, then completed the pretests. At the final session, all individuals who participated in the study completed the posttests.

The independent variables of the study were the music therapy interventions. Interventions included music listening, singing, lyric analysis, and music-assisted movements. The dependent variables measures for the study were: self-esteem, social interaction, happiness, and the life satisfaction ratings. The researcher used 4 different rating scales to measure each dependent variable. Dependent measures were administered as pre-tests and post-tests.

Table 1: Participants' Demographic Data

Participant	Age	Gender
1	74	F
2	72	F
3	75	F
4	88	M
5	90	F
6	86	F
7	68	F
8	71	M
9	66	F
10	82	F
11	69	M
12	88	F
13	67	F
14	62	F
15	77	M
16	92	M
17	83	M
18	80	F
19	79	F
20	83	F
21	85	F

Table 2: A Summarized Session Schedule

Week	Session Schedule
1	Introduction. Baseline/Pretest
2	Singing and Listening to Music
3	Singing and Lyric Analysis
4	Singing, Listening to Music, and Music-assisted Movement
5	Singing, Lyric Analysis, and Music-assisted Movement
6	Singing, Lyric Analysis, and Listening to Music
7	Singing, Lyric Analysis, Listening to Music, and Music-assisted Movement
8	Celebration. Posttest

The rating scales that were used are *The Satisfaction with Life Scale* (Diener et al., 1985), *Subjective Happiness Scale* (Lyubomirsky, 1997), *Rosenberg Self-Esteem Scale* (Rosenberg, 1965), and *Social Interaction Anxiety Scale* (SIAS; Mattick & Clarke, 1989). The rating forms used in this study is included in Appendix C.

- 1) The Satisfaction with Life Scale (Diener et al., 1985) contains 5 statements that are designed to assess individual's global judgment of life satisfaction. SWLS can be incorporated with minimal cost in time. This questionnaire has been examined for both reliability and sensitivity. Diener et al. (1985) reported an internal reliability alpha of .87 for the scale and a test-retest stability coefficient of .82. Smead (1991) reported correlations of .44 between the SWLS and positive affect, and of -.48 between SWLS and negative affect.
- 2) The *Subjective Happiness Scale* (Kyubomirsky, 1997) contains 4 statements that measure the subjective happiness of the participants. The 4 statements are rated on 7-point scale. Each statement either consist absolute ratings or ratings relative to peers. The internal consistency ranges from .79 to .94, the test-retest reliability ranges from .55 to .90, and convergent validity ranges from .52 to .72.

- 3) The *Rosenberg Self-Esteem Scale* (Rosenberg, 1965) contains 10 statements that measures older adults' self-esteem and self-worth. Blascovinch and Tomaka (1991) stated that the Rosenberg Self-Esteem Scale is by far the most widely used questionnaire. The RSE also has received more psychometric analysis and empirical validation than any other self-esteem measure. Each question is rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). RSE indicated acceptable to high reliability. Ward (1977) have reported  $\alpha = .72$  for a sample of older adults.
- 4) The *Social Interaction Anxiety Scale* (Mattick & Clarke, 1989) contains 18 statements that measures social interaction anxiety, defined as extreme distress when initiating and maintain conversations with friends, strangers, or potential mates, among any population. Each question is rated on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Heimberg (1992) reported a reliability of .86 for the SIAS. The researcher also stated that SIAS has a high correlation with other measures of social interaction anxiety and demonstrated very good internal consistency and convergent validity. Since this test is used to determine a person's level of anxiety, statements are posed in the negative form such as "I get nervous if I have to speak with someone in authority". A score of 0 indicates "least anxious" and 6 indicates "mostly anxious."

# **CHAPTER IV**

# **RESULTS**

To determine the degree of relatedness among the four different rating scales, Pearson's correlation test was computed using the pretest scores for the four rating scales. The analysis of Pearson's correlation is shown in Table 3.

<u>Table 3: Correlation between the Rating Scales</u>

		The Satisfaction with Life Scale	Subjective Happiness	Rosenberg Self- Esteem Scale	Social Interaction
		(SLS)	Scale (SHS)	(RSS)	Anxiety Scale
					(SIAS)
SLS	Correlation <i>r</i>	1			
	Significance				
SHS	Correlation <i>r</i>	.58**	1		
	Significance	.00			
RSS	Correlation r	.42	.56**	1	
	Significance	.06	.00		
SIAS	Correlation r	08	31	56**	1
	Significance	.73	.18	.00	

<sup>\*</sup>*p* < .05 \*\* *p* < .01

There were significant correlations between Subjective Happiness Scale and The Satisfaction with Life Scale (p= .006), Subjective Happiness Scale and Rosenberg Self-Esteem Scale (p= .008), and Rosenberg Self-Esteem Scale and Social Interaction Anxiety Scale (p= .009) at the p < .01 level. The result of correlation between RSS and SIAS showed a negative relationship (r = -.56). It revealed negative relationship but a significant p value because SIAS is a test to examine the anxiety during social interactions and scores are reversely measured. Using this inverse measure, such rating scales of psychosocial well-being are significantly related at an alpha level of .01. Results indicated that the four rating scales were significantly related and thus, appropriate for the purpose of this study.

### **Data Analyses for Research Question One**

Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions?

In order to answer this research question, participants' pre- and posttests were analyzed. Both pretest and posttest scores of the 21 participants were analyzed using a paired *t*-test. As shown in Table 4, participants' mean scores on all four rating scales improved from pretest to posttest (decreased for the *Social Interaction Anxiety Scale*).

There were significant effects for participation in group music therapy sessions on their life satisfaction, self-esteem, and social interaction at the p < .05. Although there was no significant effect on their subjective happiness, the mean still increased from 5.51 to 5.93. Results of the analysis are included in Table 5, and the graph for the difference between pretest and posttests for all rating scales is displayed in Figure 1. The represented rating scales are as following: 1 - *The Satisfaction with Life Scale*, 2 - *Subjective Happiness Scale*, 3 - *Rosenberg Self-Esteem Scale*, and 4 - *Social Interaction Anxiety Scale*.

As shown in the result of *t*-tests, on three out of the four rating scales that were used to measure the psychosocial well-being of older adults living in assisted and independent living communities, data indicated group music therapy interventions significantly affected older adults by promoting increased levels of psychosocial well-being.

Table 4: Participants' Pretest and Posttest Results

	Pre	test	Pos	ttest
Category	M	S.D	M	S.D
The Satisfaction with Life Scale	4.82	1.41	5.50	1.24
Subjective Happiness Scale	5.51	1.11	5.93	1.19
Rosenberg Self-Esteem Scale	5.35	1.23	6.00	.68
Social Interaction Anxiety Scale+	2.65	.99	1.90	.60

<sup>+</sup>Social Interaction Anxiety Scale is a test to measure the anxiety; therefore, the test is negatively written and meant to be scored lower for the positive result.

Table 5: Results of Analysis of *t*-test

	t	df	p
The Satisfaction with Life Scale	-2.35	20	.03*
Subjective Happiness Scale	-1.34	20	.19
Rosenberg Self-Esteem Scale*	-2.24	20	.04*
Social Interaction Anxiety Scale*	3.45	20	.00**

<sup>\*</sup>p < .05 \*\*p < .01

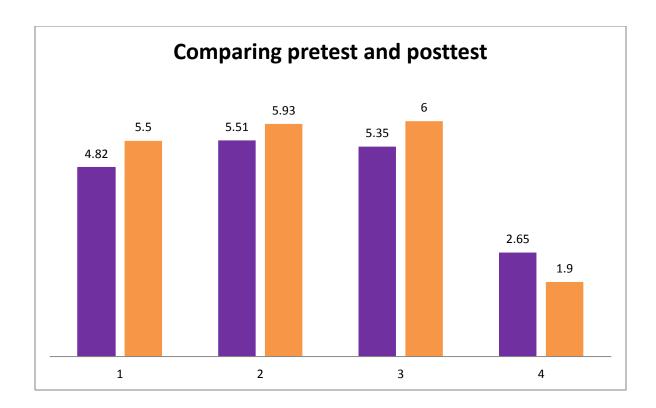


Figure 1. Compared scores of each rating scales between pretest and posttest (1 - *The Satisfaction with Life Scale*, 2 – *Subjective Happiness Scale*, 3 – *Rosenberg Self-Esteem Scale*, and 4 – *Social Interaction Anxiety Scale*).

*Summary response to research question #1.* 

These data analyses indicated that older adults living in independent and assisted living communities improved their levels of life satisfaction, self-esteem, and decreased level of social interaction anxiety after participating in group music therapy interventions.

### **Data Analyses for Research Question Two**

Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions based on participants' gender and age?

Prior to the study, each participant's basic demographic information was gathered. The data included participants' age and gender. For these analyses, participants' ages were coded with their age (from 62 to 92 years). Gender was coded with 0 and 1; 0 for male and 1 for female. To answer this research question, participants' demographic information was used to determine whether participants' demographic variables influenced their psychosocial well-being with a

logistic regression test. Since the number of participant was 21 and is considered to be a small number of samples; therefore, the researcher used p < .1 as the value used to determine significance. Results of the regression are included in Tables 6 through 9.

Results of pretest revealed that neither of the two demographic variables significantly influenced participants' scores on measures of psychosocial well-being; however, results of the posttest revealed that gender as a demographic variable did significantly influence participants' scores on two out of the four measures of psychosocial well-being. Gender had a significant influence on *Rosenberg Self-Esteem Scale* which indicate self-esteem (p=.08; p < .1) and on *Social Interaction Anxiety Scale* which indicate anxiety during social interaction (p= .03; p < .1).

Table 6: Regression of *The Satisfaction with Life Scale* 

Demography	Pretest				Post	test
	β	SE	P	ß	SE SE	E p
AGE	03	.04	.42	(	)5 .03	3 .11
GENDER	.42	.71	.58	5	.60	.33

Table 7: Regression of Subjective Happiness Scale

Demography	Pretest					Posttest	
	β	SE	P		β	SE	p
AGE	01	.03	.70	-	.02	.03	.38
GENDER	.27	.57	.66		.48	.57	.28

Table 8: Regression of Rosenberg Self-Esteem Scale

Demography	Pretest				Posttest	
	β	SE	P	β	SE	p
AGE	.00	.03	.94	01	.02	.77
GENDER	.51	.63	.45	.42	.32	.08*

<sup>\*</sup>*p* < .1

Table 9: Regression of Social Interaction Anxiety Scale

Demography	Pretest				Posttest	
	β	SE	P	β	SE	p
AGE	-,01	.03	.68	.01	.01	.72
GENDER	60	.50	.27	65	.27	.03**

<sup>\*\*</sup>p < .05

*Summary response to research question #2.* 

These data analyses may indicate that one's gender may be a significant factor when examining the influence of group music therapy interventions on older adults' self-esteem and social interaction anxiety. The data appear to indicate that women are more susceptible to the influence of group music therapy interventions on measures of self-esteem and social interaction anxiety than men.

### **Data Analyses for Research Question Three**

Is there a difference in older adults' psychosocial well-being after their participation in group music therapy intervention sessions based on participants' status of independence?

Data were analyzed base on participants' status of independence using a paired t-test. Results of pretests revealed no significant difference on participants' scores on their measures of psychosocial well-being at alpha level .05. Although scores of all measures of psychosocial well-being have increased (decreased for the *social interaction anxiety scale*) for all participants, results of posttest revealed significant difference on level of life satisfaction based on participants' status of independence. The result of t-test for participants' posttest on the *Satisfaction with Life Scale* indicated p = .02; p < .05. See Tables 10 through 13.

Table 10: Results of Pre- and Posttest for Participants Living in Independent Living Community

	Pretest	Posttest
Category	M	M
The Satisfaction with Life Scale	5.09	6.00
Subjective Happiness Scale	5.25	5.72
Rosenberg Self-Esteem Scale	5.02	5.92
Social Interaction Anxiety Scale+	2.84	1.98

<sup>+</sup>Social Interaction Anxiety Scale is a test to measure the anxiety; therefore, the test is negatively written and meant to be scored lower for the positive result.

Table 11: Results of Pre- and Posttest for Participants Living in Assisted Living Community

	Pretest	Posttest
Category	M	M
The Satisfaction with Life Scale	4.52	4.96
Subjective Happiness Scale	5.80	6.15
Rosenberg Self-Esteem Scale	5.75	6.10
Social Interaction Anxiety Scale+	2.44	1.82

<sup>+</sup>Social Interaction Anxiety Scale is a test to measure the anxiety; therefore, the test is negatively written and meant to be scored lower for the positive result.

<u>Table 12: Result of Analysis of *t*-test for Participants' Pretest Based on their Status of Independence</u>

	T	df	p
The Satisfaction with Life Scale	.92	19	.18
Subjective Happiness Scale	-1.15	19	.13
Rosenberg Self-Esteem Scale	-1.33	19	.09
Social Interaction Anxiety Scale	.93	19	.18

<u>Table 13: Results of Analysis of *t*-test for Participants' Posttest Based on their Status of Independence</u>

	t	df	p
The Satisfaction with Life Scale*	2.08	19	.02*
Subjective Happiness Scale	60	19	.28
Rosenberg Self-Esteem Scale	60	19	.28
Social Interaction Anxiety Scale	.59	19	.28

<sup>\*</sup>*p* < .05

Summary response to research question #3.

These data analyses may indicate that one's status of independence gender may be a significant factor when examining the influence of group music therapy interventions on older adults' life satisfaction. The data appear to indicate that individuals who are living independently are more susceptible to the influence of group music therapy interventions than individuals who are in assisted care.

### **CHAPTER V**

### **DISCUSSION**

The purpose of this study was to examine the effect of group music therapy interventions on the psychosocial well-being of older adults living in assisted and independent living communities. A secondary purpose of the study was to determine whether participants' age, gender, and status of independence would influence their susceptibility to music therapy interventions implemented to increase psychosocial well-being. Overall results revealed significant improvement from pre- to posttest on three out of the four rating scales used to measure psychosocial well-being. Data analyses using a paired t-test indicated significant increases in their level of life satisfaction, self-esteem, and decreases in the level of social interaction anxiety after the music therapy interventions. Although not significant, increases were also found in subjective happiness. Further analysis indicated that gender as a demographic variable did significantly influence participants' scores on two out of the four measure of psychosocial well-being. Final analyses indicated that one's status of independence may be a significant factor when examining the influence of group music therapy interventions on older adults' life satisfaction. In addition, participants' scores on *The Subjective Happiness Scale* showed the lowest gains from pretest to posttest, while scores on the Social Interaction Anxiety Scale yielded the greatest gains from pretest to posttest.

### **Relationship to Extant Literature**

The results of the present study bear resemblance to those of Matsuka et al (2004) who used wellness programs designed to teach older adults the importance of participation in meaningful social activities to improve their level of overall well-being. Results yielded from that study revealed significant increases in participants' scores on frequency of community participation and socialization after participation in the wellness program. Likewise, the participants in the present study scored higher on rating scales that were used to measure their

subjective happiness, life satisfaction, self-esteem, and social interaction after the weekly group music therapy interventions. They also verbalized their wish for more participation in wellness programs such as group music therapy interventions in the future.

Several studies have employed music as a tool to facilitate well-being and examined the importance of music and its contribution to older adults' quality of life (Hays, 2006; Laukka, 2007). Mitak (2011) reported that many older adults engage in non-formal musical opportunities such as church choirs, orchestras, and bands for their leisure time. The participants of the study indicated increased levels of well-being and also enhanced levels of physical energy after their participation. Others have also used music therapy interventions to determine the effect of music on elderly's physical and cognitive functioning, and other health-related behaviors (Coffman, 2002; Gregory, 2002; Tokiko & Takayoki, 2007). Their studies revealed that music evoked participants' emotion and prompted their memories and images that were associated with the musical stimuli.

Many music therapists have used various musical activities as therapeutic interventions in working with older adults. Adamek et al. (2000) reported using music-making activities to promote memory retention and also delay certain kinds of neurologic losses for older adults. In addition, Hamburg and Clair (2003) reported that playing musical instruments improved gross and fine motor coordination in individuals with motor impairments or neurological trauma related to strokes or head injuries. Their studies also indicated that singing exercises are often exploited to facilitate speech reconstruction in rehabilitation settings with older patients.

Moreover, dancing or moving to music activities are reported to increase gross motor coordination in working with older patients.

While the present study utilized a similar style of music therapy interventions of those cited above, it focused attention on the participants' psychosocial well-being in the context of older adults living in independent and assisted living communities. As shown from the results of the present study, music therapy was effective in improving the psychosocial well-being of older adults living in independent and assisted living communities. The group music therapy interventions provided participants with opportunities for meaningful interactions with peers and the researcher. After the conclusion of this study, participants reported feeling less isolated and better able to express their emotional needs.

### **Limitations of the Present Study**

Several factors may have influenced the process and the results of the present study. These factors include sample size, frequency of intervention, and participants' absence at sessions. Though originally intended for individuals with no dementia, the study was opened up to any individuals living in the assisted and independent living communities who returned consent forms. As such, among those who returned consent forms were older adults who exhibited significant memory issues. The study was intended to have approximately 25 to 30 participants, 12-15 from each community; however, sample size was only 21 from both places. Some potential participants who came to the first session did not want to sign the consent forms; for others, conflicts with schedules prevented participation. The researcher only used data from participants who attended all eight sessions.

Another factor that may have influenced the study is the frequency of music therapy sessions. As the intervention was held once a week, participants' level of psychosocial well-being may have been different each week. Also, it is possible that some other non-musical factors such as sickness or death in family may have influenced participants' psychosocial well-being between each music therapy sessions. Moreover, with their activity calendars, some older adults occasionally had difficulty remembering time of the sessions, and some participants also reported that they could not remember the songs that were covered at the last session. Future researchers might consider scheduling the intervention more frequently, possibly twice a week, to get a more accurate representation of the effect of group music therapy on older adult's psychosocial well-being. Such dense scheduling of sessions may also be more convenient and easier for older adults to remember and participate.

Since the study was held in group settings in independent and assisted living communities, the schedule of the present study was hard to satisfy every participant. The researcher frequently had to check on the activity directors of each community about their weekly and monthly schedule to ensure the study was scheduled at a right time for a right date with no conflicts with other activities. Nevertheless, one of the independent and assisted living communities changed their monthly schedule by moving their shuttle time for shopping at Wal-Mart approximately an hour before this intervention began. This led to some conflict with some of the participants who had to go to Wal-Mart every week. Moreover, some participants missed a few sessions for a several other reasons such as forgetting, taking a nap, and having a bad day.

### **Suggestions for Future Research**

Three out of four rating scales used to measure older adults' psychosocial well-being showed significant effect on older adults' psychosocial well-being after the eight weeks of group music therapy interventions. Though there were increases on scores from pretest to posttest, the measure of subjective happiness did not indicate significant increases. The Subjective Happiness Scale (SHS) used in the present study was the simplest and the most concise test among the four rating scales. It contains only four questions to determine the level of subjective happiness of each participant. For future research, another rating scale about subjective happiness can be used with the SHS to yield more accurate results on participants' level of subjective happiness. Also, future studies may consider replacing this rating scale with another one.

Having an assistant music therapist or a co-researcher would be helpful for any group music therapy interventions, especially ones involving older adults as a group. Giving individual attention to each participant, handing out music sheets at the beginning of the sessions, and contacting with activity directors from each community are some tasks that can possibly be shared with assistants. For the present study, several assistants volunteered to come during the pre- and posttest sessions to help older adults who would have questions about any of the rating scales. They also aided the researcher by handing out forms, passing out the pencils, and collecting data. Future studies may consider using this opportunity more often to help participants to feel they are getting more individualized attention and receiving care for their needs during the interventions. Videotaping the sessions and analyzing those afterward would be a possible research tool for future studies. This type of visual data can help researcher have better understanding of how older participants increased their involvement and engagement in group music therapy sessions as time passed.

Another suggestion for future studies would be to measure the psychosocial well-being of older adults living at home or with their families. This would allow comparing older adults from two different environments and examining the results on their psychosocial well-being. Future studies may also use control group and experimental group instead of using only one group.

### **Conclusions**

As older adults are living longer and moving in to independent and assisted living communities more frequently, these community members and their caretakers need societal support. Previous studies have concluded music to be an effective intervention tool and a positive resource for promoting older adults' physical, psychological, and social well-being. The use of music to facilitate lifelong learning has also encouraged older adults to participate and socialize. Results of the present study suggested that group music therapy sessions promote increased psychosocial well-being for older adults who are living in independent and assisted living communities. Group music therapy interventions for older adults living in independent and assisted living communities can be valuable therapeutic tools for geriatric music therapists when working with older adults with diminished levels of psychosocial well-being.

# **APPENDIX A**

# **SONG LISTS**

Song	List	S
Bullg	LIST	D

1. Amazing Grace Traditional Hymn

2. Blowing in the Wind by Bob Dylan

3. Can't Help Falling in Love by Elvis Presley

4. Chattanooga Choo Choo by Glenn Miller

5. Crazy by Willie Nelson and Patsy Cline

6. Don't Sit Under the Apple Tree by Glenn Miller;

the Anderews Sisters

7. Edelweiss Showtune, *the Sound of Music* 

8. Five Foot Two by Ray Handerson

9. Forever Young by Bob Dylan

10. Heart of Gold by Neil Young

11. I'll Fly Away Gospel

12. It Had to Be You by Gus Kahn and Isham Jones

13. I've Been Working on the Railroad American folk song

14. I Walk the Line by Johnny Cash

15. Let it Be by John Lennon

16. L-O-V-E by Nat King Cole

17. My Girl by Smokey Robinson & Ronald White;

The Temptations

18. Somewhere Over the Rainbow by Harold Arlen & E.Y. Harburg;

Judy Garland; *The Wizard of the Oz* 

19. This Little Light of Mine Gospel

20. Tennessee Waltz by Anne Murray

21. Your Cheatin' Heart by Hank Williams

# **APPENDIX B**

# **SESSION PLANS**

# **Session Plan**

### Week 1

- Intro/orientation
- Consent form
  - read it out loud and explain anything sounds complicated
  - -inform that the research is no harm
- Pretest
  - -give out the pencils and the tests
  - -research and assistants will go around the room and help anyone in needs
- Thank them

- Share the list of songs on the tri-fold board
  - -have them pick out their favorite songs
- Sing a few songs TOGETHER the participants choose
- Life review
  - -(where are they from, what they have done, children, parents,....)
- Sing a few songs that they want to listen to
- Life review
  - -(what do you think about the song? Lyrics? Melody?)

### Week 3

- I pick a few songs for the day
  - -bring song sheets, guitar, and a music stand
- Hello song
- Sing TOGETHER
  - -"Can't Help Falling in Love", "Crazy", "Edelweiss", and "Let it Be"
- Lyric analysis on each songs
- Give participants some info about the song
  - -(year, writer, singer, intention...)
- Talk about the lyrics again
  - -(anything different after knowing about the songs?)

- Bring CD
- Hello Song
- Sing TOGETHER
  - -"Amazing Grace", "Forever Young", and "I'll Fly Away"
- Play "Macarena" and conduct a Music-assisted Movement (sitting or standing)
- Sing "Heart of Gold" and "It Had to Be You".
  - -Participants will listen and rest

### Week 5

- Bring CD
- Start the session with some stretching exercises
  - -start with arms, shoulder, neck, and face
- Sing TOGETHER
  - -"Blowing in the Wind", "Chattanooga Choo Choo", "Can't Help Falling in Love",
  - "Five Foot Two", and "It Had to Be You"
- Share life stories and do Lyric Analysis
- Music-assisted Movement

- Hello song
- Start the session with some stretching exercises and greetings with each other
- Sing TOGETHER
  - -"L-O-V-E", "Somewhere Over the Rainbow", "This Little Light of Mine", "I Walk the Line".
- Sing "Tennessee Waltz", "Blowing in the Wind", "Forever Young"
- Life review/reminiscence
  - -talk about their hometown and how their parents have worked for them
  - -share what participants wanted to be when they were younger

### Week 7

- Bring song board and CD
- Start with some stretching exercises
- Participants may choose songs on the song board
- Sing TOGETHER
- Music-assisted Movement (2 activities)
- Sing a few songs that participants would like to listen to
- Anything they want to say for the last session
- "next week" is important

- Celebration
- Thank them again
- Posttest
  - -hand out pencils and papers
  - -researcher and assistants will go around the room

# **APPENDIX C**

# RATING SCALE QUESTIONNAIRES

### Rosenberg Self-Esteem Scale (Rosenberg, 1965) DATE: NAME: The scale is a ten item Likert-scale with items answered on a seven point scale- from strongly disagree to strongly agree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State. **Instruction**: Below is a list of statements dealing with your general feelings about yourself. 1= Strongly Disagree 2= Disagree 3= Slightly Disagree 4= Neither Disagree or Agree 5=Slightly Agree 6= Agree 7=Strongly Agree 1. On the whole, I am satisfied with myself. 2. \*At times, I think I am no good at all. 3. I feel that I have a number of good qualities. 4. I am able to do things as well as most other people. 5.\* I feel I do not have much to be proud of. 6.\* I certainly feel useless at times. 7. I feel that I'm a person of worth, at least on an equal plane with others. 8.\* I wish I could have more respect for myself. 9.\* All in all, I am inclined to feel that I am a failure. 10. I take a positive attitude toward myself.

<sup>\*</sup>Items with asterisk are reverse scored.

### **Social Interaction Anxiety Scale (SIAS)**

NAME:	DATE
-------	------

**Instruction:** For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follow:

1= Strongly Disagree 2= Disagree

3= Slightly Disagree

4= Slightly Agree

5= Agree

6= Strongly Agree

6- Strongly Agree Characteristic	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1. I get nervous if I have to speak with	1	2	3	4	5	6
someone in authority (teacher, boss, etc.)						
2. I have difficulty making eye contact with	1	2	3	4	5	6
others.						
3. I become tense if I have to talk about	1	2	3	4	5	6
myself or my feelings.						
4. I find it difficult to mix comfortably with	1	2	3	4	5	6
the people I work with						
5. I tense up if I meet an acquaintance in the	1	2	3	4	5	6
street.						
6. When mixing socially, I am uncomfortable.	1	2	3	4	5	6
7. I feel tense if I am alone with just one other	1	2	3	4	5	6
person.						
8. I have difficulty talking with other people.	1	2	3	4	5	6
9. I worry about expressing myself in case I	1	2	3	4	5	6
appear awkward						
10. I find it difficult to disagree with another's	1	2	3	4	5	6
point of view.						
11. I have difficulty talking to attractive	1	2	3	4	5	6
persons of the opposite sex.						
12. I find myself worrying that I won't know	1	2	3	4	5	6
what to say in social situations.						
13. I am nervous mixing with people I don't	1	2	3	4	5	6
know well.						
14. I feel I'll say something embarrassing	1	2	3	4	5	6
when talking.						
15. When mixing in a group, I find myself	1	2	3	4	5	6
worrying I will be ignored.						
14. I am tense mixing in a group.	1	2	3	4	5	6
15. I am unsure whether to greet someone I	1	2	3	4	5	6
know only slightly.						
16. I find it difficult to disagree with another's	1	2	3	4	5	6
point of view.						

# The Satisfaction with Life Scale

By Ed Diener, Ph.D.

DIRECTIONS: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = Neither Agree or Disagree 5 = Slightly Agree 6 = Agree 7 = Strongly Agree
1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

# **Subjective Happiness Scale (SHS)**

By Sonja Lyubomirsky, Ph.D.

For each of the following statements and/or questions, please circle the point on the scale that you feel is most appropriate in describing you.

1. In general, I consider myself:

1	2	3	4	5	6	7
not a very						a very
happy						happy
person						person

2. Compared to most of my peers, I consider myself:

1	2	3	4	5	6	7
less						more
happy						happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?

1	2	3	4	5	6	7
not at						a great
all						deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?

```
1 2 3 4 5 6 7
not at a great
all deal
```

Note: Item #4 is reverse coded.

# APPENDIX D

# APPROVAL FORMS AND CONSENT FORM

Office of the Vice President For Research Human Subjects Committee Tallahassee, Florida 32306-2742 (850) 644-8673 · FAX (850) 644-4392

### APPROVAL MEMORANDUM

Date: 3/15/2012

To: You Lee Sun

Dept.: MUSIC SCHOOL

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research

The Effect of Music Therapy Interventions to Increase the Psychosocial Well-being of Older Adults Living in Independent and Assisted Living Communities.

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and one member of the Human Subjects Committee. Your project is determined to be Expedited per per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 3/13/2013 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is FWA00000168/IRB number IRB00000446.

Cc: Alice-Ann Darrow, Advisor

HSC No. 2012.7760



February 1, 2012

To: The Florida State University Human Subjects Review Committee

Re: Research Participation

I, our staff, and selected residents eagerly anticipate participation in the study, "The Effect of Music Therapy Interventions to Increase the Psychosocial Well-being of Older Adults Living in Independent and Assisted Living Communities" conducted by You Lee Sun at the Florida State University College of Music.

I understand the responsibilities of my facility's participation in this study and eagerly await your committee's approval.

Sincerely,



301 East Carolina Street, Tallahassee, FL 32301 850-224-8021 • Fax 850-222-0151 • www.WestminsterRetirement.com

February 7, 2012

To: The Florida State University Human Subjects Review Committee

Re: Research Participation

I, our staff, and selected residents eagerly anticipate participation in the study, "The Effect of Music Therapy Interventions to Increase the Psychosocial Well-being of Older Adults Living in Independent and Assisted Living Communities" conducted by You Lee Sun at the Florida State University College of Music. I understand the responsibilities of my facility's cooperation with this study by helping our residents to participate in this voluntary study. We eagerly await your committee's approval.

Sincerely,

Regional Director



One of the Westminster Communities of Florida

Bradenton, Ft. Laudendale, Ft. Walton Beach, Jacksonville, Orlando, Pensacola, St. Petersburg, Tallahausee, Winter Park



### **Consent Form**

You are invited to be in a research study entitled "The Effect of Music Therapy Interventions to Increase the Psychosocial Well-being of Older Adults Living in Independent and Assisted Living Communities." You were selected as a possible participant because you volunteered to participate in this study. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by You Lee Sun, a graduate student in the College of Music at Florida State University.

### **Background Information:**

The purpose of this study is to determine if participation in a music therapy sessions with interventions (listening to music, singing songs, playing small instruments, analyzing song lyrics, and moving to music) influences the psychosocial well-being of older adults living in independent or assisted living communities. You will be asked a series of questions about your well-being three times during this project.

### **Procedure:**

If you agree to be in this study, you will participate in music therapy sessions. The total time commitment will be about 30 to 45 minutes one time per week for 12 weeks, in which you will be encouraged to participate in any of music activities. The sessions will not be videotaped or recorded.

### Risks and benefits of being in the Study:

The study has almost no risk involve if you agree to participate. The music sessions will occur during the day. The benefits to participation are engaging in weekly music therapy activities in group setting. Also, your participation and answers on the questionnaires will help examining the psychosocial well-being of older adults living in independent and assisted living communities.

### Confidentiality:

The records of this study will be kept private and confidential to the extent permitted by law. In any sort of report I might publish, I will not include any information that will make it possible to identify a participant. Research records will be stored securely and only researcher will have access to the records.

### Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University or your community. If you decide not to participate, you are free to not answer any questions or withdraw at any time without affecting those relationships.

FSU Human Subjects Committee Approved on 3/14/2012. Void after 3/13/2013. HSC # 2012.7760

### Contact:

The researcher conducting this study is Youlee Sun. You may ask any questions you have now. If you have a question later, you are encouraged to contact her at 919-760-9283, <a href="mailto:yls08@my.fsu.edu">yls08@my.fsu.edu</a>, or Alice-Ann Darrow at 850-645-1438, aadarrow@fsu.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-8633, or by email at jjcoper@fsu.edu.

You will be given a copy of this information to keep for your records.

# Statement of Consent: I have read the above information. I have asked questions and have received answers. I consent in participate in the study. Signature Date

FSU Human Subjects Committee Approved on 3/14/2012. Void after 3/13/2013. HSC # 2012.7760

# **APPENDIX E**

# RECRUITING MATERIAL





# **Music Therapy**

Ву

Youlee Sun,

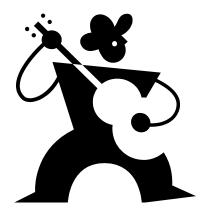
a Graduate Student at FSU.

Starting April 13 and ending in June.

Once a week on Fridays for 30 minutes

Various musical activities in a group setting

If interested, please sign up at front desk Hope to see you all!!







# **Music Therapy**

By

Youlee Sun,

a Graduate Student at FSU. Is holding a

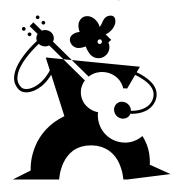
# LAST DAY CELEBRATION

ON 6/01/12 @ 2:30 pm

PLEASE Come and Enjoy the Music and Some Goodies!!

She will miss you.

Hope to see you all!!



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### **BIOGRAPHICAL SKETCH**

Youlee Sun was born in Seoul, South Korea, and came to the United States when she was 15 years old. She began playing piano at age of six, and later added voice and guitar while in high school. She participated in various choral programs and other musical activities throughout school years in both high school and college. Youlee Sun completed her Bachelor of Music in Music Therapy from Florida State University in 2011. She had a 6-month internship at Big Bend Hospice in Tallahassee, FL. She is currently finishing up her Master's degree in Music Therapy from FSU.