

# Florida State University Libraries

---

Electronic Theses, Treatises and Dissertations

The Graduate School

---

2013

## The Status of Music Therapy in Florida Nursing Homes and Assisted Living Facilities

Maria Greco



THE FLORIDA STATE UNIVERSITY

COLLEGE OF MUSIC

THE STATUS OF MUSIC THERAPY IN FLORIDA  
NURSING HOMES AND ASSISTED LIVING FACILITIES

By

MARIA GRECO

A Thesis submitted to the  
College of Music  
in partial fulfillment of the  
requirements for the degree of  
Master of Music

Degree Awarded:  
Spring Semester, 2013

Copyright © 2013  
Maria Greco  
All Rights Reserved

Maria Greco defended this thesis on April 1, 2013.

The members of the supervisory committee were:

Kimberly VanWeelden  
Professor Directing Thesis

Jayne Standley  
Committee Member

Dianne Gregory  
Committee Member

Alice-Ann Darrow  
Committee Member

The Graduate School has verified and approved the above-named committee members, and certifies that the thesis has been approved in accordance with university requirements.

## **ACKNOWLEDGEMENTS**

I would like to give special thanks to Dr. Kimberly VanWeelden for the giving of her precious time, guidance, support, and knowledge of research. I will be forever grateful for her dedication and patience through the entire process and writing of this thesis. I would also like to thank Dr. Jayne Standley, Professor Diane Gregory, and Dr. Alice-Ann Darrow for their support in this process and the knowledge they have instilled in me to become a successful professional. Lastly, I give the utmost thanks to my family and friends for their encouragement and prayers throughout this challenging but rewarding journey.

# TABLE OF CONTENTS

List of Tables .....	vi
Abstract .....	vii
1. INTRODUCTION.....	1
Overview of Assisted Living Facilities.....	1
Overview of Nursing Homes .....	1
Services Offered to Residents.....	2
Defining the Elderly.....	3
Elderly Population Expanding .....	3
Preparing for the Demand of Services .....	4
Purpose.....	5
Research Questions .....	5
Operational Definitions.....	6
2. REVIEW OF LITERATURE.....	9
Healthcare .....	9
Insurance and Reimbursement.....	10
Overview of Common Therapies in Facilities .....	12
Physical Therapy.....	12
Speech Therapy.....	13
Occupational Therapy .....	14
Recreational Therapy .....	15
Overview of Additional Therapies.....	17
Respiratory Therapy.....	17
Art Therapy .....	18
Dance Therapy .....	18
Pet Therapy .....	19
Music Therapy .....	20
Music Therapy Research and the Elderly .....	21
3. METHODOLOGY.....	24
Dependent Measure .....	24
Procedure .....	26
4. RESULTS.....	27

Data Analysis .....	28
Research Question 1 .....	28
Research Question 2 .....	29
Research Question 3 .....	30
Research Question 4 .....	31
Research Question 5 .....	32
Research Question 6 .....	33
Research Question 7 .....	35
Facilities with music therapy .....	35
Facilities without music therapy .....	35
Research Question 8 .....	36
Facilities with music therapy .....	36
Facilities without music therapy .....	37
Research Question 9 .....	39
5. DISCUSSION.....	41
Individual Research Questions .....	42
Research Question 1 .....	42
Research Question 2 .....	43
Research Question 3 .....	44
Research Question 4 .....	45
Research Question 5 .....	46
Research Question 6 .....	47
Research Question 7 .....	47
Facilities with music therapy .....	47
Facilities without music therapy .....	48
Research Question 8 .....	49
Facilities with music therapy .....	49
Facilities without music therapy .....	49
Research Question 9 .....	50
APPENDICES	
A INTRODUCTORY EMAIL .....	52
B LETTER OF CONSENT .....	53
C SURVEY.....	54
D REMINDER EMAIL.....	64
E FLORIDA STATE UNIVERSITY IRB APPROVAL.....	65
REFERENCES .....	66
BIOGRAPHICAL SKETCH .....	72

## LIST OF TABLES

Table 1: Position Titles of Music Therapist by Facilities .....	29
Table 2: Types of Sessions Music Therapist Provide in Facilities by Sums and Percentages .....	30
Table 3: Therapies Utilized by Residents of Nursing Homes and Assisted Living Facilities by Mean Order .....	31
Table 4: Therapies Ordered by Physician's for Residents of Nursing Homes and Assisted Living Facilities by Mean Order .....	33
Table 5: Therapies Provided on a Contractual Basis in Nursing Homes and Assisted Living Facilities by Mean Order .....	34
Table 6: Facilities with Music Performers/Volunteers and Music Making with Residents by Sums and Percentages.....	35
Table 7: Opinions of Music Therapy's Legitimacy by Facility Type .....	39
Table 8: Therapies Most Preferred by Administrators to Obtain for their Facility by Mean Order .....	40

## **ABSTRACT**

The purpose of this study was to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida. The researcher specifically sought to determine how many nursing homes and assisted living facilities surveyed in Florida offer music therapy, position titles of music therapists at each facility, how music therapy is offered, how often each therapy is utilized, ordered by physicians, and contracted for services, if facilities have music performers/volunteers, the opinion of music therapy's legitimacy by participants, and the most preferred therapy participants would like to obtain for their facility. The results revealed that only 26% of the nursing homes and 37% of assisted living facilities surveyed provided music therapy. In nursing homes, music therapy was the sixth most often utilized out of nine therapies listed on the survey. However, music therapy was the second most utilized therapy by residents of the assisted living facilities. In both nursing homes and assisted living facilities, music therapy was rated as the sixth most often physician-ordered therapy. All of the administrators of nursing homes with music therapy, most administrators of nursing homes without music therapy, and most assisted living facilities with and without music therapy said they believe music therapy is a legitimate therapy for their residents. Music therapy was indicated as the third most preferred therapy to acquire for nursing homes and the second most preferred therapy for assisted living facilities.

# **CHAPTER ONE**

## **INTRODUCTION**

### **Overview of Assisted Living Facilities**

Nursing homes and assisted living facilities are places that provide services for individuals who seek and require quality care. Assisted living facilities “provide a combination of housing, personalized supportive services and health care designed to meet the needs of people who require assistance with the activities of daily living” (“Assisted Living and Nursing Home”, n.d., para. 11). People who usually live in assisted living facilities are elderly individuals who have a slight decline in health and desire a social environment with little responsibility (“What is Assisted Living?”, 2011). According to the National Center for Assisted Living (Resident Profile, n.d.), residents need help with approximately one to two activities of daily living which may include bathing, dressing, toileting, transferring, eating, and managing medications. Residents of assisted living facilities can have as much independence as they want and have access to services and assistance as needed (What is Assisted Living?, 2011). This type of facility is seen as a way to bridge the gap between independent living and nursing homes (Day, 2013).

### **Overview of Nursing Homes**

Nursing homes are long-term care facilities that offer regular medical supervision, therapy, and assistance (“Assisted Living and Nursing Home”, n.d.). Residents typically rely on assistance with most or all activities of daily living (“Assisted Living and Nursing Home”, n.d.) and need a higher level of care than those who live in assisted living facilities. There are two types of residents in nursing homes. The first are the short-term patients who need rehabilitation

for injuries, illnesses, or postoperative care. A nursing home provides a cost-effective way for the patients to recover in a setting other than a hospital (Day, 2013). The second type of individuals who live in nursing homes are considered long-term patients, which mean “they will never recover or stabilize to the point where they can take care of themselves and go back home” (Day, 2013, para. 4). Unlike assisted living facilities, nursing homes may provide 24-hour skilled nursing care and medical supervision to residents who require it (“Assisted Living and Nursing Home”, n.d.).

### **Services Offered to Residents**

There are a number of services offered to residents in assisted living facilities which may include meals, housekeeping, transportation, exercise programs, assistance with laundry, and social activities. Some facilities may also have access to health and medical services (“Assisted Living and Nursing Home”, n.d.). Differences exist across facilities but some assisted living facilities also provide on-site therapies for residents (“Assisted Living Facilities”, 2013). If the facility does not provide therapy themselves then some facilities will contract home health agencies for direct services (“The Basics”, 2012). Like assisted living facilities, nursing homes may offer many of the same services but at a much higher intensity. Residents of nursing homes are provided with around the clock care for assistance with most activities of daily living and to maintain their safety. Another difference between nursing homes and assisted living facilities is that nursing homes typically offer more complex medical services since many of the residents have had surgery, a severe illness, or an injury. The most common services provided in nursing homes include a licensed nurse, physical therapy, occupational therapy, and speech therapy (“Skilled Nursing Care”, 2011).

## **Defining the Elderly**

In the United States, the term “elderly” is generally defined by chronological age. For example, the United States government considers individuals 65 years old and over as elderly, which is when one is eligible to start receiving benefits such as Social Security and Medicare (OpenStax College, 2012). The AARP (formerly known as the American Association of Retired Persons) also classifies people 50 years old and over as eligible for membership. Due to the wide range of people encompassing this group and increasing life expectancy, it is helpful to categorize the elderly into subgroups. According to the U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics (2007) and OpenStax College (2012), there are three subgroups of the elderly population, which include: the “young-old” (ages 65-74), “middle-old” (ages 75-84), and “old-old” (85 and older). These sub-populations are useful when discussing the elderly.

## **Elderly Population is Expanding**

Both nursing homes and assisted living facilities primarily house and provide care for the elderly population. Currently, over 90% of nursing home residents are 65 years old or older and nearly half are over 85 years of age (“Today’s Nursing Homes”, 2013). In 2009, the average age of those living in assisted living facilities was 86.9 years old (“Resident Profile”, n.d.). According to Johnson (2007), the demand for long-term care services and supports to the elderly will surge in the coming decades. One reason the older population is expanding is because life expectancy in the United States has been increasing over the last decade due to better nutrition, safety, and medical care (*Center for Health Workforce Studies*, 2006; Parker-Pope, 2009). Parker-Pope (2009) indicated it has risen from 76.5 years in 1997 to 77.9 years in 2007. Because of this increase in life expectancy, the “old-old” (individuals over the age of 85) population is

expected to grow 377% by 2050, which means the demand for health care services will multiply since they require more care (*Center for Health Workforce Studies*, 2006). A report from the U.S. Administration on Aging states that “in 2050, the number of Americans aged 65 and older are projected to be 88.5 million, more than double its projected population of 40.2 million in 2010” (Vincent & Velkoff, 2010, p. 1). The older population’s growth will also be largely due to the aging baby boomers (those born between 1946 and 1964) as many are set to retire in the next couple of decades (Vincent & Velkoff, 2010). As of 2008, “there were 78 million baby boomers, making up 26% of the U.S. population, according to the U.S. Census Bureau. The baby boomers will soon make up the largest group of consumers for long term services and supports” (Magan, 2011, para. 7).

### **Preparing for the Demand of Services**

“The expected growth of the older adult population in the U.S. over the next 50 years will have an unprecedented impact on the U.S. health care system, especially in terms of supply of and demand for health care workers” (*Center for Health Workforce Studies*, 2006, p. 2). The make up of long-term care settings may change substantially in the coming decades to meet the demands of the aging population. “New opportunities will develop for health care personnel in settings in which they are not currently well-represented” (*Center for Health Workforce Studies*, 2006, p. 8). Employment in assisted living facilities and nursing homes is also expected to rise in the next 10 years (*Center for Health Workforce Studies*, 2006). It seems that healthcare professionals and facilities will be challenged in the near future to meet the demand for services provided to the older generation and may need to prepare for what is to come.

## **Purpose**

The purpose of this study was to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida. The research questions of this study were as follows:

## **Research Questions**

Of those surveyed:

1. How many nursing homes and assisted living facilities in Florida offer music therapy?
2. What is the position title of the music therapist at each facility?
3. How is music therapy offered (i.e. group, individual, co-treating) in nursing homes and assisted living facilities in Florida?
4. How often do residents utilize specific therapies including music therapy?
5. How often do physicians order specific therapies including music therapy?
6. How often are therapies contracted for services including music therapy?
7. Do facilities have music performers and if so, do the musicians allow residents to make music with them?
8. Do administrators think that music therapy is or would be a legitimate therapy for the residents of their facility?
9. Concerning the facilities without music therapy, which therapy would administrators most prefer to obtain for their facility?

## **Operational Definitions**

The following are the operational definitions used for this study:

**Assisted Living Facilities** - “provide a combination of housing, personalized supportive services and health care designed to meet the needs of people who require assistance with the activities of daily living” (“Assisted Living and Nursing Home”, n.d., para. 11). All facilities were licensed, active, had administrative personnel, and were located in Florida. Facilities were excluded if they were listed as both an assisted living facility and a nursing home.

**Nursing Homes** - are long-term care facilities that offer regular medical supervision, therapy, and assistance. Residents typically rely on assistance with most or all activities of daily living and need a higher level of care than those who live in assisted living facilities (“Assisted Living and Nursing Home”, n.d.). All facilities were licensed, active, had administrative personnel, and were located in Florida. Facilities were excluded if they were listed as both an assisted living facility and a nursing home.

**Assisted Living Facility Administrator** – “Assisted living administrators manage, outline and coordinate services geared toward older adults who may require assistance with eating, bathing, taking medication and other basic functions. They oversee the day-to-day operations of the assisted living facilities and ensure that all staff are providing the best service possible” (“Certified Assisted Living Administrator”, 2013).

**Nursing Home Administrator** – “Nursing Home Administrators work to supervise clinical and administrative affairs of nursing homes and related facilities. Typical duties of Nursing Home Administrators include overseeing staff and personnel, financial matters, medical care, and medical supplies” (“Nursing Home Administrator”, 2013).

**Physical Therapy** – “therapy for the preservation, enhancement, or restoration of movement and physical function impaired or threatened by disability, injury, or disease that utilizes therapeutic exercise, physical modalities (as massage and electrotherapy), assistive devices, and patient education and training” (Physical therapy, n.d.).

**Speech Therapy** - The treatment of speech and communication disorders. It may include physical exercises to strengthen the muscles used in speech (oral-motor work), speech drills to improve clarity, or sound production practice to improve articulation” (Speech therapy, 2013).

**Occupational Therapy** – “therapeutic use of self-care, work, and recreational activities to increase independent function, enhance development, and prevent disability; may include adaptation of tasks or environment to achieve maximum independence and optimal quality of life” (Occupational therapy, 2013)

**Recreational Therapy** - "Therapy based on engagement in recreational activities especially to enhance the functioning, independence, and well-being of individuals affected with a disabling condition" (Recreational therapy, n.d.)

**Music Therapy** - An established health profession in which the clinical and evidence-based use of music and music activities address and seek to accomplish individualized goals and objectives within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program and undergone training in multiple populations and settings (American Music Therapy Association, 2005)

**Respiratory Therapy** – “The treatment or management of acute and chronic breathing disorders, as through the use of respirators or the administration of medication in aerosol form” (Respiratory therapy, 2000).

**Art Therapy** – “the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art” (American Art Therapy Association, 2013, para. 3).

**Dance Therapy** – “psychotherapeutic use of movement to further the emotional, cognitive, and social integration of the individual” (American Dance Therapy Association, n.d., para. 1).

**Pet Therapy** – “A goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. It is designed to promote improvement in human physical, social, emotional, and/or cognitive functioning” (Pet Partners, 2012, para. 1).

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

As the elderly population ages they require more care due to injuries and illnesses. A number of therapies are provided in places such as nursing homes and assisted living facilities that offer treatment and the opportunity to rehabilitate from age-related issues. However, there are many factors that influence the care being given to residents in nursing homes and assisted living facilities. Some therapies are more easily accessed than others due to reimbursement and funding while others are not. With the changes in government policy, all therapies, including music therapy, may be helpful in providing care to the increasing numbers of elderly.

#### **Healthcare**

The Affordable Care Act (ACA) is a bill that directly affects nursing homes and assisted living facilities. As professionals try to predict the impact of the ACA on the elderly and long-term facilities, some fully support it while others do not ((Iglehart, 2012; Kaplan, 2011). Recently, there have been many budget cuts to nursing homes and long-term facilities across the United States (Alliance for Quality Nursing Home Care, 2013; Morrow, 2011). The government is decreasing the amount of funds available to long-term care facilities for both Medicaid and Medicare by a significant amount (Morrow, 2011). According to the Alliance for Quality Nursing Home Care (2013), there will be a total of \$783 million in cuts nation-wide with Florida nursing homes losing \$66 million, the second largest amount of cuts in the United States. In Florida, the sequestration may lead to cutting staff positions and ultimately reducing the quality of care for residents (Morrow, 2011). In addition, there will be an overwhelming increase in the amount of people eligible for Medicaid if the bill is fully implemented. Because of this increase

in spending on Medicaid it may lead many states to reduce payments to hospitals and nursing homes to help reduce the budget deficits (Iglehart, 2012). The ACA may also have some detrimental effects on access to music therapy services due to cuts in Medicare and funds provided to facilities (Tague, 2013). However, there are also some benefits of the ACA for long-term care facilities, which include the expansion of information available to the public about nursing homes such as staffing data, a summary of complaints about the facility, and criminal violations (Kaplan, 2011). This additional information will be beneficial to individuals selecting nursing homes. Further research is needed to examine how the Affordable Care Act will affect the services offered to the elderly in the coming years.

### **Insurance and Reimbursement**

In many states, therapies such as physical therapy and speech therapy do not require a physician's order for the therapist to begin services (American Physical Therapy Association, 2012; American Speech-Language-Hearing Association, 2013). According to the American Speech-Language-Hearing Association (2013), speech therapists are not required to retrieve a physician's order to administer therapy. Although there are states where direct access to physical therapists is an option, which means no physician's order is required to start services, most states do require a physician's order in the U. S. (American Physical Therapy Association, 2012). Medicaid, Medicare, and most insurance companies also request a physician's order for these therapies in order to obtain reimbursement for their services to clients (Do I need a referral?, 2012) .

The field of music therapy is on its way towards making reimbursement common practice and has already had some success in this area (American Music Therapy Association, 2011). The American Music Therapy Association (AMTA) "estimates that approximately 20% of music

therapists receive third party reimbursement for the services they provide” (AMTA, 2011, para. 4). Music therapy can be compared to other health professions, like occupational therapy and physical therapy, in that assessments are provided on an individual basis for each client, the “service must be found reasonable and necessary for the individual’s illness or injury and interventions include a goal-directed documented treatment plan” (AMTA, 2011, para. 5). Insurance companies including Blue Cross Blue Shield and Cigna have paid for services given by music therapists. Similar to other therapies, music therapy services are reimbursable when approved prior to treatment and considered “medically or behaviorally necessary to reach the individual patient’s treatment goals” (AMTA, 2011, para. 6).

In nursing homes, music therapists are considered qualified and able to contribute to restorative care programs (AMTA, 2011), which can have a positive affect on a facility’s reimbursement from Medicare (Funding Options for Seniors, 2010). Music therapists implement many interventions and techniques in nursing homes that could be considered restorative care (Funding Options for Seniors, 2010). Under the umbrella of Medicare and Partial Hospitalization Programs, music therapy has also been deemed a reimbursable service since 1994. There are also a number of states that allow music therapy services to be paid by using Medicaid Home and Community Based Care waivers. Success has also been found by some music therapists working in the Neonatal Intensive Care Units by obtaining referrals from physicians and billing for reimbursement. An important point made by Standley and Walworth (2010) was that one of the possible benefits of reimbursement is that it may help “provide a medically necessary role for music therapists...that is recognized by the medical and insurance professions” (p. 119). It is the hope of many music therapists that the music therapy profession

and the services they provide will be equally recognized and respected someday among other professions and professionals.

### **Overview of Common Therapies in Facilities**

Common therapies that may be offered in nursing homes and assisted living facilities include physical therapy, occupational therapy, speech therapy, music therapy, and recreational therapy. Physical, speech, occupational, and recreation therapy programs are more established in facilities since they are mandated by nursing home standards (Griffin, 1983). While all therapies may be used in nursing homes and assisted living facilities, each has its own unique goals, characteristics, and benefits to each client. The following are descriptions of the core therapies covered by insurance and ordered by physicians along with definitions, their history as a profession, and how they may benefit the elderly population.

#### **Physical Therapy**

As defined by the Merriam-Webster's online dictionary (n.d.), physical therapy is a "therapy for the preservation, enhancement, or restoration of movement and physical function impaired or threatened by disability, injury, or disease that utilizes therapeutic exercise, physical modalities (as massage and electrotherapy), assistive devices, and patient education and training". The use of exercise to treat muscle/bone disorders, as well as disabilities, date back to the 1500-1700's and continued to progress into the 1800's by treating orthopedic diseases/disabilities ("The History of Physical Therapy", 2013). Not until the polio epidemic in 1916 and the return of soldiers from World War I in 1917 did the demand for physical therapists drastically increase and the profession of physical therapy officially begin ("The History of Physical Therapy", 2013). The first physical therapy association was started in 1921 and members continued to increase with the dawn of World War II ("The History of Physical Therapy", 2013).

The main focus of physical therapy is dealing with the “big picture” or gross motor skills (“What is the Difference”, 2012). Clients receiving physical therapy may work on areas such as strength, balance, and flexibility (“What is the Difference”, 2012). Among the people eligible for physical therapy include elderly individuals, who often have decreased physical capabilities and can lead to falls (Mallery and Munroe, 2002). Other individuals recommended for physical therapy include the elderly who have illnesses such as stroke, Parkinson’s, or arthritis (Mallery and Munroe, 2002). Physical therapy has many benefits for this population such as improving an individual’s ability to complete activities of daily living, increasing muscle strength, improving gait, balance, stability, endurance, cardiovascular function, safety, and independence (Mallery and Munroe, 2002).

### **Speech Therapy**

Speech therapy is “the treatment of speech and communication disorders. It may include physical exercises to strengthen the muscles used in speech (oral-motor work), speech drills to improve clarity, or sound production practice to improve articulation” (Speech therapy, 2013). In the late 1800’s, most “speech correctionists”, as they were first termed, mainly worked with speech problems such as stuttering (Center on Human Development and Disability, Clinical Training Unit, University of Washington, 2007). A major contribution to the early profession by Alexander Melville Bell was made when he designed a visible code indicating the correct positioning of parts of the mouth when speaking which was used to teach individuals with speech impairments (Center on Human Development and Disability, Clinical Training Unit, University of Washington, 2007). In 1925, the group that would eventually become known as the American Speech-Language Association (ASHA) was formed in order to promote scientific research in the field of speech correction (American Speech-Language-Hearing Association,

2013). Today, ASHA is “nation’s leading professional, credentialing, and scientific organization for speech language pathologists” (American Speech-Language-Hearing Association, 2013, para. 1).

Speech language pathologists are trained to address issues related to the natural aging process such as neurological difficulties and age-related illnesses (Sponholz, 2013). With the elderly, speech therapy mainly focuses on increasing communication and the ability to safely swallow (Sponholz, 2013). Individuals who may be eligible for speech therapy include elderly persons who have had a brain injury, stroke, cancer, lung disease, dysarthria, apraxia, and dysphagia (Sponholz, 2013). Speech therapists can help increase muscles of the face, improve swallowing, and increase articulation (Sponholz, 2013). Treatment may also include a focus on problem-solving, restoring memory, sequencing, and attention for those with cognitive-linguistic impairments (Sponholz, 2013).

### **Occupational Therapy**

Occupational therapy is the “therapeutic use of self-care, work, and recreational activities to increase independent function, enhance development, and prevent disability; may include adaptation of tasks or environment to achieve maximum independence and optimal quality of life” (Occupational therapy, 2013). The early development of occupational therapy began in the late 1700’s with a new approach, developed by Phillippe Pinel, called “Moral Treatment and Occupation” which was used to treat the mentally ill (“The History of Occupational Therapy”, 2013). This new treatment approach used literature, music, physical exercise, and work as a way to improve emotional stress, and in turn increasing an individual’s ability to perform activities of daily living (“The History of Occupational Therapy”, 2013). This treatment became highly used in many American hospitals during the mid 1800’s but the birth of the more scientific approach

to occupational therapy began in 1917 with the creation of the National Society for the Promotion of Occupational Therapy and later to become known as the American Occupational Therapy Association (AOTA) (“The History of Occupational Therapy”, 2013). Occupational therapists now have a significant role in hospitals and with individuals with nearly any disability (American Occupational Therapy Association, 2013). AOTA is also the home of the national registry of occupational therapists and educational standards for the profession (American Occupational Therapy Association, 2013).

Overall, occupational therapists concentrate on the use of fine motor skills in activities of daily living (“What is the Difference”, 2012). Examples include helping clients re-learn how to tie their shoes, button up a shirt, and maneuver small objects (“What is the Difference”, 2012). Occupational therapy can be beneficial for elderly individuals who have suffered a stroke or fall in addition to healthy seniors by increasing independence and quality of life (“The Benefits of Occupational Therapy”, 2012). Therapists can provide training in adaptive devices such as walkers or wheelchairs and help increase/maintain mobility and activities of daily living as well as elevate mood in residents (“The Benefits of Occupational Therapy”, 2012).

### **Recreational Therapy**

Recreational therapy (or therapeutic recreation) is “based on engagement in recreational activities especially to enhance the functioning, independence, and well-being of individuals affected with a disabling condition” (Recreational therapy, n.d.). Similar to other therapies, recreation hospital workers were first hired in 1931 by the American Red Cross to work in convalescent houses in military hospitals (American Therapeutic Recreation Association (ATRA), 1999; American Therapeutic Recreation Association (ATRA), 2004). The history of recreational therapy as we know it today began with two philosophies in the 1940’s and 1950’s;

the first promoted the use of recreation as a therapeutic tool while the other viewed recreation enough in itself to satisfy a specific human need in individuals who are institutionalized (Van Andel & Austin, 2013). The years following World War II are considered the formative years of the profession, with the development of undergraduate education programs and three professional organizations (ATRA, 1999). In 1966, the three different associations joined forces to become the National Therapeutic Recreation Society (NTRS), a branch of the National Recreation and Park Association (NRPA) (Van Andel & Austin, 2013). The NTRS continued to struggle to create a unified identity of the profession because the NRPA did not accept the members of NTRS as professionals using recreation services as a therapeutic tool in treatment (Van Andel & Austin, 2013). Frustrated with such limitations, the members of NTRS created their own organization in 1983, called the American Therapeutic Recreation Association (ATRA) that promoted membership and professional issues (Van Andel & Austin, 2013). In addition, the ATRA now focuses on such areas as public policy, research, education, and reimbursement (ATRA, 2004). Today, recreational therapists are employed in a variety of settings including hospitals, community mental health centers, adult day care programs, and hospice (ATRA, 2004).

“The unique feature of recreational therapy that makes it different from other therapies is the use of recreational modalities in the designed intervention strategies” (American Therapeutic Recreation Association, 2004, para. 4). The recreational therapist works towards similar goals as other disciplines but incorporates the client’s interests, which then leads to a meaningful process (ATRA, 2004). The elderly population being treated in places such as nursing homes, assisted living facilities, or hospitals can benefit from recreational therapy in many ways. Recreational therapy can improve the physical, cognitive, emotional, social, and leisure needs through

recreational modalities in individually designed interventions (ATRA, 2004). The ultimate goal for the elderly individual is to improve functioning and independence as well as decrease the effects of the illness or disability (ATRA, 2004).

### **Overview of Additional Therapies**

While physical, speech, occupational, and recreational therapies are often used in the treatment of the elderly, there are many other therapies (e.g., respiratory therapy, art therapy, pet therapy, dance therapy, and music therapy) that are also utilized in nursing homes and assisted living facilities. Each therapy has a history of its own and different goals that they address in treatment. The following is a description of each therapy including a definition, a brief history of the profession, and the benefits of for the elderly.

#### **Respiratory Therapy**

Respiratory therapy is “the treatment or management of acute and chronic breathing disorders, as through the use of respirators or the administration of medication in aerosol form” (Respiratory therapy, 2000). The field of respiratory care began in the 1950’s when hospitals hired “inhalation therapists” to provide oxygen to patients (Jefferson College of Health Sciences, 2013). Since then, the profession has expanded and developed by using a wider variety of treatment methods such as managing computerized mechanical ventilators and monitoring the heart of patients (Jefferson College of Health Sciences, 2013). Today, respiratory therapists can work in a number of settings including neonatal care, rehabilitation facilities, nursing homes, and intensive care units (Jefferson College of Health Sciences, 2013). Respiratory care can greatly benefit the elderly and will be of great use as the baby boomer generation expands the older adult population (Jefferson College of Health Sciences, 2013). Older adults who have commonly

develop respiratory conditions such as pneumonia, COPD, and heart disease are eligible for and would greatly benefit from respiratory therapy (Jefferson College of Health Sciences, 2013).

### **Art Therapy**

Art therapy is “the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art” (American Art Therapy Association (AATA), 2013, para. 3). The profession of art therapy began in the 1940’s when psychiatrists and educators became interested in the artwork created by their patients and children (AATA, 2013). By the 1950’s, hospitals, clinics, and rehabilitation centers began to establish art therapy programs along with other “talk therapies” (AATA, 2013). These settings started to recognize “that the creative process of art making enhanced recovery, health, and wellness” (AATA, 2013, para. 2). Since then, art therapy has grown into a valuable method of communication, assessment, and treatment with both children and adults in a number of settings such as mental health, nursing homes, and schools (AATA, 2013). There are a number of benefits of art therapy for older adults such as increasing coping skills with complex-related issues like mental and physical illness, end-of-life decisions, communication, expression, and grief (AATA, 2012). Art therapy can also provide a “safe way to explore loss, depression, anxiety, and changes in health” (AATA, 2012) for the elderly.

### **Dance Therapy**

Dance therapy is the “psychotherapeutic use of movement to further the emotional, cognitive, and social integration of the individual” (American Dance Therapy Association, n.d., para. 1).

Dance/movement therapy first started in the 1930's when doctors heard about a dance teacher, named Marian Chace, encouraging students to abandon thoughts of technique, and instead freely expressing emotions (American Dance Therapy Association (ADTA), 2005). Doctors began sending patients, including those with mental illness, to Marian Chace after hearing of students' sense of well-being following this form of self-expression (ADTA, 2005). While Chace studied at the Washington School of Psychiatry in the 1950's, her methods become well-known and the focus of research (ADTA, 2005). In 1966, dance therapy gained more even more credibility with the creation of the American Dance Therapy Association (ADTA) (ADTA, 2005). ADTA now has a registry of dance therapists and publishes research in the American Journal of Dance Therapy (ADTA, 2005). Dance therapy is used with older adults in settings that include senior centers, nursing homes, assisted living facilities, and mental health settings (ADTA, n.d.b). Dance therapy has shown to be beneficial with the elderly population such as improving gait and balance (Martin, 2010), fostering "an atmosphere of physical and psychological safety" (ADTA, n.d.b, para. 2), and increasing social interaction and cognitive stimulation (ADTA, n.d.b).

### **Pet Therapy**

Pet therapy is "a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. It is designed to promote improvement in human physical, social, emotional, and/or cognitive functioning" (Pet Partners, 2012, para. 1). Animals have been seen as companions since prehistoric times as evidenced by cave drawings depicting both people and wolves sitting around a campfire and the discovery of a 12,000 year old human skeleton holding onto the remains of a puppy (Christiansen, 2007). In the 9<sup>th</sup> century in Gheel, Belgium was the first documented use of animals being used in therapy where individuals with disabilities learned how to care for farm animals (Christiansen, 2007). Later in 1792, patients of

a mental health institution in England cared for animals as a part of their therapy program (Christiansen, 2007). In 1867, animals were used in the treatment of patients with epilepsy and in 1942, a planned program involving dogs was implemented with veterans (Christiansen, 2007). In the 1960's, a psychiatrist named Boris Levinson discovered improvement in a nonverbal child's communication with the presence of Levinson's dog (Christiansen, 2007). "Levinson coined the term pet therapy in 1964, and his work is considered the birth of animal-assisted therapy" (Christiansen, 2007, para. 5) and extensive research. Today animal-assisted therapy is used in settings such as nursing homes, schools, and hospitals (Christiansen, 2007). Pet therapy has been shown to benefit the elderly, specifically to those living in nursing homes (Christiansen, 2007). In an Australian nursing home, it was reported that residents "showed improvement in happiness, alertness, responsiveness, and optimism (Christiansen, 2007). Interaction with the dogs also promoted self-reliance and increased responsibility among the patients, some of whom were previously unmotivated" (Christiansen, 2007, para. 7).

### **Music Therapy**

As defined by the AMTA (2005), music therapy is an established health profession in which the clinical and evidence-based use of music and music activities address and seek to accomplish individualized goals and objectives within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program and undergone training in multiple populations and settings. Music has been seen as a powerful tool since ancient times and throughout various cultures to improve emotional, psychological, and physical health (AMTA, 2011). The 1800's saw the first recorded music therapy interventions in an institutional setting in which music was used to effect positive change towards physiological processes such as blood pressure, pulse rate, and respiratory rate (AMTA, 2011). The profession of music

therapy began to develop after World War II when musicians were enlisted to work at veteran hospitals to address physical and emotional trauma from war (AMTA, 2011). The observed positive physiological, psychological, cognitive, and emotional effects on veterans by doctors and nurses led to the demand of additional musicians in the hospitals (AMTA, 2011). It soon became evident that musicians needed training prior to working in hospital settings, which resulted in the need for a college curriculum (AMTA, 2011). The first music therapy degree program was established at Michigan State University in 1944 (AMTA, 2011). In the U.S. today, there are currently over 70 music therapy degree programs (AMTA, 2011). In 1998, the National Association for Music Therapy and the American Association for Music Therapy joined forces to establish the American Music Therapy Association (AMTA, 2011). The Certification Board for Music Therapists was created in 1983 to increase credibility of the profession and to ensure the competency of practicing music therapists (AMTA, 2011). The AMTA is committed to continuing evidence-based research in the field of music therapy by publishing two research journals and other publications (AMTA, 2011). Today, music therapists are employed in a variety of settings including, but not limited to, nursing homes, assisted living facilities, hospitals, hospices, adult day care centers, rehabilitation centers, and schools.

### **Music Therapy Research and the Elderly**

Research has shown music therapy to be extremely effective and beneficial with the elderly and provides many benefits to this population. Music therapy has shown to be effective in improving quality of life (VanerArk, Newman, & Bell, 1983), socialization (Coffman & Adamek, 1999), and providing new challenges for healthy senior adults (Coffman & Adamek, 1999). The field of music therapy has also become well respected in the hospice setting. Music therapists are apart of the interdisciplinary treatment team and focus primarily on enhancing the

patients' quality of life. Interventions such as songwriting and lyric analysis have provided opportunities for patients to express their feelings and say goodbye to loved ones (O'Callaghan, 1996). In addition, music therapy has shown to be beneficial in the rehabilitation setting. Studies have revealed that music therapy can improve speech intelligibility, mood (Haneishi, 2001), balance, and gait (Kadivar, Corcos, Foto, & Hondzinski, 2011) in individuals with Parkinson's disease. Significant improvements were also found in gait (Thaut, Leins, Rice, Argstatter, Kenyo, McIntosh, Bolay, & Fetter, 2007) and functional speech intelligibility (Tamplin, 2008) after music therapy treatment with patients who suffered from a stroke. In both the nursing home and assisted living settings, music therapists can work in partnership with speech, physical and occupational therapies to improve motor, communication, cognitive and sensory skills to enhance the quality of care given to each resident (McCarthy, Geist, Zojwala, & Schock, 2008).

Often times, senior adults are stereotyped as uninterested in learning new skills, are prone to passive activities, and are unable or unwilling to strive for excellence (Coffman, 2002). This truth is evidenced by Ice (2002), who found that residents within nursing homes spent 65% of their time doing little or nothing, and only 12% of their time in social activities. It may be important for long-term care facilities to promote and support social interaction and meaningful activity throughout the day. According to the AMTA (2011), "music therapy is used with the elderly in nursing homes to increase or maintain their level of physical, mental, and social/emotional functioning" (para. 23). Research also shows that in long-term care facilities, such as nursing homes, music therapy can be effective in increasing social interaction and positive nonverbal expressions such as smiling and touch in patients with Alzheimer's disease following music therapy sessions (Pollack & Namazi, 1992).

Music therapists and music therapy programs may enhance long-term care if established in nursing homes and assisted living facilities, due to its evidence-based therapeutic benefits. It may also help with the future demand for long-term care services provided to the quickly aging baby boomer generation. Griffin (1983) found that music therapy was the most popular therapy besides the required recreation therapy, and the second most utilized therapy in a survey of nursing homes across Florida. The study also revealed that 22 out of 164 facilities reported that a music therapist was used most often to provide services in the activities program. As of this study in 1983, the status of music therapy in Florida nursing homes appeared to be improving compared to the previous five years.

In the years to come, there will be much change in the healthcare system due to new government policies, insurance, reimbursement, and the increase in the elderly population. The therapies provided to the elderly, which each have their own unique history, characteristics, and benefits, may be directly affected by many of these changes. Although, it is still uncertain how each of these factors may positively or negatively influence the care and therapies given to older adults in nursing homes and assisted living facilities. Therapies such as physical, speech, and occupational have been established in long-term facilities as common therapies, whereas equal access to complementary therapies such as music therapy is still in progress. All therapies may be affected by these new developments, but it seems beneficial to the field of music therapy to determine the current status of music therapy in nursing homes and assisted living facilities and how they compare to other therapies.

## **CHAPTER THREE**

### **METHODOLOGY**

Participants ( $N = 1812$ ) for this study were administrators of nursing homes ( $n = 501$ ) and assisted living facilities ( $n = 1311$ ) in Florida. Administrators were chosen as participants since they are “ultimately responsible for the implementation of the therapies program and have the authority to effect major changes in those programs” (Griffin, 1983, p. 17). The researcher located the Florida Health Care Association (FHCA; [www.fhca.org](http://www.fhca.org)) online and became a member in order to access the emails of the administrators of Florida nursing homes. All the administrators of nursing homes chosen for this study were members of the FHCA. The assisted living facilities chosen for this study were selected from a list of 1,344 licensed assisted living facilities in Florida found through the website ([floridahealthfinder.gov](http://floridahealthfinder.gov)). The researcher then acquired 1,311 administrator emails through a public records request.

All facilities were licensed, had administrative personnel, and were located in Florida. Facilities were excluded if they were listed as both an assisted living facility and a nursing home and had one or more of the following: the same name, address, phone number, or administrator. Facilities were not asked to participate if the licensed status listed “in review”, “litigation”, or “inactive”. There were no stipulations regarding facility size, budget, number of staff, or the sub-populations served of the nursing home/assisted living facility were made.

#### **Dependent Measure**

A survey was designed by the researcher to ascertain the current status of therapies, including music therapy, offered in Florida nursing homes and assisted living facilities. The administrator of the nursing home/assisted living facility completed all questions. There were no

demographic questions included in the survey since the researcher created two surveys; one for nursing homes and one for assisted living facilities. The first question of the survey asked administrators to indicate what therapies were offered at their facility from a list provided by the researcher. Therapies listed as options included: physical therapy, speech therapy, occupational therapy, recreational therapy, music therapy, respiratory therapy, art therapy, dance therapy, and pet therapy. To ensure accurate responses, a definition of each therapy was also included. For this question, participants were asked to “check all that apply”.

If the administrator indicated their facility offered music therapy they were asked to rate on a scale of “never” to “all the time” the following three questions: how often each therapy was utilized by residents, how often each therapy was ordered by a physician, and how often each therapy was provided on a contractual basis. Administrators were then asked four questions related to music therapy. They were requested to specify what type of sessions the music therapist provides (group, individual, co-treating, or other), and indicate “yes/no” if their facility has music performers/volunteers other than music therapy, if performers let residents play music with them, and if they think music therapy is a legitimate therapy for their residents.

If the administrator indicated their facility did not offer music therapy they were asked the same three questions as the other group except “music therapy” was not included as an answer option. Administrators were then asked the following three questions: to indicate “yes/no” if their facility has music performers/volunteers, if performers allow residents to play music with them, and if they think music therapy would be a legitimate therapy for their residents. The last question was shown to only the administrators who indicated they did not offer music therapy at their facility. Participants were asked to rank on a scale from 1 to 5 which

therapy they would most prefer to obtain for their facilities of the therapies they do not already offer.

### **Procedure**

An introductory email (see Appendix A) was sent to each nursing home/assisted living facility administrator explaining the study and asking for their participation. A link to the survey was provided in the body of the email. If the administrator opted to participate within the study, they were directed to click the survey link. The survey was administered electronically through Qualtrics (Qualtrics, Provo, UT; <http://www.qualtrics.com>), a free survey engine to Florida State students.

The first page of the survey contained the Letter of Consent (see Appendix B) where the administrator was given the option to click “yes” or “no” to participate in the study. Consent was considered given by the administrator if they clicked “yes” and completed the survey. To ensure accurate responses from participants, the definition of each therapy (physical therapy, occupational therapy, speech therapy, recreational therapy, music therapy, dance therapy, art therapy, and pet therapy) was included at the beginning of the survey. See Appendix C for a copy of the survey.

One week after the initial email was sent, a follow-up email was sent to all administrators since the survey was anonymous (see Appendix D). A second follow-up email was sent due to a low response rate and the survey was extended an extra week. The last week of the survey, the researcher sent two additional email reminders. The survey was then deactivated after the third week.

## CHAPTER FOUR

### RESULTS

The purpose of this research study was to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida. Specifically, the research questions asked were the following:

Of those surveyed:

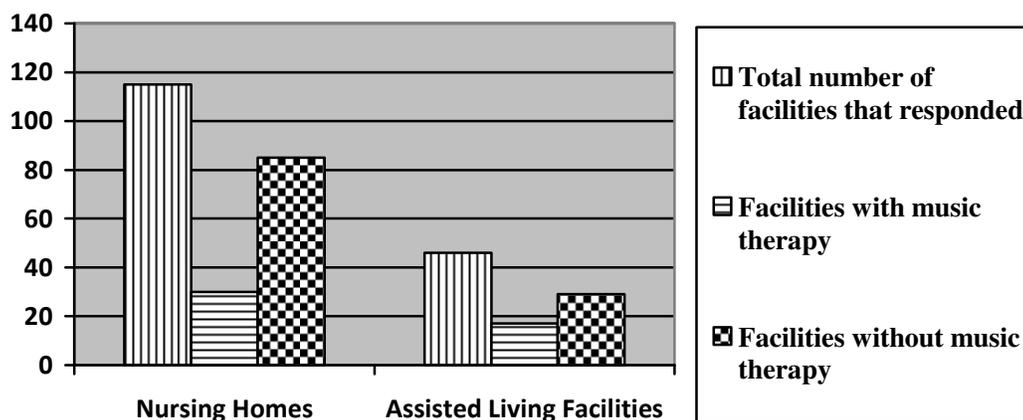
1. How many nursing homes and assisted living facilities in Florida offer music therapy?
2. What is the position title of the music therapist at each facility?
3. How is music therapy offered (i.e. group, individual, co-treating) in nursing homes and assisted living facilities in Florida?
4. How often do residents utilize specific therapies including music therapy?
5. How often do physicians order specific therapies including music therapy?
6. How often are therapies contracted for services including music therapy?
7. Do facilities have music performers and if so, do the musicians allow residents to make music with them?
8. Do administrators think that music therapy is or would be a legitimate therapy for the residents of their facility?
9. Concerning the facilities without music therapy, which therapy would administrators most prefer to obtain for their facility?

## Data Analysis

Administrators ( $N = 1812$ ) of nursing homes ( $n = 501$ ) and assisted living facilities ( $n = 1311$ ) in Florida were invited to participate in a survey on the status of therapies in their facility. Of the 1812 administrators invited to participate, a total of 161 administrators (115 = nursing homes and 46 = assisted living facilities) completed the survey, creating an overall return rate of 8.9%. Analysis of the individual research questions included sums, percentages, and means.

### Research Question 1 - Of those surveyed, how many nursing homes and assisted living facilities in Florida offer music therapy?

For this question, participants were asked to “check all that apply”. Thirty out of the 115 administrators, or 26%, of nursing homes indicated their facility offered music therapy to residents. Seventeen out of the 46 administrators of assisted living facilities, or 37%, indicated their facility offered music therapy to residents. See Figure 1.



**Figure 1.** Comparing facilities with and without music therapy.

**Research Question 2 - Of those surveyed, what is the position title of the music therapist at each facility?** For the following question, only those administrators who indicated their facilities offered music therapy answered. Participants were also asked to “check all that apply”.

Within nursing homes that had music therapy ( $n = 30$ ), only one administrator selected they have a full-time music therapist on staff while 17 administrators indicated the music therapist was part-time or contracted for services. Additionally, 13 other administrators chose “other”, which included the following position titles: activities director ( $n = 1$ ), recreational director ( $n = 1$ ), via hospice ( $n = 3$ ), vendor ( $n = 1$ ), entertainer ( $n = 1$ ), as needed ( $n = 1$ ), and volunteer ( $n = 3$ ), not specified ( $n = 2$ ) (see Table 1).

Of the 17 administrators of assisted living facilities who said their facility offers music therapy, no participant indicated they have a full-time music therapist; however, seven responded as having a contracted/part-time music therapist at their facility. Ten administrators also chose “other”, which included the following position titles: activities director ( $n = 4$ ), staff member ( $n = 1$ ), volunteer ( $n = 1$ ), friends ( $n = 1$ ), musician ( $n = 1$ ), and “The administrator encourages all residents to listen to music at all hours of the day. Some prefer a music cd and some prefer the radio” ( $n = 1$ ) (see Table 1).

Table 1

*Position Titles of Music Therapist by Facilities*

	NH		ALF	
	$\Sigma$	%	$\Sigma$	%
Total number of facilities that responded	115	---	46	---
Facilities with music therapy	30	26	17	38
Full-time music therapist	1	3	0	0
Part-time/Contracted music therapist	17	50	7	41
Other	13	50	10	59

**Research Question 3 - Of those surveyed, how is music therapy offered (i.e. group, individual, co-treating) in nursing homes and assisted living facilities in Florida?**

For the following question, only those administrators who indicated their facilities offered music therapy answered. Participants were also asked to “check all that apply”. Within nursing homes that had music therapy ( $n = 30$ ), 28 administrators indicated the music therapist at their facility provides group sessions. Furthermore, 11 administrators indicated a music therapist provides individual sessions to residents and one administrator indicated the music therapist co-treats with other therapists. Within the assisted living facilities that had music therapy ( $n = 17$ ), 16 administrators indicated the music therapist at their facility provides group sessions, four indicated that individual music therapy sessions are given to residents, and two administrators indicated that music therapist co-treats with other therapists (see Table 2).

Table 2

*Types of Sessions Music Therapist Provide in Facilities by Sums and Percentages*

	Nursing Homes		Assisted Living Facilities	
	$\Sigma$	%	$\Sigma$	%
Total Facilities w/ Music Therapy	30	26	17	38
Group	28	98	16	94
Individual	11	37	4	24
Co-treating with other therapists	1	3	2	12
Other	0	0	1	6

**Research Question 4 – Of those surveyed, how often do residents utilize specific therapies including music therapy?**

For the following question, only those administrators who indicated their facilities offered music therapy answered. The administrators were asked to indicate how often each therapy was utilized by residents at their facility using the following 5-point Likert-type scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = all the time. The researcher analyzed the data using the means ( $M$ ) to determine the question and compare therapies with one another. In the nursing homes surveyed, the mean for each therapy is as follows: physical therapy ( $M = 4.73$ ), occupational therapy ( $M = 4.73$ ), speech therapy ( $M = 4.63$ ), recreational therapy ( $M = 4.57$ ), pet therapy ( $M = 3.93$ ), music therapy ( $M = 3.87$ ), respiratory therapy ( $M = 3.57$ ), art therapy ( $M = 2.97$ ), and dance therapy ( $M = 1.93$ ). In the assisted living facilities surveyed, the mean for each therapy was as follows: recreational therapy ( $M = 4.41$ ), music therapy ( $M = 4.29$ ), physical therapy ( $M = 4.00$ ), pet therapy ( $M = 3.82$ ), occupational therapy ( $M = 3.65$ ), art therapy ( $M = 3.41$ ), speech therapy ( $M = 2.71$ ), dance therapy ( $M = 2.71$ ), and respiratory therapy ( $M = 2.18$ ). See Table 3.

Table 3

*Therapies Utilized by Residents of Nursing Homes and Assisted Living Facilities by Mean Order*

<u>Nursing Homes</u>		<u>Assisted Living Facilities</u>	
Therapies	$M$	Therapies	$M$
Physical	4.73	Recreational	4.41
Occupational	4.73	Music	4.29
Speech	4.63	Physical	4.00

Table 3 - continued

<u>Nursing Homes</u>		<u>Assisted Living Facilities</u>	
Therapies	<i>M</i>	Therapies	<i>M</i>
Recreational	4.57	Pet	3.82
Pet	3.93	Occupational	3.65
Music	3.87	Art	3.41
Respiratory	3.57	Speech	2.71
Art	2.97	Dance	2.71
Dance	1.93	Respiratory	2.18

**Research Question 5 – Of those surveyed, how often do physicians order specific therapies including music therapy?**

For the following question, only those administrators who indicated their facilities offered music therapy answered. The administrators were asked to indicate how often each therapy was ordered by a physician for residents at their facility using the following 5-point Likert-type scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = all the time. The researcher analyzed the data using the means (*M*) to determine the question. While the means were found to be different within the two types of facilities, both the nursing homes and assisted living facilities indicated the same therapies in the same order with physical therapy ordered the most (nursing home *M* = 4.80; assisted living *M* = 4.12) and dance therapy ordered the least (nursing home *M* = 1.27; assisted living *M* = 1.65). See Table 4 for all results.

Table 4

*Therapies Ordered by Physicians for Residents of Nursing Homes and Assisted Living Facilities by Mean Order*

<u>Nursing Homes</u>		<u>Assisted Living Facilities</u>	
Therapies	<i>M</i>	Therapies	<i>M</i>
Physical	4.80	Physical	4.12
Occupational	4.80	Occupational	3.53
Speech	4.73	Speech	3.06
Respiratory	3.47	Respiratory	2.47
Recreational	2.57	Recreational	2.35
Music	1.57	Music	2.00
Pet	1.40	Pet	2.00
Art	1.37	Art	1.82
Dance	1.27	Dance	1.65

**Research Question 6 – Of those surveyed, how often are therapies contracted for services including music therapy?**

For the following question, only those administrators who indicated their facilities offered music therapy answered. The administrators were asked to indicate how often each therapist provides direct client services on a contractual basis at their facility using the following 5-point Likert-type scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = all the time. The researcher

analyzed the data using the means ( $M$ ) to determine the question and compare therapies with one another. Within the two types of facilities, both the means and prevalence of therapies were found to be different between nursing homes and assisted living facilities although physical therapy was still the most often contracted service (nursing home  $M = 2.93$ ; assisted living  $M = 4.06$ ) and dance therapy was the least (nursing homes  $M = 1.43$ ; assisted living  $M = 1.59$ ) across both facilities. See Table 5 for all results.

Table 5

*Therapies Provided on a Contractual Basis in Nursing Homes and Assisted Living Facilities by Mean Order*

<u>Nursing Homes</u>		<u>Assisted Living Facilities</u>	
Therapies	$M$	Therapies	$M$
Physical	2.93	Physical	4.06
Speech	2.93	Occupational	3.37
Occupational	2.93	Speech	3.12
Music	2.87	Music	2.53
Respiratory	2.70	Pet	1.94
Pet	2.20	Recreational	1.88
Recreational	1.93	Respiratory	1.76
Art	1.80	Art	1.59
Dance	1.43	Dance	1.59

**Research Question 7 - Of those surveyed, do facilities have music performers and if so, do the musicians allow residents to make music with them?**

**Facilities with music therapy.** In nursing homes, all 30 of administrators (100%) specified that in addition to music therapy, music performers/volunteers also play for their residents and 28 of the administrators indicated that music performers allow residents to make music with them. In assisted living facilities, 15 out of 17 administrators, or 88%, indicated that in addition to music therapy, music performers/volunteers also play for their residents. Furthermore, data also showed that 16 out of 17 administrators of the assisted living facilities stated that the music performers allow residents to make music with them. See Table 6.

**Facilities without music therapy.** In nursing homes without music therapy, 84 out of 85 administrators (99%) indicated they have music performers/volunteers perform for residents. Additionally, 75 administrators indicated the music performers/volunteers allow their residents to make music with them. In assisted living facilities without music therapy, 23 out of 29 administrators (79%) indicated they have music performers/volunteers play for residents and 21 of these administrators indicated that music performers/volunteers allow residents to make music with them. See Table 6.

Table 6

*Facilities with Music Performers/Volunteers and Music Making with Residents by Sums and Percentages*

---

With Music Therapy				Without Music Therapy			
NH (n = 30)		ALF (n = 17)		NH (n = 85)		ALF (n = 29)	
Σ	%	Σ	%	Σ	%	Σ	%

---

Table 6 - continued

	<u>With Music Therapy</u>				<u>Without Music Therapy</u>			
	NH (n = 30)		ALF (n = 17)		NH (n = 85)		ALF (n = 29)	
	Σ	%	Σ	%	Σ	%	Σ	%
Music performers/ volunteers	30	100	15	88	84	99	23	79
Performers allow residents to make music	28	93	16	94	75	88	21	72

Note. NH = Nursing homes and ALF = Assisted Living Facilities.

**Research Question 8 – Of those surveyed, do administrators think that music therapy is or would be a legitimate therapy for the residents of their facility?**

**Facilities with music therapy.** All of the administrators of nursing homes (n = 30) with music therapy said they believe music therapy is a legitimate therapy for their residents (See Table 7). The following are some comments from administrators when asked to indicate why they think music therapy is a legitimate therapy for their residents:

- “Brings them to life, triggers memories, makes them happy”.
- “Essential to their quality of life”.
- “Social interaction”.
- “Helps residents reflect on past”.
- “I am a recreational therapist and I completely understand what music can bring to a long term setting”.

In assisted living facilities with music therapy, 16 out of 17 administrators indicated that they believe music therapy is a legitimate therapy for their residents (See Table 7). The following are some of their reasons why:

- “It helps with depression and provides them with cognitive stimulus”.
- “Music engages the person”.
- “Music sometimes allows residents to remember their past. It brings joy and laughter. It is definitely a legitimate therapy”.

However, one administrator indicated that music therapy is not a legitimate therapy by stating, “Not as a chargeable treatment”.

**Facilities without music therapy.** Of the nursing homes without music therapy, 73 out of 85, or 86%, indicated that they think that music therapy would be a legitimate therapy for their residents (See Table 7). Some administrators indicated why:

- “We have used this service through a local hospice and it was very beneficial”.
- “Many of our residents use music as an outlet as well as to facilitate movement (swaying, upper body movement)”.
- “We have observed residents of all levels of cognition respond to music. Music programs are our largest attended activity”.
- “Calming”.
- “Stimulates memory”.
- “Some of my residents that are not able to speak recognize songs and at least smile or hum the lyrics of old familiar songs”.
- “I studied music therapy at FSU and use it intermittently”.

- “Some residents can sing when they have difficulty expressing their thoughts with words”.

One administrator even added, “Sadly, with the cuts already made in reimbursement due to the Affordable Care Act there is no money to pay for such services.” The remaining 14% of administrators indicated that they believe that music therapy would not be a legitimate therapy for the residents of their facility. The following are the administrators’ reasons why it would not be a legitimate therapy:

- “As you describe it, it would be individualized not group and would entail a cost”.
- “It isn’t reimbursed and it doesn’t really have any results which are based on proven outcomes”.
- “More of a recreational thing, does not fit into our skilled nursing and therapy model, i.e. how we get reimbursed”.
- “Entertainment value only”.
- “No one to pay for a music therapist”.
- “Not if it has to be paid for by the resident or government”.

In assisted living facilities without music therapy, 27 out of 29, or 93% of administrators (See Table 7), indicated that music therapy would be a legitimate therapy for their residents whereas two administrators indicated it would not be. The following are some of their comments on why music therapy would be legitimate:

- “Many dementia patients are no longer able to communicate and music is a great outlet for them”.
- “Residents respond to music”.
- “It will entertain them”.

Table 7

*Opinions of Music Therapy's Legitimacy by Facility Type*

	Facilities with MT		Facilities without MT	
	NH ( <i>n</i> = 30)	ALF ( <i>n</i> = 17)	NH ( <i>n</i> = 85)	ALF ( <i>n</i> = 29)
Yes	100%	94%	86%	93%
No	0%	6%	14%	7%

*Note.* MT = Music therapy, NH = Nursing homes, and ALF = Assisted Living Facilities

**Research Question 9 - Concerning the facilities without music therapy, which therapy would administrators most prefer to obtain for their facility?**

For the following question, only those administrators who indicated their facilities did not offer music therapy answered. The administrators were asked to rank which therapy they would most prefer to obtain for their facility. In order to compare means, the scores of 35 participants were randomly selected to create equal groups. Physical therapy, speech therapy, and occupational therapy were not included because all nursing homes and most assisted living facilities surveyed indicated they already offer those therapies. In nursing homes, the mean (*M*) for each therapy is as follows: pet therapy (*M* = 3.88), recreational therapy (*M* = 3.77), music therapy (*M* = 3.40), respiratory therapy (*M* = 3.28), art therapy (*M* = 3.17), and dance therapy (*M* = 3.11). In assisted living facilities, the mean (*M*) for each therapy is as follows: recreational therapy (*M* = 4.41), music therapy (*M* = 3.94), dance therapy (*M* = 3.76), art therapy (*M* = 3.52), pet therapy (*M* = 3.47), and respiratory therapy (*M* = 3.05). See Table 8 for the order of ranking for each therapy.

Table 8

*Therapies Most Preferred by Administrators to Obtain for their Facility by Mean Order*

---

<u>Nursing Homes</u>		<u>Assisted Living Facilities</u>	
Therapies	<i>M</i>	Therapies	<i>M</i>
Pet	3.88	Recreational	4.41
Recreational	3.77	Music	3.94
Music	3.40	Dance	3.76
Respiratory	3.28	Art	3.52
Art	3.17	Pet	3.47
Dance	3.11	Respiratory	3.05

---

## CHAPTER FIVE

### DISCUSSION

The purpose of this research study was to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida. Specifically, the research questions asked were the following:

Of those surveyed:

1. How many nursing homes and assisted living facilities in Florida offer music therapy?
2. What is the position title of the music therapist at each facility?
3. How is music therapy offered (i.e. group, individual, co-treating) in nursing homes and assisted living facilities in Florida?
4. How often do residents utilize specific therapies including music therapy?
5. How often do physicians order specific therapies including music therapy?
6. How often are therapies contracted for services including music therapy?
7. Do facilities have music performers and if so, do the musicians allow residents to make music with them?
8. Do administrators think that music therapy is or would be a legitimate therapy for the residents of their facility?
9. Concerning the facilities without music therapy, which therapy would administrators most prefer to obtain for their facility?

## Individual Research Questions

### **Research Question 1 - Of those surveyed, how many nursing homes and assisted living facilities in Florida offer music therapy?**

Participants were asked to “check all that apply” to answer this question. It is evident by the data that most of the facilities surveyed do not offer music therapy to residents, with only 26% of the nursing homes ( $n = 115$ ) and 37% of assisted living facilities ( $n = 48$ ) surveyed providing this therapy. While this is not a large number, it should be noted that the sample was very small and may not be a complete reflection of therapies offered in facilities in Florida. Thus, further questioning is needed to determine the inclusion of music therapy in nursing homes and assisted living facilities. One reason, however, why many nursing homes and assisted living facilities may not offer music therapy is due to reimbursement and the lack of physicians’ awareness of music therapy. Many administrators in the following research questions indicate the reason their facilities do not have a board-certified music therapist is because they do not have the funds for this service since it is not a reimbursable service. Even though music therapy can be a reimbursable service in nursing homes (AMTA, 2011), it requires education on both the administrators’ and the music therapists’ part to implement this process. Another reason for the minimal amount of music therapy in nursing homes and assisted living facilities may be due to the lack of physicians’ awareness of the benefits of music therapy. If physicians are unaware of the goals and benefits of music therapy for residents and patients in nursing homes and assisted living facilities than it is unlikely they are going to refer clients to a music therapist. Music therapists may have the potential to increase the demand for services by educating physicians about how music therapy can be used with the elderly in nursing homes and assisted living facilities population.

**Research Question 2 - Of those surveyed, what is the position title of the music therapist at each facility?**

For this question, only those administrators who indicated their facilities offered music therapy answered. Participants were also asked to “check all that apply”. According to the data, it is rare to have a full-time music therapist in either a nursing home or assisted living facility. Only one nursing home surveyed has a full-time music therapist whereas no assisted living facility surveyed has a full-time music therapist. It is more common for facilities to have a part-time/contracted music therapist since half or roughly half of the nursing homes (17 out of 30) and assisted living facilities (7 out of 17) indicated this to be true. The remaining administrators stated having the following position title for their music therapist: a music therapist via hospice, a staff member, activities director, recreational director, volunteer, entertainer, and musician. Since this was a survey completed by administrators, it is hard to know who may really be a music therapist or not. The researcher knows of a music therapist who is an activities director in another state. Their official title is the activities director but they implement music therapy at times since they were trained in this vocation. Hence, it is difficult to determine what these other position titles may really imply. A reason why it is more common to have a part-time/contracted music therapist may be because of the lack of funds to have a full-time music therapy program. It is certainly more economical for facilities to hire a music therapist for 3-4 group sessions a month than funding an entire salary for an additional employee. Additional research may want to determine the number of sessions the music therapist implements each month.

**Research Question 3 – Of those surveyed, how is music therapy offered (i.e. group, individual, co-treating) in nursing homes and assisted living facilities in Florida?**

Only those administrators who indicated their facilities offered music therapy answered this question. Additionally, participants were also asked to “check all that apply”. Results found group sessions are the most common way music therapy is offered in both nursing homes and assisted living facilities (93% of nursing homes and 94% of assisted living facilities). A possible reason for this may be because of the cost of services. Administrators reported there was a lack of funds to pay for individualized therapy and that music therapy is non-reimbursable at many facilities. Of those surveyed, individual music therapy sessions was less common among all facilities, although, more nursing homes (11 out of 30) offered individual sessions than assisted living facilities (4 out of 17). Music therapists co-treating with other therapists was seen as the most rare with one nursing home and two assisted living facilities indicating this to be true.

There may be a multitude of factors that influence the ability to co-treat. A survey of music therapists by McCarthy et al. (2008) revealed many challenges when co-treating with other therapists. Among the challenges indicated by music therapists included scheduling, different approaches in addressing goals, lack of knowledge about music therapy, skepticism about music therapy, lack of comfort/experience with music, funding, and other therapists feeling “protective” over their field and not wanting to share treatment. However, music therapists also reported a variety of benefits working with other therapists such as the sharing of knowledge across professions, enhancing goals, enhancing client progress, and enhancing creativity. It is also important to note that once participants convinced other therapist of music therapy benefits, they “took more initiative in fostering partnerships by requesting music therapy services again or making referrals” (McCarthy et al., 2008, p. 414). This is an important finding

for music therapists in nursing homes and assisted living facilities. It seems if music therapists can educate and convince other therapists about the benefits of music therapy than they are more likely to make referrals and have a desire to co-treat. This may ultimately lead to an increase in the credibility of music therapists among other therapists.

**Research Question 4 – Of those surveyed, how often do residents utilize specific therapies including music therapy?**

Again, only those administrators who indicated their facilities offered music therapy answered this question. In nursing homes, the most often utilized therapies by residents included physical therapy and occupational therapy, whereas music therapy was the sixth most often utilized out of nine therapies listed on the survey. However, music therapy is the second most utilized therapy by residents of the assisted living facilities; only recreational therapy is utilized more often. The data of the current study is similar to a study by Griffin, (1983) in which music therapy was also the second most utilized therapy with recreational therapy being the most utilized in nursing homes. This is interesting that after 30 years, music therapy is still the second most utilized therapy. Although, instead of music therapy being the second most utilized in nursing homes it is now the second most utilized in assisted living facilities. Since there is no data, it is uncertain if music therapy was also the second most utilized therapy in assisted living facilities 30 years ago. Nevertheless, a reason for this shift in music therapy utilization from nursing homes to assisted living facilities could be that the nursing home model has changed. Today, nursing homes are much more similar to the hospital setting than assisted living facilities and follow more of a medical model. Furthermore, it is more likely for residents, specifically short term residents, in nursing homes to utilize similar therapies (physical, speech, and occupational) offered in the hospital setting since many are often sent there to continue rehabilitation. On the

other hand, assisted living facilities are generally more of a supportive model and only offer assistance when needed. Therefore, physical, speech, and occupational therapies may not fit the assisted living model as well as music therapy might. Future research would be beneficial to determine if the use of music therapy has increased or decreased in nursing homes and assisted living facilities in Florida after another 30 years.

**Research Question 5 – Of those surveyed, how often do physicians order specific therapies including music therapy?**

Only those administrators who indicated their facilities offered music therapy answered this question. In nursing homes, physical therapy and occupational therapy are the therapies most often ordered by a physician whereas music therapy is the sixth most often therapy ordered by a physician. Similar to nursing homes, in assisted living facilities physical therapy is the therapy most often ordered by a physician with music therapy rated as the sixth most often physician-ordered therapy. The nursing homes and assisted living facilities surveyed are very similar when it comes to therapies ordered by physicians. Both nursing homes and assisted living facilities had the same order and prevalence of therapies ordered by physicians. The data shows there are therapies, such as physical, occupational, and speech therapy, that are more commonly ordered by physicians across both types of facilities. Music therapy does not seem to be ordered by physicians in nursing homes and assisted living facilities very often. This may indicate a lack of knowledge on the physicians' part of the goals, treatment, and interventions used and addressed in music therapy. Similar to Standley & Walworth (2010) educating neonatologists and nurses about the use of music therapy with premature babies before referrals could be made, music therapists also need to educate nursing home and assisted living facility physicians about

the use of music therapy with the residents and patients of their facilities in order for referrals to be issued.

**Research Question 6 – Of those surveyed, how often are therapies contracted for services including music therapy?**

For the following question, only those administrators who indicated their facilities offered music therapy answered. In nursing homes, physical, speech, and occupational are the most often contracted therapies followed by music therapy. In assisted living facilities, physical therapy is the most often contracted therapy whereas music therapy is fourth most contracted. After the three most common therapies (physical, speech, and occupational), music therapy is the most often therapy provided on a contractual basis in both nursing homes and assisted living facilities. These results may suggest that facilities prefer contracting music therapy services rather than having a full-time music therapist. Possible reasons for this finding are discussed in research question 2.

**Research Question 7 - Of those surveyed, do facilities have music performers and if so, do the musicians allow residents to make music with them?**

**Facilities with music therapy.** It is interesting that 100% of nursing homes with music therapy also have music performers and that 28 out of 30 of those facilities allow residents to make music with them. In assisted living facilities, 88% of have music performers and 16 out of 17 allow residents to join in the music making process. There certainly seems to be a lot of music in these particular facilities since they have both music therapy and music performers. Even though a definition of music therapy was provided at the beginning of the survey, it is difficult to know if some administrators considered music performers and music therapists as the same thing when answering this question. This is detrimental to music therapists if

administrators did consider music performers and music therapists the same. Administrators may not fully understand the difference between the two and be able to distinguish the clear benefits of music therapy versus music performers. This calls for the necessary education of administrators about the differences between music therapy and music performers/volunteers so residents can benefit from the goal-oriented and evidence-based treatments of music therapy.

**Facilities without music therapy.** In facilities without music therapy, the incidence of music performers is almost as high as facilities with music therapy. In nursing homes, 99% have music performers with 88% allowing residents to make music with them. In assisted living facilities, 79% have music performers with 72% allowing residents to make music with them.

Almost all of the nursing homes and assisted living facilities surveyed have music performers/volunteers play for the residents of their facility. This definitely may be detrimental to music therapists for the facilities without music therapy since these facilities already have free “music” and may not see the need for additional music. From the outside, music performers and music therapists may look similar since many music performers/volunteers allow residents to play instruments and sing along. However, music therapists understand there is much more to the profession than playing music and singing songs and make a point to distinguish the difference between music performers/volunteers and music therapists at every available opportunity. This is definitely not a new concept for music therapists, but this data shows that music therapists have some competition. It may be important for music therapists to educate administrators on the differences between music volunteers and music therapists as well as informing them of the many benefits that music therapy can bring to their residents.

**Research Question 8 – Of those surveyed, do administrators think that music therapy is or would be a legitimate therapy for the residents of their facility?**

**Facilities with music therapy.** All of the administrators of nursing homes ( $n = 30$ ) with music therapy said they believe music therapy is a legitimate therapy for their residents. Most of assisted living facilities with music therapy, 16 out of 17, think that music therapy is a legitimate therapy for their residents. These results may indicate that administrators have observed the effects a trained music therapist has on residents of nursing homes and assisted living facilities. This is evident in some of the comments made by administrators supporting the legitimacy of music therapy with this population: “Brings them to life, triggers memories, makes them happy”, “Social interaction”, and “It helps with depression and provides them with cognitive stimulus”. It may be important for music therapists who are trying to begin services in a nursing home or assisted living facility to obtain a recommendation for music therapy from an administrator whose facility offers it already. This may help other facilities learn how music therapy can benefit their residents from a colleague in the same field and in turn possibly increase the likelihood of the administrator hiring a music therapist at their facility.

**Facilities without music therapy.** Most administrators of nursing homes without music therapy ( $n = 85$ ), or 86%, indicated that they think that music therapy *would be* a legitimate therapy for their residents leaving 14% of administrators that believe it *would not* be a legitimate therapy. Most administrators of assisted living facilities without music therapy ( $n = 29$ ), or 93%, also indicated that music therapy would be a legitimate therapy for their residents whereas the remaining two administrators indicated it would not be.

Although most of the administrators believe music therapy would be a legitimate therapy for their residents, there are still some that do not. Since nursing homes are much more similar

to the hospital setting than assisted living facilities, it may be understandable why 14% of nursing homes without music therapy did not see how it fits into their medical model. After analyzing their comments, it seems that some of the main reasons music therapy is not considered a legitimate therapy may be because it is not reimbursed in all locations, shortage of funding, and the lack of knowledge of evidence-based research and the benefits of music therapy. Even among administrators who indicated that music therapy would be a legitimate therapy for their residents, it seems they still do not understand the entire meaning of music therapy and the benefits it can bring as evidenced by statements such as “It will entertain them”.

It is unknown if administrators realize how beneficial music therapy may also be to the short-term patients. Music therapy may also be cost-effective by reducing the patients stay in the nursing home. Since many short-term patients come from hospitals to continue the rehabilitation process and since nursing homes are similar to the hospital setting, music therapy could potentially address the same goals for patients used in the hospital such as decreasing perception of pain, improving expressive language skills, improving gait, and increasing cognitive stimulation. Research on the use of music therapy specifically with short-term patients in nursing homes may be a beneficial study to in the future to determine cost-effectiveness.

**Research Question 9 - Concerning the facilities without music therapy, which therapy would administrators most prefer to obtain for their facility?**

For the following question, only those administrators who indicated their facilities did not offer music therapy answered. Of the randomly selected scores of nursing home administrators, music therapy was indicated as the third most preferred therapy to acquire for their facility. Pet therapy and recreational therapy were the two therapies more preferred by administrators of nursing homes. Of the randomly selected scores of assisted living facility administrators, music therapy

was chosen as the second most preferred therapy to acquire for their facility, with recreational therapy being the most preferred. This data shows that both recreational therapy and pet therapy are preferred over music therapy. A reason why recreational therapy is more preferred may be because recreational therapy is more familiar since it has been apart of therapy programs in long-term facilities for a longer period of time (Griffin, 1983). Even if administrators do not fully understand what music therapy is and how it can benefit their residents and facility, it indicates that music therapy is preferred and may be added when funds become available.

Future research may want to increase the subject pool in order to have a truer reflection of the status of therapies in nursing homes and assisted living facilities in Florida. Additionally, researchers might want to consider adding or changing the participant who completes the survey. Some administrators contacted the researcher to say that they forwarded the email to their activities director or director of therapies. It is may be difficult to control who ultimately completes the survey but another researcher may want to survey both the administrator and the activities director for reliability purposes. Future applications also may want to consider providing a definition for what “offering” a therapy means. The researcher did not provide an operational definition for this so one administrator contacted the researcher to ask what this meant. Other researchers may choose to change this definition, but for this study, “offering” a therapy meant either providing it on the grounds of the facility or contracting a therapist to provide services for the residents at their facility. It was also brought to the attention of the researcher that there was no option for administrators to indicate that their facility “does not offer any therapies”. This is an important answer option to have on the survey because you may loose potential participants if you do not.

## **APPENDIX A**

### **INTRODUCTORY EMAIL**

Hi!

My name is Maria Greco and I am a graduate student in the College of Music at Florida State University currently working on my Masters thesis. I am conducting a research study to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida.

I am requesting your participation completing a brief survey which should take approximately 5 minutes of your time.

For your convenience, I have made the survey available electronically through the Florida State University Qualtrics survey engine, which will allow you to answer anonymously. If you are willing to complete the survey, please follow the provided link to access it.

[https://fsu.qualtrics.com/SE/?SID=SV\\_d0t1DifBS4YM5GI](https://fsu.qualtrics.com/SE/?SID=SV_d0t1DifBS4YM5GI)

Thank you for your consideration!

Sincerely,

Maria Greco

## APPENDIX B

### LETTER OF CONSENT

Dear Administrator,

I am a graduate student in the College of Music at Florida State University currently working on my Masters thesis under the direction of Dr. Kimberly VanWeelden. I am conducting a research study to obtain recent data on the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida.

I am requesting your participation completing a brief survey which should take approximately 5 minutes of your time. The survey will involve:

Answering 8 to 10 questions about the various therapies at your facility. Questions include multiple choice, rating, and one open ended question.

Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty. To withdraw at any time after beginning the survey, simply close your web browser. Your name or other identifying information will never be used in any written or oral presentation pertaining to this study. All data collected will only be used to the extent allowed by law and for the purpose of the study as it is described above.

There are no known risks or benefits to you for participating in this research study. If you have any questions concerning this research study, please call me at (\*\*\*) \*\*\*-\*\*\*\* or email me at (insert email). You may also contact my faculty advisor, Dr. Kimberly VanWeelden by phone at (\*\*\*) \*\*\*-\*\*\*\* or email at (insert email).

Electronic submission of the completed survey will be considered your consent to participate.

Sincerely,  
Maria Greco

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-9694.

## APPENDIX C

### SURVEY

Q19 Dear Administrator,

I am a graduate student in the College of Music at Florida State University currently working on my Masters thesis under the direction of Dr. Kimberly VanWeelden. I am conducting a research study to obtain recent data on the status of therapies provided to the residents of nursing homes in Florida. I am requesting your participation completing a brief survey which should take approximately 5 minutes of your time. The survey will involve: Answering 8 to 10 questions about the various therapies at your facility. All questions are multiple choice except one open ended question. Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty. To withdraw at any time after beginning the survey, simply close your web browser. Your name or other identifying information will never be used in any written or oral presentation pertaining to this study. All data collected will only be used to the extent allowed by law and for the purpose of the study as it is described above. There are no known risks or benefits to you for participating in this research study. If you have any questions concerning this research study, please call me at (\*\*\*) \*\*\*-\*\*\*\* or email me at (insert email). You may also contact my faculty advisor, Dr. Kimberly VanWeelden by phone at (\*\*\*) \*\*\*-\*\*\*\* or email at (insert email). Electronic submission of the completed survey will be considered your consent to participate.

Sincerely, Maria Greco

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-9694.

- Yes (1)
- No (2)

If Yes Is Selected, Then Skip To What therapies are offered at your fa...If No Is Selected, Then Skip To End of Survey

Q2 What therapies are offered at your facility? (Check all that apply)

- Physical therapy - "Therapy for the preservation, enhancement, or restoration of movement and physical function impaired or threatened by disability, injury, or disease that utilizes therapeutic exercise, physical modalities (as massage and electrotherapy), assistive devices, and patient education and training." (1)
- Speech therapy - "The treatment of speech and communication disorders. It may include physical exercises to strengthen the muscles used in speech (oral-motor work), speech drills to improve clarity, or sound production practice to improve articulation." (2)
- Occupational therapy - "The therapeutic use of self-care, work, and recreational activities to increase independent function, enhance development, and prevent disability; may include

adaptation of tasks or environment to achieve maximum independence and optimal quality of life." (3)

- ❑ Recreational therapy - "Therapy based on engagement in recreational activities especially to enhance the functioning, independence, and well-being of individuals affected with a disabling condition." (4)
- ❑ Respiratory therapy - "The treatment or management of acute and chronic breathing disorders, as through the use of respirators or the administration of medication in aerosol form." (6)
- ❑ Art therapy - "The therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art." (7)
- ❑ Dance therapy - "The psychotherapeutic use of movement to further the emotional, cognitive, physical and social integration of the individual." (8)
- ❑ Pet therapy - "A goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. is designed to promote improvement in human physical, social, emotional, and/or cognitive functioning." (9)
- ❑ Music therapy - "An established health profession in which the clinical and evidence-based use of music and music activities address and seek to accomplish individualized goals and objectives within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program and undergone training in multiple populations and settings." (10)

If If

Q3 Rate how often the following therapies are utilized by residents at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Music therapy (5)	<input type="radio"/>				
Respiratory therapy (6)	<input type="radio"/>				
Art therapy (7)	<input type="radio"/>				
Dance therapy (8)	<input type="radio"/>				
Pet therapy (9)	<input type="radio"/>				

Q4 Rate how often the following therapies are physician ordered for residents at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Music therapy (5)	<input type="radio"/>				
Respiratory therapy (6)	<input type="radio"/>				
Art therapy (7)	<input type="radio"/>				
Dance therapy (8)	<input type="radio"/>				
Pet therapy (9)	<input type="radio"/>				

Q5 Rate how often the following therapists provide direct client services on a contractual basis at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Music therapy (5)	<input type="radio"/>				
Respiratory therapy (6)	<input type="radio"/>				
Art therapy (7)	<input type="radio"/>				
Dance therapy (8)	<input type="radio"/>				
Pet therapy (9)	<input type="radio"/>				

Q6 What position title does the Music Therapist(s) at your facility hold? (Check all that apply)

- Full-time Music Therapist (1)
- Contracted/Part-time Music Therapist (2)
- Other (please list) (3) \_\_\_\_\_

Q7 What type of sessions does the Music Therapist(s) provide? (Check all that apply)

- Group (1)
- Individual (2)
- Co-treating with other therapists (3)
- Other (please list) (4) \_\_\_\_\_

Q8 Other than music therapy, does your facility have music performers/volunteers play for residents?

- Yes (1)
- No (2)

Q9 If you have music performers/volunteers, do they allow residents to make music with them (i.e. play instruments or sing)?

- Yes (1)
- No (2)

Q10 Do you think music therapy is a legitimate therapy for the residents of your facility?

- Yes (You may indicate why) (1) \_\_\_\_\_
- No (You may indicate why) (2) \_\_\_\_\_

If Yes Is Selected, Then Skip To End of Survey If No Is Selected, Then Skip To End of Survey

Answer If What therapies are offered at your facility? (Check all t... Music therapy Is Not Selected

Q11 Rate how often the following therapies are utilized by residents at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Respiratory therapy (5)	<input type="radio"/>				
Art therapy (6)	<input type="radio"/>				
Dance therapy (7)	<input type="radio"/>				
Pet therapy (8)	<input type="radio"/>				

Q12 Rate how often the following therapies are physician ordered for residents at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Respiratory therapy (5)	<input type="radio"/>				
Art therapy	<input type="radio"/>				

(6)					
Dance therapy (7)	<input type="radio"/>				
Pet therapy (8)	<input type="radio"/>				

Q13 Rate how often the following therapists provide direct client services on a contractual basis at your facility.

Physical therapy (1)	<input type="radio"/>				
Speech therapy (2)	<input type="radio"/>				
Occupational therapy (3)	<input type="radio"/>				
Recreational therapy (4)	<input type="radio"/>				
Respiratory therapy (5)	<input type="radio"/>				
Art therapy (6)	<input type="radio"/>				
Dance therapy (7)	<input type="radio"/>				
Pet therapy (8)	<input type="radio"/>				

Q14 Does your facility have music performers/volunteers play for residents?

- Yes (1)
- No (2)

Q15 If you have music performers/volunteers, do they allow residents to make music with them (i.e. play instruments or sing)?

- Yes (1)
- No (2)

Q16 Do you think music therapy would be a legitimate therapy for residents of your facility?

- Yes (You may indicate why) (1) \_\_\_\_\_
- No (You may indicate why) (2) \_\_\_\_\_

Q20 Of the therapies that you do not offer, rank which therapy you would most prefer to obtain for your facility? (1 = least prefer and 5 = most prefer)

Physical therapy (1)	<input type="radio"/>					
Speech therapy (2)	<input type="radio"/>					
Occupational therapy (3)	<input type="radio"/>					
Recreational therapy (4)	<input type="radio"/>					
Music therapy (5)	<input type="radio"/>					
Respiratory therapy (6)	<input type="radio"/>					
Art therapy (7)	<input type="radio"/>					
Dance therapy (8)	<input type="radio"/>					
Pet therapy (9)	<input type="radio"/>					

## **APPENDIX D**

### **REMINDER EMAIL**

Hi!

My name is Maria Greco and I am a graduate student in the College of Music at Florida State University currently working on my Masters thesis. I sent you an email about a week ago requesting your participation in completing a brief survey concerning the status of therapies provided to the residents of nursing homes and assisted living facilities in Florida.

If you have already taken the survey, thank you! I am sending you a reminder email since the survey is anonymous and I do not know who has taken the survey.

For your convenience, I have made the survey available electronically through the Florida State University Qualtrics survey engine, which will allow you to answer anonymously. If you are willing to complete the survey, please follow the provided link to access it.

[https://fsu.qualtrics.com/SE/?SID=SV\\_d0t1DifBS4YM5GI](https://fsu.qualtrics.com/SE/?SID=SV_d0t1DifBS4YM5GI)

Thank you for your consideration!

Sincerely,

Maria Greco

## APPENDIX E

### FLORIDA STATE UNIVERSITY IRB APPROVAL

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

#### APPROVAL MEMORANDUM

Date: 1/18/2013

To: Maria Greco

Address: [REDACTED]  
Dept.: MUSIC SCHOOL

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research  
The status of therapies in Florida nursing homes and assisted living facilities

The application that you submitted to this office in regard to the use of human subjects in the research proposal referenced above has been reviewed by the Human Subjects Committee at its meeting on 01/09/2013. Your project was approved by the Committee.

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 1/8/2014 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: Kimberly VanWeelden, Advisor  
HSC No. 2012.9535

## REFERENCES

- American Art Therapy Association. (2013). *History and Background*. Retrieved from <http://www.americanarttherapyassociation.org/aata-history-background.html>
- American Art Therapy Association. (2012). *Art therapy: enhancing the lives of older adults*. Retrieved from <http://www.americanarttherapyassociation.org/SeniorToolkit/SENIORTOOLKIT.pdf>
- American Dance Therapy Association. (n.d.a). *About dance/movement therapy*. Retrieved from [http://www.adta.org/About\\_DMT](http://www.adta.org/About_DMT)
- American Dance Therapy Association. (n.d.b). *Dance/movement therapy and the older adult*. Retrieved from <http://www.adta.org/resources/Documents/Info-Sheet-DMT-Elderly-with-Resource-Bib.pdf>
- American Dance Therapy Association. (2005). *Dance/movement therapy*. Retrieved from [http://www.healthpronet.org/ahp\\_month/04\\_05.html](http://www.healthpronet.org/ahp_month/04_05.html)
- American Music Therapy Association. (2011). *Frequently asked questions: is music therapy reimbursable service?* Retrieved from <http://www.musictherapy.org/faq/#51>
- American Music Therapy Association. (2005). *Frequently asked questions: what is music therapy?* Retrieved from <http://www.musictherapy.org/faq/#38>
- American Music Therapy Association. (2011). *History of Music Therapy*. Retrieved from <http://www.musictherapy.org/about/history/>
- American Occupational Therapy Association. (2013). *AOTA: A historical perspective*. Retrieved from <http://aota.org/About/39983.aspx>
- American Physical Therapy Association. (2012). *A summary of direct access language in state physical therapy practice acts*. Retrieved from [http://www.apta.org/uploadedFiles/APTAorg/Advocacy/State/Issues/Direct\\_Access/DirectAccessbyState.pdf](http://www.apta.org/uploadedFiles/APTAorg/Advocacy/State/Issues/Direct_Access/DirectAccessbyState.pdf)
- American Speech-Language-Hearing Association. (2013). *Frequently asked questions: SLPs Working in Health Care*. Retrieved from [http://www.asha.org/slp/healthcare/health\\_serv\\_FAQ.htm#signature](http://www.asha.org/slp/healthcare/health_serv_FAQ.htm#signature)
- American Speech-Language-Hearing Association. (2013). *History of ASHA*. Retrieved from <http://www.asha.org/about/history/>

- American Therapeutic Recreation Association. (1999). *About ATRA*. Retrieved from <http://www.atra-online.com/displaycommon.cfm?an=1&subarticlenbr=3>
- American Therapeutic Recreation Association. (2004). *The recreational therapy professional*. Retrieved from [www.healthpronet.org/ahp\\_month/07\\_04.html](http://www.healthpronet.org/ahp_month/07_04.html)
- Assisted living and nursing home facilities (n.d.) In *Livestrong*. Retrieved from <http://www.livestrong.org/Get-Help/Learn-About-Cancer/Cancer-Support-Topics/Practical-Effects-of-Cancer/Assisted-Living-and-Nursing-Home-Facilities>
- Assisted living facilities. (2013). In *Medicare*. Retrieved from <http://www.medicare.com/assisted-living/assisted-living-facilities.html>
- Center for Health Workforce Studies, School of Public Health, University at Albany. (2006). *The impact of the aging population on the health workforce in the United States: summary of key findings*. Retrieved from [www.apha.org/apha/PDFs/Geron/aging\\_short\\_version6.doc](http://www.apha.org/apha/PDFs/Geron/aging_short_version6.doc)
- Center on Human Development and Disability, Clinical Training Unit, University of Washington. (2007). *Speech and Language*. Retrieved from [http://depts.washington.edu/lend/seminars/modules/spl/intro\\_history.htm](http://depts.washington.edu/lend/seminars/modules/spl/intro_history.htm)
- Certified Assisted Living Administrator: Job Description and Requirements. (2013). In *Education Portal*. Retrieved from [http://education-portal.com/articles/Certified\\_Assisted\\_Living\\_Administrator\\_Job\\_Description\\_and\\_Requirements.html](http://education-portal.com/articles/Certified_Assisted_Living_Administrator_Job_Description_and_Requirements.html)
- Christiansen, J. (2007). History of animal-assisted therapy. In *Yahoo! Voices*. Retrieved from <http://voices.yahoo.com/history-animal-assisted-therapy-557454.html?cat=72>
- Coffman, D. D. (2002). Music and quality of life in older adults. *Psychomusicology, 18*, 76-88.
- Coffman, D. D., & Adamek, M. S. (1999). The contributions of wind band participation to quality of life of senior adults. *Music Therapy Perspectives, 17*, 27-31.
- Day, T. (2013). About assisted living. Retrieved from [http://www.longtermcarelink.net/eldercare/assisted\\_living.htm](http://www.longtermcarelink.net/eldercare/assisted_living.htm)
- Day, T. (2013). About nursing homes. Retrieved from [http://www.longtermcarelink.net/eldercare/nursing\\_home.htm](http://www.longtermcarelink.net/eldercare/nursing_home.htm)
- Do I need a referral for physical therapy? If so, I do I get one? (2012). *Section on Women's Health, APTA*. Retrieved from <http://www.womenshealthpta.org/pdfs/Do%20I%20need%20a%20referral%20for%20Physical%20Therapy.pdf>

- Funding options for seniors. (2010). In *Roman Music Therapy Services*. Retrieved from <http://www.romanmusictherapy.com/services/music-therapy-for-elders/funding-options-for-seniors/>
- Griffin, W.W. (1983). *A study to determine the status of activities programs and music therapy in Florida nursing homes*. (Unpublished master's thesis). Florida State University, Tallahassee, FL.
- Haneishi, E. (2001). Effects of a music therapy voice protocol on speech intelligibility, vocal acoustic measures, and mood of individuals with Parkinson's disease. *The Journal of Music Therapy*, 38(4), 273-290.
- Ice, G. H. (2002). Daily life in a nursing home: has it changed in 25 years? *Journal of Aging Studies*, 16, 345-359.
- Iglehart, J. K. (2012). Expanding eligibility, cutting costs – a medicaid update. *The New England Journal of Medicine*, 366(2), 105-107.
- Jefferson College of Health Sciences. (2013). *Associate of Applied Science in Respiratory Therapy*. Retrieved from <http://www.jchs.edu/page.php/prmID/84#94>
- Kadivar, Z., Corcos, D. M., Foto, J., Hondzinski, J. M. (2011). Effect of step training and rhythmic auditory stimulation on functional performance in Parkinson patients. *Neurorehabilitation and Neural Repair*, 25(7), 626-635.
- Kaplan, R. L. (2011). Older americans, medicare, and the affordable care act: what's really in it for elders? *Journal of the American Society on Aging*, 35(1). Retrieved from <http://www.asaging.org/blog/kaplan-older-americans-medicare>
- Magan, G. (2011). Aging demographics. *Leading Age*. Retrieved from <http://www.leadingage.org/Demographics.aspx>
- Mallery, L. H. & Munroe, A. (2002). Physical therapy for the elderly. *Encyclopedia of Aging*. Retrieved from Encyclopedia.com: <http://www.encyclopedia.com/doc/1G2-3402200316.html>
- Martin, E. (2010, April 15). Dance therapy improves seniors' gait, balance, mu research finds. *News Bureau: University of Missouri*. Retrieved from <http://munews.missouri.edu/news-releases/2010/0415-dance-therapy-improves-seniors%E2%80%99-gait-balance-mu-researcher-finds/>
- McCarthy J., Geist, K., Zojwala, R., and Schock, M. Z. (2008). A survey of music therapists' work with speech-language pathologists and experiences with augmentative and alternative communication. *Journal of Music Therapy*, 45(4), 405-426.

- Morrow, A. (2011, May 27). Millions in budgets cuts leaves nursing homes no choice but to cut staff. *ABC Action News*. Retrieved from [http://www.abcactionnews.com/dpp/news/region\\_tampa/millions-in-budget-cuts-leaves-nursing-homes-no-choice-but-to-cut-staff](http://www.abcactionnews.com/dpp/news/region_tampa/millions-in-budget-cuts-leaves-nursing-homes-no-choice-but-to-cut-staff)
- Nursing home administrator: job description and info for students considering a career in nursing home administration. (2013). In *Education Portal*. Retrieved from [http://education-portal.com/articles/Nursing\\_Home\\_Administrator\\_Job\\_Description\\_and\\_Info\\_for\\_Students\\_Considering\\_a\\_Career\\_in\\_Nursing\\_Home\\_Administration.html](http://education-portal.com/articles/Nursing_Home_Administrator_Job_Description_and_Info_for_Students_Considering_a_Career_in_Nursing_Home_Administration.html)
- O'Callaghan, C. (1996). Lyrical themes in songs written by palliative care patients. *Journal of Music Therapy*, 33, 74-92.
- Occupational therapy. (2013). In *WebMD*. Retrieved from [http://dictionary.webmd.com/terms/occupational-therapy\(ot\)](http://dictionary.webmd.com/terms/occupational-therapy(ot))
- OpenStax College. (2012). *Who are the elderly? Aging in Society*. Retrieved from <http://cnx.org/content/m42874/latest/?collection=col11407/latest>
- Pet Partners. (2012). *Animal-Assisted Therapy (AAT)*. Retrieved from <http://www.petpartners.org/page.aspx?pid=320>
- Physical therapy. (n.d.). In *Merriam-Webster's online dictionary*. Retrieved from <http://www.merriam-webster.com/medical/physical%20therapy>
- Parker-Pope, T. (2009). U.S. life expectancy at all-time high. *New York Times*. Retrieved from <http://well.blogs.nytimes.com/2009/08/19/us-life-expectancy-at-all-time-high/>
- Pollack, N. J., Namazi, K. H. (1992). The effect of music participation on the social behavior of Alzheimer's Disease patients. *Journal of Music Therapy*, 29(1), 54-67.
- Qualtrics. (2013). Provo, Utah, USA. Version: 39,745.
- Recreational therapy. (n.d.) In *Merriam-Webster's online dictionary*. Retrieved from <http://www.merriam-webster.com/medical/recreational%20therapy>
- Resident profile. (n.d.). In *National Center for Assisted Living*. Retrieved from <http://www.ahcancal.org/ncal/resources/Pages/ResidentProfile.aspx>
- Respiratory therapy. (2000). In *The American Heritage® Dictionary of the English Language* (4th ed.). Retrieved from <http://www.thefreedictionary.com/respiratory+therapy>
- Skilled nursing care community overview. (2011). In *Assisted Living Info*. Retrieved from <http://www.assistedlivinginfo.com/Skilled-Nursing-Care/Skilled-Nursing-Care-Overview>

- Speech therapy. (2013). In *MedicineNet*. Retrieved from <http://www.medterms.com/script/main/art.asp?articlekey=11252>
- Sponholz, M. (2013). The difference between physical, speech, and occupational therapy. In *AgingCare.com*. Retrieved from <http://www.agingcare.com/Articles/geriatric-rehabilitation-services-what-is-physical-therapy-143151.htm>
- Standley, J., & Walworth, D. (2010). *Music therapy with premature infants: research and developmental interventions* (2nd ed., pp. 117-119). Silver Spring, MD: The American Music Therapy Association.
- Tague, D. B. (2013, January 31). The effect of the affordable care act on music therapy: a call for advocacy. [Web log post]. Retrieved from <http://musicmakessense.blogspot.com/2013/01/the-effect-of-affordable-care-act-on.html>
- Tamplin, J. (2008). A pilot study into the effect of vocal exercises and singing on dysarthric speech. *NeuroRehabilitation* 23, 207-216.
- Thaut, M. H., Leins, A. K., Rice, R. R., Argstatter, H., Kenyon, G. P., McIntosh, G. C., Bolay, H. V., Fetter, M. (2007). Rhythmic auditory stimulation improves gait more than ndt/bobath training in near-ambulatory patients early poststroke: a single-blind, randomized trial. *Neurorehabilitation and Neural Repair*, 21(5), 455-459.
- The Alliance for Quality Nursing Home Care. (2013). *Sequestration to cost nursing homes \$783M*. Retrieved from <http://www.aqnhc.org/news/417>
- The basics of assisted living. (2012). In *National Caregivers Library*. Retrieved from <http://www.caregiverslibrary.org/caregivers-resources/grp-care-facilities/hsgrp-assisted-living-facilities/the-basics-of-assisted-living-article.aspx>
- The benefits of occupational therapy. (2012). In *Care Plan Information*. Retrieved from <http://www.careplaninformation.com/articles/the-benefits-of-occupational-therapy.htm>
- The history of occupational therapy. (2013). In *Sensory Processing Disorder*. Retrieved from <http://www.sensory-processing-disorder.com/history-of-occupational-therapy.html>
- The history of physical therapy. (2013). In *Network Synergy Group: Physical Therapy Management*. Retrieved from <http://www.network-synergy.com/news/the-history-of-physical-therapy.aspx>
- Today's nursing homes. (2013). In *PBS*. Retrieved from <http://www.pbs.org/newshour/health/nursinghomes/facts.html>

- U. S. Department of Health and Human Services, Centers for Disease Control and Prevention, and National Center for Health Statistics. (2007). *Chartbook on Trends in the Health of Americans* (DHHS Publication No. 2007-1232). Retrieved from <http://www.cdc.gov/nchs/data/hus/hus07.pdf#001>
- Van Andel, G. & Austin, D. (2009). *Personal perspectives*. Retrieved from <http://www.atra-online.com/displaycommon.cfm?an=1&subarticlenbr=6>
- VanderArk, S., Newman, I., & Bell, S. (1983). The effects of music participation on quality of life of the elderly. *Music Therapy*, 3, 71-81.
- Vincent, G. K. & Velkoff, V. A. (2010). *The next four decades: the older population in the United States: 2010 to 2050*. Retrieved from Administration on Aging website: [http://www.aoa.gov/AoARoot/Aging\\_Statistics/future\\_growth/DOCS/p25-1138.pdf](http://www.aoa.gov/AoARoot/Aging_Statistics/future_growth/DOCS/p25-1138.pdf)
- What is assisted living? (2011). In *Assisted Living Info*. Retrieved from <http://www.assistedlivinginfo.com/Assisted-Living-Care/What-is-Assisted-Living>
- What is the difference between occupational therapy and physical therapy? (2012). In *Occupational Therapy Schools Guide*. Retrieved from <http://www.occupationaltherapyschoolsguide.org/2012/01/what-is-the-difference-between-occupational-therapy-and-physical-therapy/>

# **BIOGRAPHICAL SKETCH**

## **MARIA GRECO**

### **Education**

August 2007 to December 2011 Bachelor of Music in Music Therapy, Magna Cum Laude, Florida State University, Tallahassee, Florida

### **Professional Experience**

January 2012 to Present Music Therapist, Healing Hearts Music Therapy, Tallahassee, Florida

June 2011 to December 2011 Music Therapy Intern, Florida Hospital Orlando, Orlando, Florida

September 2010 to Present Section Violinist, Tallahassee Symphony Orchestra, Tallahassee, Florida

September 2006 to Present Private Violin, Piano, and Guitar instructor, Tallahassee, Florida and St. Petersburg, Florida

June 2010/2012 to July 2010/2012 Day/Night Counselor, Florida State Summer Music Camps, Tallahassee, Florida

### **Certification and Training**

2012 Board Certification in Music Therapy (Certification Number: 10211)

2012 Neonatal Intensive Care Unit Music Therapy Certification  
(NICU Music Therapist)

2011 Certificate in Violin Performance