A COMPARISON OF THREE MUSIC THERAPY INTRODUCTION DIALOGUES ON ACCEPTANCE OF MUSIC THERAPY SERVICES BY CANCER PATIENTS

By

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Submitted to the graduate degree program in Music Education and Music Therapy
and the Graduate Faculty of the University of Kansas
in partial fulfillment of the requirements for the degree of
Master of Music Education (Music Therapy).

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Date Defended: 12 December 2014

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ABSTRACT

The purpose of this study was to compare the effectiveness of 3 different music therapy introduction dialogues with cancer patients. Relationships between patient-reported anxiety levels, sex, and age and the acceptance rate of music therapy services were also examined. Patients (n = 59) were offered music therapy using 1 of 3 introduction dialogues, asked to complete an anxiety Visual Analogue Scale (VAS), and provided with music therapy services if accepted. Results showed that introduction dialogue #2 (benefits of music therapy explained, including research) had the greatest effectiveness. Moderate anxiety levels, males, and individuals 61+ years of age also showed greater acceptance rates. A breakdown of different variables influencing patient response, limitations of the study, and future recommendations are also discussed.

Acknowledgements

There are many people I would like to thank for their time, guidance, and support throughout this research study. The study was a collaborative effort between professionals, researchers, academic personnel, cancer center staff, and patients. Each person played an equally important role throughout the planning, organizing, writing, executing, and analyzing phases of the study and deserve individual acknowledgement for their contributions.

Dr. Colwell, my academic thesis advisor, provided guidance through every step of the writing process and data analysis, and I extend tremendous gratitude for her ongoing patience with all of my questions and correspondence. Her words of encouragement (mixed with a touch of humor) allowed me to work through challenges and celebrate little achievements along the way.

I would like to thank Dawn Miller, my Co-Investigator, for her continued enthusiasm, advocacy, and inspiration throughout the study. Her willingness to attend multiple meetings, proofread drafts, and collaborate with other cancer center staff did not go unnoticed. Additionally, her faith in me provided ongoing motivation to push through obstacles, challenge myself, and ultimately succeed in my research endeavors.

I thank my parents, Terry and Linda, siblings, Marcia and Neil, and Aunt and Uncle, Deb and Craig for their persistent cheerleading over the course of this study. Their willingness to listen and provide kind words of encouragement, and their enduring support for my education cannot be emphasized enough. This support helped propel me through each phase of my research study and writing, and allowed me to pursue my passions for music and helping people.

I extend my gratitude to the research team at the cancer center for supporting and approving my research study. To Dr. Alice Shapiro, Research Scientist, I extend my thanks for sharing her vast knowledge of research and assisting me in setting up many of the details required to run the study. Marilyn Magadan, Project Manager in Oncology Research, is to be thanked for all of the help she provided with the IRB submission. Finally, I would like to acknowledge Carol Ann Petersen, Manager of Patient Support and Education, and Joan Bissen, Executive Director of the cancer center's research institute, for giving their support to run this study.

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CHAPTER I

INTRODUCTION

During my music therapy internship at a medical health center, I had the privilege of working with cancer patients, hospice patients, and individuals with Parkinson's and related diseases. Approximately three days a week, I made rounds within an inpatient unit of the hospital or visited patients receiving chemotherapy in the outpatient cancer unit. There, I would introduce myself and music therapy to the patient, and offer music therapy services.

In my first couple of weeks, I quickly discovered that it was difficult to introduce music therapy in a manner that would result in the patient's acceptance of music therapy services. I instantly became intrigued as to why some patients would accept services while others would decline. Was I using the wrong choice of words to introduce myself or music therapy? Was my body language unconvincing? Did the patient's current physical or mental condition influence his or her decision in any way? As more patients continued to decline music therapy services, I became even more interested in discovering the answers to these questions. The experience of introducing music therapy to cancer patients at the hospital, combined with a curiosity for what influenced patients to either accept or decline music therapy services led me to my research topic: comparing the effectiveness of three different music therapy introduction dialogues when offering music therapy services, and examining the potential effects of patient-reported anxiety levels, sex, and age on patient acceptance or non-acceptance of music therapy services.

Historical Developments

The use of music in U.S. hospitals dates back to the beginning of the 20th century, even before music therapy was established as an organized profession (Davis & Gfeller, 2008). During this time, music was provided by hospital volunteers to calm patients, relieve adverse symptoms, shorten recovery time, and normalize the environment (Davis & Gfeller, 2008; Ilsen, 1925; Rogers, 1918). Ilsen (1925) claimed that music was most beneficial for patients with long hospital stays and provided relaxation and mood elevation during this time.

During much of the early 20th century, barriers existed that limited the growth and advancement of music therapy in hospitals. Resistance by medical professionals and hospital management was one of these barriers (Davis, 1993). Despite this resistance, there were select physicians who actively supported music therapy. Dr. Evan O'Neill Kane (1914) authorized the use of recorded music with a phonograph in the operating room to sooth patients and divert their attention away from the surgical procedure. Around the same time, Dr. W. P. Burdick (1915) reported using a phonograph in operating rooms and on hospital floors to promote sleep and comfort for patients. Thirteen years passed before the first hospital – Duke University Hospital – fully embraced Burdick's idea and installed speakers and personal earphones on the floors for patients and staff (Pickrell, Metzger, Wilde, Broadbent, & Edwards, 1950).

Esther L. Gatewood was an active proponent of music in medicine during the early part of the century, and is credited for many developments in the field of music therapy (Taylor, 1981). In 1920, Gatewood introduced the idea of using music with anesthesia and analgesia and also shared her observation that music selected by the

patient in concurrence with his/her physician provided the most beneficial results during treatment. One criterion in selecting patient- and physician-preferred music, according to Gatewood, was to shift the mood of the music gradually – a term known by music therapists today as *iso-principle*. Another forward-thinking idea proposed by Gatewood, which is still in circulation today, is the scientific explanation that two different sensory stimuli cannot enter the brain simultaneously; that is, the stronger of two sensory stimuli (e.g. music or pain) will cancel the other one out (Taylor, 1981).

In 1926, Isa Maud Ilsen – another early pioneer in music therapy – developed the National Association for Music in Hospitals (Davis & Gfeller, 2008). Ilsen was a firm believer that music could help with pain management for patients undergoing surgery and suffering from physical impairments. She also supported the idea that only qualified persons should provide music therapy services within hospitals. Working for 20 years as a hospital musician, founding the National Association for Music in Hospitals, and promoting a professional status for the "hospital musician" has warranted Ilsen as an innovator in the development of music therapy in hospitals (Davis & Gfeller, 2008, p. 28).

The first hospital to install radio speakers, outlets, and private hook-ups for patients was Duke University Hospital in North Carolina, in 1929. According to Pickrell et al. (1950), it was well known at the time that emotions played an important role in the patients' recovery following surgery. Additionally, recorded music, radio programs, and readings offered to patients prior to and during the operation helped to reduce fear and anxiety, divert the patient's attention away from the procedure, and promote minimal movement during the operation. Following the operation, Pickrell et al. (1950) noted that

patients who listened to recorded music required less medication during their recovery. Not only did music positively influence patients' emotional and physical states, but physicians, nurses, assistants, and cleaning staff also experienced similar effects when listening to music between operations and during night and weekend shifts (Pickrell et al., 1950).

During WWI and WWII, music therapy was provided in hospitals for returning soldiers suffering from psychological and physical ailments (Davis & Gfeller, 2008). Individuals and persons belonging to an association (e.g. American Red Cross, National Federation of Music Clubs, Musicians Emergency Fund, and Sigma Alpha Iota, Mu Phi Epsilon, and Delta Omicron) provided music services, taught lessons, led music activities, and supplied instruments (Rorke, 1996). Marian Erdman is an example of one notable Red Cross hospital recreation worker and musician who facilitated dances, led sing-a-longs, organized socials with musical themes, and scripted variety shows among other activities in her work at three military hospitals between the years of 1945 and 1948 (Robb, 1999).

Immediately following WWII, there was heightened interest among musicians nationwide to serve in hospitals. Both amateurs and professionals were eager to bring "comfort and encouragement" through live music to returning soldiers (Van de Wall, 1948, p. 294). Between 1946 and the early 1950s, the use of music was reported in 122 Veterans Administration Hospitals, expanding services to individuals undergoing insulin shock treatment, hydrotherapy, and surgery (Rorke, 1996). Following the development of music therapy programs at Michigan State University, the University of Kansas, Chicago Musical College, College of the Pacific, and Alverno College, trained music therapists

began working in the medical setting as the demand for medical music therapists increased (Davis & Gfeller, 2008).

Current Trends

Music therapy in today's hospitals looks much different than it did at the beginning of the century due to a continually changing health care system. The patient areas served by music therapists have expanded to obstetrics, intensive care units, general medical/surgical units (i.e. internal medicine, neurology, post-surgical, burn, and orthopedics), and cancer care. This broad range of clientele requires the music therapist to be trained in medical terminology, equipment, treatment procedures, and the symptoms of various illnesses and disorders (Hanson-Abromeit & Colwell, 2010).

Music therapists in a hospital setting are part of an interdisciplinary team, which includes physicians and nurses, and frequently physical and occupational therapists, chaplains, nutritionists, pharmacists, social workers, other complementary and alternative medicine personnel, and volunteers. The role of the music therapist is to assess patient needs, devise a treatment plan, and continually evaluate treatment outcomes related to the medical diagnosis, course of treatment, and discharge timeline (American Music Therapy Association, 2014).

Hospital patients' goals and objectives targeted within the music therapy session are varied and largely dependent upon the diagnosis. Some common goal areas within the medical setting include anxiety and stress reduction; nonpharmacological management of pain; mood elevation; active patient participation during treatment; decreased length of hospital stay; emotional intimacy between family, friends, and caregivers; relaxation; and positive social interaction (AMTA, 2014; Ghetti, 2012; Yinger & Standley, 2011). For

individuals with a cancer diagnosis, goal areas commonly addressed by music therapists include pain and symptom management, relaxation, emotional support and expression, control, improved quality of life, stress management, and anxiety reduction (Magill, 2006; Richardson, Babiak-Vazquez, & Frenkel, 2008; Stanczyk, 2011).

Characteristics of a Hospital Setting and Cancer Treatment Center

Within a hospital setting or cancer treatment center, patients are continually approached by a number of professionals including, but not limited to, nurses, doctors, social workers, nutritionists, chaplains, hospital volunteers, therapists, and other hospital staff. During these visits, vitals are checked, treatment procedures are done, tests are taken, medicine is administered, therapeutic or chaplain services are provided, and conferences with the doctors, social worker, and nutritionist are held. According to J. Hoyt (personal communication, March 19, 2014), Nurse Supervisor at a Midwestern medical center, cancer patients receiving chemotherapy are typically approached between 21 and 26 times during their treatment.

When a music therapist is on staff, he/she may also approach patients during their hospital stay or chemotherapy treatment to introduce him/herself and music therapy. The music therapist typically has a matter of seconds to introduce him/herself and present the offer of music therapy services, after which the patient can decide to accept or decline these services.

The hospital music therapist will quickly discover that the manner in which he/she introduces music therapy to a patient upon entering the room often contributes to the patient's willingness, or lack thereof, to accept the music therapy offer. The therapist's body language, facial expressions, dress, tone of voice, and verbal dialogue all play a part

in the presentation of music therapy services to the patient and the patient's subsequent decision to accept or decline. Likewise, the physical, emotional, and mental condition of the patient at the time of the therapist's visit weighs significantly on his/her choice to either accept or decline music therapy services (Burns, Sledge, Fuller, Daggy, & Monahan, 2005).

Rationale and Statement of Purpose

Limited research exists that examines the factors associated with cancer patients' decisions to accept or decline music therapy services (O'Callaghan & Colegrove, 1998). Cancer patients have multiple needs during their treatment and hospital visit that can be effectively addressed by music therapy (Magill, 2006); however, patients will not accept this service if presented ineffectively. Because there is a very short window of time for the music therapist to introduce music therapy, it is vital that he/she use the most effective introduction strategy to reach as many patients as possible.

The purpose of the present study was to compare the effectiveness of three different music therapy introduction dialogues (based on patient acceptance or non-acceptance of the offer for music therapy services). Relationships between patient-reported anxiety levels and the acceptance or non-acceptance of music therapy services was also be examined, as well as the effects of patient sex and age on patient acceptance or non-acceptance of music therapy services.

CHAPTER II

REVIEW OF LITERATURE

Music therapy within an outpatient cancer treatment setting is unique in many ways. The nature of treatment, condition(s) of the patient, complications resulting from the disease and treatment, patient characteristics and expectations, and family and hospital staff involvement create an intricate setting for music therapy and the music therapist involved. A cancer patient's needs are often immediate, substantial, and appropriate for music therapy interventions; for these reasons it is important that the music therapist have an opportunity to present and offer music therapy services in the most effective manner, allowing patients the liberty to accept these services and begin experiencing its many treatment benefits. There are a number of factors involved in the initial presentation and introduction of music therapy to a patient, which can be classified into four broad categories: characteristics of the music therapist, patient factors, situational factors, and attitudes toward the use and acceptance of complementary and alternative medicine.

Characteristics of the Music Therapist

Many authors agree that certain characteristics of a therapist influence patients' first impressions of therapy, and whether or not treatment will be successful. Auxier (2001) discusses the importance of "counselor characteristics" that reflect "acceptance, care, and respect" during the initial therapy session (pp. 385-386). Factors such as voice quality, eye contact, and dress may also influence clients' perceptions of the counselor; however, verbal content reflecting feelings of acceptance and respect were rated as most influential in Auxier's (2001) study. Other significant therapist characteristics, as

described by participants in a study of meaningful moments within the music therapy process, included "trust, good listening skills, presence, knowledge, and intuition" (Amir, 1992, pp. 160-164; 172-173). In both studies, all aforementioned characteristics resulted in the establishment of a healthy therapeutic relationship between patient and therapist, as well as better treatment outcomes.

Additional characteristics have been identified and evaluated for therapist effectiveness based on therapy outcomes. In Lafferty, Beutler, and Crago's (1989) study of select therapist variables, "therapist empathy… and therapist directiveness" differentiated more effective therapists from less effective therapists (based on patients' level of affliction following treatment) (p. 78). The therapist's personal qualities, values, training, and theoretical orientation were not found to be significant predictors of treatment effectiveness. The authors predicted that when these variables were minimized, therapists tended to place credit on their own accomplishments and work rather than practice empathy toward their clients (and were thus less effective) (Lafferty et al., 1989). This study most accurately determined therapist effectiveness *throughout* the session as opposed to *initiating* a session; however, it may be deduced that the therapist who initially reflects empathy and directness will also be more effective in initiating a session.

Certain characteristics of the therapist – be they effective in building a therapeutic relationship with a patient, or not – can be influenced by individual personality types. Steele and Young (2011) surveyed a total of 253 music educators and music therapists to determine their personality types based on the Myers-Briggs Type Indicator. They found the most common personality types among music therapists to be "introverted, intuitive, feeling, and judging" (INFJ) followed by "extroverted, intuitive, feeling, and judging"

(ENFJ) (Steele & Young, 2011, p. 64). The Myers & Briggs Foundation (2013) describes both types as focused on impressions, interested in new possibilities, highly responsive to others' needs, caring, organized, and either focused on the outer world (extroverted) or focused on the inner world (introverted). While many personality types are inherent and difficult to change, the therapist who is cognizant of his or her own personality traits in practice will be most effective in establishing a therapeutic relationship and initially engaging the patient in music therapy.

Many patients receiving treatment in an outpatient hospital setting receive only one music therapy session due to the sporadic nature of treatment. Therefore, the music therapist who immediately establishes a healthy therapeutic relationship and safe environment will be more successful in engaging the patient (Daykin, McClean, & Bunt, 2007). Auxier (2001) suggests that counselors who verbally and non-verbally reflect honesty and integrity during the initial meeting with a client are most successful in building a therapeutic relationship and safe environment. Other factors involved in this process include the therapist's ability to match the energy level and emotional state of the patient upon entering the room (Marom, 2008; Ramseyer & Tschacher, 2011). For instance, a therapist entering the room of a depressed hospice patient would be more likely to engage the patient if the therapist lowers his or her energy level and pace to match that of the patient's. When the therapist incorrectly interprets the patient's physical, psychological, and emotional state and fails to meet the patient where he or she is in the moment, the patient may be more likely to decline the therapist's offer for services (Marom, 2008). If cancer patients are to be initially engaged in therapy, it is

important that the music therapist quickly lay the foundation for a therapeutic relationship and safe environment.

A therapist's nonverbal behavior is another factor that greatly influences the patient's initial response to therapy (O'Callaghan & Colegrove, 1998). In a study of nonverbal behavior among internal medicine residents, Griffith III, Wilson, Langer, and Haist (2003) found greater "standardized patient" satisfaction in the residents' nonverbal behavior than in residents' verbal communication (p. 173). The nonverbal behaviors evaluated by patients included facial expressivity; frequency of smiling, eye contact, and nodding; body lean; body posture (open vs. closed); and tone of voice. Results confirmed that the aforementioned behaviors affected standardized patient satisfaction (Griffith III et al., 2003).

Philippot, Feldman, and Coats (2003) suggest there are three parts involved in the establishment of a therapeutic relationship based on nonverbal behavior: "empathy, evaluation of the therapist by the clients, and feelings of rapport or relatedness" (largely through mimicry of the patient's body language and nonverbal behaviors by the therapist) (pp. 8-9). Tickle-Degnen and Gavett (2003) expand on this idea, claiming that rapport building is comprised of three nonverbal elements: "attentiveness, positivity-negativity, and coordination" (p. 76). In summation, therapists and other medical professionals who are cognizant of their personal characteristics, ability to establish a healthy therapeutic relationship and a safe environment for the patient, and appropriate use of nonverbal behavior in their approach may find greater patient acceptance and engagement, resulting in better treatment outcomes.

Patient Factors

Factors that relate to the cancer patient may include his or her individual background, physical condition, personal characteristics, and expectations – all of which influence his or her response to music therapy. The patient's background, including culture and ethnicity, can play a significant role in his or her attitude toward music therapy and other complementary therapies (Balneaves, Weeks, & Seely, 2008; Marom, 2008). Many cultures frown upon the outward expression of emotion, or disclosure of one's personal issues and feelings. These individuals may prefer to internally work through their problems or refuse to acknowledge them at all (Hogan, 1999). Social constructs in Western culture also center around a "biomedical approach" with emphasis on curative measures rather than comfort care (Pederson & Emmers-Sommer, 2012, p. 422). An individual's cultural background has also shown to influence preference for specific therapy interventions (Gotay & Lau, 2002). According to Gotay and Lau (2002), ethnicity is associated with an individual's preference for relaxation therapy and hypnosis, but not one's preference for guided imagery, biofeedback, or psychological counseling. Culture-bound beliefs may prevent persons from seeking or accepting certain types of treatment, especially lesser-known treatments. Many cultural beliefs are deeply rooted in society and will inevitably continue to affect some cancer patients' attitudes toward music therapy.

Another important patient-related factor to be considered in the acceptance or non-acceptance of music therapy services is the manifestation of the patient's disease (Kwekkeboom, Bumpus, Wanta, & Serlin, 2008; Marom, 2008). A long progression of decline, or the culmination of a loss of function can contribute greatly to the patient's

attitudes and behaviors. If the patient's condition worsens and death becomes eminent, emotions such as fear, anxiety, anger, isolation, and depression can permeate his or her outlook and behaviors (Hogan, 1999, p. 69; Marom, 2008, p. 20). In other instances, disease symptoms directly affect the patient's physical and emotional response to others. For instance, when a patient is experiencing difficulty breathing, mobilizing, eating, or engaging in any other activities of daily living, it may be their decline in physical functioning that inhibits them from engaging in music therapy services (Marom, 2008).

According to O'Callaghan and Colgrove's (1998) study evaluating the effects of music therapy introductions on hospitalized cancer patients, certain symptoms, such as pain, influenced the decision to accept or decline music therapy services. Patients experiencing acute pain or very little pain at all tended to decline music therapy services more frequently. Conversely, patients somewhere between acute pain and physical comfort accepted music therapy with the most frequency. The authors predicted that acute pain was too debilitating and distracting to add additional stimuli (i.e. music), and that physically comfortable patients may have preferred to engage in other personal interests at a time when they felt relatively well. This study illustrates the importance of considering the patient's pain and physical condition when introducing music therapy to a hospital patient.

Another symptom frequently experienced by cancer patients is anxiety that, like pain, may influence the patient's response to music therapy. According to Stark and House (2000), treatment is the cause of many cancer patients' anxiety. In some studies, anxiety levels were found to be highest among patients currently undergoing treatments such as chemotherapy, radiotherapy, and surgery (Ho, So, Leung, Lai, & Chan, 2013;

Schreier & Williams, 2004). Jacobsen and Jim (2008) identified additional potential sources of anxiety for cancer patients, which include the diagnosis of a "life-threatening" disease; experience of adverse symptoms; concerns about the future, recurrence, or course of the disease; and a decreased quality of life (p. 215). Multiple studies have evaluated treatment-related distress and anxiety levels in cancer patients in response to music therapy, and have found that different music therapy interventions are effective in lowering anxiety levels (Ferrer, 2007; Clark et al., 2006; Burns et al., 2008). These positive responses to music therapy are promising for the future of anxiety treatment within the cancer population.

Patients experiencing anxiety and other adverse symptoms related to the manifestation of their disease have very specific needs. In Beatty, Oxlad, Koczwara, and Wade's (2008) study, patients diagnosed with breast cancer, nurses, and volunteers identified the following needs as primary areas of concern: "coping with side effects; dealing with self-concept change; stress and adjustment reactions; having to manage others' unhelpful beliefs, expectations and emotions; and issues of survival and growth" (p. 339). Similarly, Chambers et al. (2012) found that psychological unrest, worry about the future and recurrence, and learning to live with cancer and anxiety were most highly rated by cancer patients and caregivers as major concerns. Associated with disease-related needs is the demand for support programs. One study interviewed young cancer survivors to determine what types of programs were desired to address cancer-related behavioral and psychosocial needs (Rabin, Simpson, Morrow, & Pinto, 2011). Results showed interest in "physical activity, relaxation, emotional support, cancer-related and other information, and nutrition/weight loss" (p. 802). From these studies, it can be seen

that cancer patients' needs span the psychological, emotional, social, physical, cognitive, and spiritual domains, resulting in a demand for increased programs and support services. Multiple studies have already begun to highlight music therapy as a service that can effectively address cancer patients' needs (Daykin, Bunt, & McClean, 2006; Richardson et al., 2008; Stanczyk, 2011).

Like therapists, patients have personal characteristics that influence their response to various treatment interventions (Burns et al., 2005). Selected personal characteristics were identified and analyzed in Burns et al.'s (2005) study to uncover potential relationships between certain characteristics and music therapy involvement. Of the seven characteristics analyzed (anxiety, coping plan, active coping, seeking social support, fatigue, positive affect, and negative affect), three were determined to be statistically significant. Participants with higher anxiety levels and negative affect preferred music listening most frequently, while participants seeking social support were more likely to choose either music listening or music making (Burns et al., 2005, pp. 193-194). Determining some of the patient's personal characteristics upon entering his or her treatment room for the first time may not be feasible; however, knowledge that personal characteristics such as anxiety, coping style, fatigue, and emotional affect can influence a patient's response to music therapy is invaluable to the music therapist.

In looking specifically at music therapy interventions with regard to demographic factors and individual preferences, Burns et al. (2005) found additional relationships. More specifically, younger patients (and patients who experienced greater discomfort and/or pain) tended to prefer a music listening intervention rather than a music making intervention. The authors surmised that because younger individuals are generally more

accustomed to listening to music in their environment, and due to previous findings that younger patients experience more adversity from a cancer diagnosis, these individuals tend to prefer music listening interventions. Gender, education, marital status, employment status, and prior music experience were also evaluated in the study and found to have no significant differences between groups (Burns et al., 2005).

Patient expectation was another variable evaluated for music therapy acceptance and intervention preference in Burns et al.'s (2005) study. For this piece, patients were asked to report their preferred music intervention ("music listening," "music making," or "not interested"), any anticipated pros and cons for participating in their preferred music intervention, and any foreseen efforts required to partake and benefit from their preferred music intervention (p. 191). Their findings revealed that a majority of patients (68%) reported a preference for music listening, and anticipated more pros than cons for this type of intervention with less effort required to participate and achieve positive outcomes. Seventeen (17%) percent of patients reported a preference for music making, anticipating increased benefits and minimal effort. Finally, 15% of patients reported they were not interested in either music listening or music making and recorded any anticipated pros, cons, or foreseen efforts required to participate in them.

In a similar study, Bruscia, Dileo, Shultis, and Dennery (2009) looked at patient expectations as they related to the willingness, or lack thereof, to accept music therapy services. They evaluated cancer and cardiac patients for perceived benefits of music therapy, perceived "effectiveness" of different music interventions, and prior experience in music or music therapy (p. 241). Results from their questionnaires showed that cancer patients rated 10 out of 15 expected benefits of music therapy "significantly higher" than

the cardiac patients (p. 242). Both groups indicated music listening as the "most effective" intervention, followed by singing, instrument playing, improvising, and songwriting (p. 242). Furthermore, individuals with prior experience in music or music therapy held greater expectations of music therapy, specifically the benefits that active music interventions could provide. From their findings, the authors suggest music therapists introduce music therapy by first discussing the individual needs of the patient related to his or her illness; second, provide information about the researched-based benefits and effectiveness of music therapy in addressing their needs; third, engage the patient in a discussion about his or her music background and music preferences; and fourth, offer to play some of the patient's preferred music for a listening experience.

Situational Factors

Patients introduced to music therapy and invited to participate can be influenced by a certain set of circumstances related to their personal situation. For instance, when family members are highly involved in the patient's care, the music therapist's offer for services may go through family rather than directly to the patient. In this situation, music therapy might be presented in the family member's language and terminology rather than the therapist's. In some cases, family members and/or caregivers are the ones who elect music therapy for the patient. When this happens, patients may view a music therapy visit as an infringement upon their environment rather than a welcomed visit (O'Callaghan & McDermott, 2004). According to Marom (2008), some families reject music therapy altogether in an effort to "protect" their loved one from an unknown mode of treatment (p. 19). Family involvement, while normally a positive influence on patient care, can

create additional situational factors that the music therapist must consider when initially offering music therapy services to patients.

Family involvement in music therapy also has the potential to influence the therapeutic relationship between patient and therapist. This therapeutic relationship can be altered or compromised when an involved family member crosses boundaries between him- or herself and the therapist. Transference – a situation where a patient or family member unconsciously projects another role onto the therapist (Dictionary.com, 2014) – is one example of crossing boundaries in a therapeutic relationship and altering the manner in which music therapy is presented (Marom, 2008). Family involvement is not uncommon within an outpatient cancer treatment setting; therefore, the music therapist who adjusts accordingly in his or her introduction and initial presentation of music therapy may find more success in engaging the patient.

Other individuals involved in the patient's care, such as nurses, social workers, physicians, volunteers, counselors, psychologists, and other complementary therapists may also introduce music therapy to the patient. In doing so, their explanation of the service may be based on preconceived knowledge or personal experience, whether accurate or not. The patient may then formulate a false or misconstrued understanding of music therapy based on the explanation they were provided. According to Marom (2008), some nurses and social workers report that patients and families decline music therapy because it is "unfamiliar" and "irrelevant" (p. 19). The facts, phrasing, and terminology used by other professionals in introducing music therapy to a patient, and the manner in which it is presented, may influence the patient to respond in one way or another.

Music therapy is not always offered to the patient face-to-face. The method of initially contacting a patient to introduce music therapy can play a significant role in the decision-making process to accept or decline services. For cancer patients, the music therapist typically makes an initial visit face-to-face, with all instruments and equipment on hand. In this setting, factors such as the therapist's "energy level, temperament, and personality" strongly influence the patient's response (Marom, 2008, p. 20). To contrast, home hospice patients are frequently contacted and initially introduced to music therapy through a phone call. After introducing him- or herself and the nature of music therapy over the phone, the music therapist offers his/her services, which the patient, family, or caregiver(s) may choose to accept or decline. Drawbacks to phone introductions include increased opportunities for the patient and family to refuse music therapy; that in turn impacts the establishment of a therapeutic relationship (Marom, 2008). As a key element in the introduction of music therapy, the method of contacting a patient – be it face-to-face, through a phone call, or directly vs. indirectly to the patient – is very influential and may need to be considered by the music therapist in his or her approach.

Related to the method of contacting a patient to introduce music therapy is the dialogue used to present the service. Through dissecting various discussions that occurred between a music therapy student (MTS) and cancer patients during an initial encounter, O'Callaghan and Colegrove (1998) came up with common "concepts," "categories," and "introductory themes" that the student used in presenting music therapy (p. 70). The number of patients who accepted music therapy services after the introduction determined the level of effectiveness for each introductory theme. Seven introductory themes were identified (O'Callaghan & Colgrove, 1998, p. 71):

- Music preferences discussed;
- Benefits of music therapy to the patient offered;
- Discussion of music preferences not elicited by the MTS;
- Music offered – no mention of music therapy;
- Discussion of patient's illness, and/or non-musical interests;
- Patient heard music therapy before verbal contact with the MTS;
- Music therapy methods explained.

Results of O'Callaghan and Colegrove's (1998) study showed that the most effective introductory style used by the music therapy student was "music preferences discussed," followed by "benefits of music therapy to the patient offered," while "discussion of music preferences not elicited by the music therapy student" and "music offered – no mention of music therapy" tied for third (p. 71). O'Callaghan and Colegrove's (1998) study illustrates that the verbal content used in presenting music therapy to a cancer patient for the first time can affect the patient's response.

Attitudes toward Use and Acceptance of Complementary and Alternative Medicine

Music therapy is sometimes referred to as a form of complementary and alternative medicine (CAM). The National Center for Complementary and Alternative Medicine (2014) defines CAM as a non-standard form of treatment used "together with, or in place of conventional medicine" (p. 1). Various researchers have studied CAM use among individuals diagnosed with cancer. Predictors of CAM use, personal situations that authorize CAM use, barriers that inhibit CAM, patient needs associated with CAM, expectations and preconceived knowledge of CAM, and acceptance/non-acceptance of CAM among patients and medical professionals are some of the topics that have been

researched and published, just to name a few (Chang, Brodie, Choong, Sweeney, & Kerin, 2011; Daugherty, Hlubocky, Hu, Lee, & Stafford, 2008; Fouladbakhsh, Stommel, Given, & Given, 2005).

When considering factors that predict the choice to use CAM, Kristoffersen, Fonnebo, and Norheim (2009) found that cancer patients with a poorer prognosis tended to accept CAM more frequently than patients with better expected outcomes. Other studies report just the opposite, according to Fouladbakhsh et al. (2005). Females, younger to middle-aged individuals, Caucasians, those with a higher education, higher socioeconomic status, not identified as Christian, and having private health coverage further predicted greater CAM use in oncology (Balneaves, Weeks, & Seely, 2008; Chang et al., 2011; Fouladbakhsh & Stommel, 2010; Frass, Strassl, Friehs, Müllner, Kundi, & Kaye, 2012; Graham et al., 2005; Shumay, Maskarinec, Gotay, Heiby, & Kakai, 2002; Yates et al., 2005). Davis, West, Weeks, and Sirovich (2011) also found that a majority of CAM users reported using CAM for "health promotion" versus "treatment" purposes, and used CAM in addition to conventional medicine (pp. 1410-1411). Because music therapy is often considered a form of CAM, music therapists may want to consider the factors found to positively influence CAM use among cancer patients.

In addition to identifying factors involved in the likelihood of accepting CAM, Chang et al. (2011) asked study participants to provide reasons for accepting or declining CAM. Some of the reasons for accepting CAM included suggested by family or friends, own choosing, informed by the media, and referred by a doctor. On the other hand, reasons given for declining CAM included lack of information, lack of interest, "did not

believe in it," had no reason for needing it, too costly, content with traditional forms of treatment, did not feel well, and heard negative commentary about it (Chang et al., 2011, p. 3; Gotay & Lau, 2002). An awareness of the factors that influence patients to accept or decline CAM can be very useful to the music therapist when visiting a patient for the first time, because it allows the therapist to personalize his or her introduction and provide information that is consistent with the patient's attitudes, beliefs, and needs.

The relationship between CAM providers and medical staff is crucial to achieve quality patient care. Nurses and physicians can help identify patient needs that may best be addressed by CAM, and make the referral if appropriate. Likewise, Hume (2010) argues that "the arts team" may benefit greatly from the medical staff's knowledge and expertise, and that their support is vital for the development and maintenance of CAM within the hospital setting (p. 20). According to Hume (2010), the greatest patient outcomes can only be achieved when "arts programmes" are viewed as a necessary form of treatment rather than optional or as an alternative (p. 20).

Medical professionals surveyed in Chang et al.'s (2011) study indicated 17.2% would support patients' continued use of CAM, 3.3% would not support their patients' use of CAM, and 60.9% would neither support nor discourage patients from participating in CAM. Furthermore, medical professionals who participated in CAM themselves were more apt to make a referral for their patients (Chang et al., 2011). An international study of oncologists' attitudes toward CAM found that a majority of the sample reported having little or no education on CAM; however, 70% of the oncologists supported CAM use. In this study, more conversations and CAM referrals were found among the Chinese

and Taiwanese oncology population than in the US oncology population (Daugherty et al., 2008).

One reason music therapy and other forms of CAM are not utilized more frequently by patients is the lack of information provided to patients. Gotay and Lau (2002) suggest that physicians should be responsible for relaying this information to their patients. However, this proposition could prove to be challenging if many physicians report they do not have adequate information about CAM (Daugherty et al., 2008). According to Winslow and Shapiro (2002), a majority of surveyed physicians desired more education on CAM for the purpose of competently addressing their patient's needs. Certain medical programs are beginning to respond to the increasing use and demand for CAM by incorporating courses on the topic, which may increase medical students' probability of informing their future patients of additional forms of treatments (Wetzel, Eisenberg, & Kaptchuk, 1998).

In O'Callaghan and McDermott's study (2004), hospital staff and visitors were approached and surveyed regarding their support and reactions to music therapy at a cancer hospital. The hospital staff provided the following responses: music therapy creates a positive environment in the hospital, and it feels good to see other patient needs addressed; music therapy allows patients to reconnect with others and their past, which may also help them to make sense of the present and future; music therapy is beneficial to visitors; and music therapy services are welcome at the cancer hospital, especially when practiced effectively by a competent music therapist. Some of the visitors' responses included feeling a range of positive emotions; recollecting memories from the past; experiencing the benefits of music therapy for themselves in addition to the patient;

seeing how music and associated memories can support the physical, emotional, and social self; and acknowledging that music therapy can provide positive sensations and deviation from the hospital setting. On average, 40% of visitors surveyed in the study reflected the importance of music therapy at the cancer hospital, and voiced their appreciation for these services (O'Callaghan & McDermott, 2004). Overall, each group's responses to music therapy were positive, reflecting music therapy's importance within the hospital setting.

From the present review of literature, it can be seen that a number of different variables exist in introducing music therapy to the cancer patient for the first time. Characteristics of the therapist, patient factors, situational factors, and attitudes toward the use and acceptance of complementary and alternative medicine all come into play during the initial music therapy visit, influencing the patient to either accept or decline services. Due to the complexity of the outpatient cancer setting (as illustrated through the extensive list of variables presented in this chapter), four variables have been extracted for the focus of this research, which is largely based on O'Callaghan and Colgrove's (1998) study: dialogue used to introduce music therapy, patient's self-reported anxiety level, patient's sex, and patient's age.

Therefore, the aim of the present study was to compare the effectiveness of three different dialogues used to introduce music therapy to patients within an outpatient cancer treatment center, and to discover how patients' self-reported anxiety level, sex, and age might influence the decision to accept or decline music therapy services. The four independent variables of the study include music therapy dialogue, patient self-

reported anxiety level, patient sex, and patient age. The dependent variable of the study was patient response: acceptance or non-acceptance of music therapy services.

Four research questions were addressed:

1. Did the verbal presentation (i.e. dialogue) of music therapy influence a cancer patient's response to either accept or decline music therapy services?
2. Which of three predetermined verbal dialogues used to introduce music therapy, if any, resulted in the greatest number of patients who accepted music therapy services?
3. Did patient anxiety level, sex or age influence the decision to accept or decline music therapy services?
4. What patient anxiety level(s), sex, and age group, if any, resulted in the greatest number of patients who accepted music therapy services?

CHAPTER III

METHOD

Participant Selection Criteria

Participants in the study included adult cancer patients (18 years of age or older) receiving chemotherapy treatment at a Midwestern cancer center (N=59). Family members and friends of the patient were also invited to participate in music therapy services; however, for data collection purposes, only the patient's information was recorded. A breakdown of patient sex (male/female) and age (by group: 18-40; 41-60; 61+) is displayed in Table 1. Some of the patients were referred to music therapy by word of mouth through a nurse or hospital volunteer, but the majority of patients were approached at the music therapist's own discretion (based largely on the patient's treatment length and cycle). Inclusion eligibility to participate in the study included having a cancer diagnosis of any type and stage, for any duration of time (i.e. time since diagnosis), and receiving chemotherapy treatment at the designated cancer center.

Table 1

Breakdown of Participants by Sex and Age Group

	n	Percent (%)
Total Participants	59	100%
Sex		
Male	23	39%
Female	36	61%
Age Group		
18 – 40 years	2	3%
41 – 60 years	21	36%
61 + years	36	61%

All procedures and data collection took place at a 22-room comprehensive cancer treatment center in the Midwestern region of the United States. Offering both chemotherapy and radiation therapy, in addition to counseling services, psychotherapy, integrative therapy, music therapy, pastoral care, home care, hospice, and patient and family support services, this cancer center provided a highly conducive setting for the present study. Music therapy services were offered to chemotherapy patients within a private, enclosed treatment room, where the infusion process, blood draw, nursing evaluation, doctor visit, treatment, and scheduling all took place. Music therapy was offered during any of these treatment stages with the exception of the doctor visit.

Methods and Measurement Tools

Patients were initially selected and approached by the Principal Investigator (PI) in a manner consistent with the cancer center's customs: (a) a music therapy referral was made for the patient by hospital staff (e.g. nurse, volunteer, etc.), or (b) the music therapist determined that music therapy services were appropriate for the patient (based on the patient's treatment cycle or other patient information gathered from hospital staff). Occasionally, patients were approached at random due to the therapist's schedule or unavailability of information such as patients' condition or status. Patients who made a specific request for music therapy were not included in the data collection but were provided with clinical music therapy services as appropriate.

Randomization

Three slips of paper of equal size, color, and texture had a "#1," "#2," or "#3" written on one side in black ink. These slips of paper were then folded in half and put into a plastic bowl. Once a patient had been selected for the current study by one of the two

methods described above ("a," or "b"), the music therapist blindly drew one slip of paper from the bowl. This slip of paper was not replaced and thus could not be drawn again until all three numbers had been selected (blocked randomization) (Moher et al., 2010, pp. e12-e13). After each numbered slip had been drawn, all three slips were put back into the bowl for the next draw.

Treatment Interventions

Each numbered slip of paper corresponded with a different music therapy introduction dialogue predetermined by the PI (Appendix A). Introduction dialogue #1 consisted of the music therapist entering the treatment room and using the following dialogue: "Hello; my name is Leanne and I am a music therapist. May I offer to play a song or two of your choice today?" Introduction dialogue #2 involved the music therapist entering the treatment room and presenting dialogue #2: "Hello; my name is Leanne and I am a music therapist. I am here because research has shown that music can promote relaxation, reduce stress and anxiety, provide symptom management and emotional support, and improve quality of life among other things. May I offer to play a song or two of your choice today?" The final introduction dialogue, Dialogue #3, was a casual conversation held between the music therapist and patient, where no mention of music therapy took place initially: "Hello; my name is Leanne. How is your day going? (Conversation could continue with topics related to the weather, family, hobbies, objects in the room, etc., depending on the environment and verbal or social cues given by the patient). I am a music therapist and I stopped in today to see if I may offer to play a song or two of your choice."

Patients were also asked to indicate their current level of anxiety on a Visual Analog Scale (VAS). The scale was comprised of a 100 mm. horizontal line with the words "Not at all anxious" at the left end of the line, and the words "Extremely anxious" at the right end (Appendix C). Instructions for completing the scale were placed directly above the line. The patient's mark on the line was measured from the left end of the scale (rounded to the nearest millimeter), with each millimeter corresponding to an incremental level of anxiety (e.g. a mark at ≤30 mm. indicated low anxiety; a mark between 30 and 70 mm. indicated moderate anxiety; and a mark at ≥70 mm. indicated high anxiety). Anxiety VASs have been evaluated and compared to other anxiety measures (e.g. Spielberger State Trait Anxiety Inventory, or STAI) and found to be effective in quickly and sufficiently measuring anxiety (Davey, Barratt, Butow, & Deeks, 2007).

Informed Consent

The present study's proposal was submitted to both the Human Subjects Committee (HSC) at the PI's academic institution, as well as the Institutional Review Board (IRB) at the medical institution for review and approval prior to implementation. Informed consent is typically given in writing prior to the study's implementation; however, due to the influence this would have on participants' responses in the present study (thus skewing results) a waiver of consent was requested from the HSC and IRB. This waiver of consent was applied under the following conditions: the research involved no more than minimal risk to participants; the waiver did not adversely affect the rights and welfare of participants; the research could not feasibly be done without a waiver of consent; and when appropriate, participants would be provided with additional pertinent information following participation (S. Elms, personal communication, April 7, 2014).

Music therapy interventions provided to patients targeted individual needs related to disease symptoms and cancer treatment. Cancer often causes adverse manifestations such as anxiety, anger, fear, sadness, guilt, shame, pain, fatigue, and nausea and vomiting, among other disease- and treatment-related symptoms (Magill, 2001; Pedersen, Koktved, & Nielsen, 2013; Stanczyk, 2011). Cancer patients and survivors have identified their needs, which include coping with side-effects, adjusting to changes in self-image, managing stress, dealing with others' responses, and handling emotions and concerns about the future (Beatty, Oxlad, Koczwara, & Wade, 2008; Chambers et al., 2012). Music therapists can target and address these needs within a music therapy session. Multiple authors (Burns, 2001; Magill, 2001; Stanczyk, 2011) have identified music therapy interventions that are effective in addressing the specific needs of individuals diagnosed with cancer, which include song selection, songwriting, lyric analysis, singing, instrument playing, music and relaxation, Guided Imagery and Music, and music technology assisted interventions. As a board-certified music therapist (MT-BC), the PI was qualified to facilitate all aforementioned interventions with the exception of Guided Imagery and Music (an advanced intervention that requires additional training). Interventions were selected on a case-by-case basis (based primarily on patient preferences) and ran anywhere between five and 50 minutes in duration.

The final step involved in the data collection phase included obtaining sex and age of participants. This information was gathered from electronic patient appointment records located at any one of the three nurses' stations within the cancer center. The obtained information was then recorded onto the Data Collection Sheet (Appendix B).

Equipment and Materials

The PI had access to an electronic keyboard (Yamaha PSR-340), acoustic guitar (Seagull 29518), ukulele (Lanikai LU-21 Soprano), various percussion instruments (12" ocean drum, djembe, 10" floor tom, 14" buffalo drum, egg shakers, guiro, rain stick, 10" tambourine, etc.), a set of Orff instruments (soprano glockenspiel, soprano diatonic SONOR xylophone, soprano diatonic SONOR metallophone, and three SONOR bass bars), a Reverie Harp, accordion, collection of C.D.s for relaxation, SONY AM/FM radio and C.D. player, multiple songbooks with a variety of styles, and a large metal cart on wheels to transport equipment. Only a select few instruments and equipment were utilized during any given session, and based primarily on patient preference. For the present study, the PI also had the "Description of Music Therapy Introduction Dialogues" (Appendix A) for reference (all dialogues were delivered to patients by memory), the Data Collection Sheet (Appendix B), a pencil, and a plastic bowl containing the three slips of paper with "#1," "#2," and "#3" written on them.

Independent Variables

The independent variables of the study included three music therapy introduction dialogues, patient-reported anxiety level (on the VAS), patient sex, and patient age. Each music therapy introduction dialogue was developed by the PI, and based on an existing study by O'Callaghan and Colegrove (1998) entitled, "Effect of the Music Therapy Introduction When Engaging Hospitalized Cancer Patients." Patient anxiety levels were assessed through completion of the VAS, and patient sex and age were obtained via electronic patient appointment records. All patient information was recorded onto the Data Collection Sheet.

Dependent Variable

Patient response to the introduction dialogues (acceptance or non-acceptance of music therapy services) was the dependent variable of the study. Responses are represented as frequency counts and percentages for each of the three introduction dialogues.

Statistical Methods

The four independent variables were a combination of nominal (sex) and ordinal (introduction dialogue, age group, and anxiety level) data, and were analyzed and represented as frequency counts and percentages in a comprehensive table. All study findings are reported descriptively.

CHAPTER IV

RESULTS

Three different introduction dialogues were devised by the Principal Investigator (PI) to offer music therapy services to cancer patients receiving chemotherapy treatment. Dialogue #1 consisted of an offer to play/sing a song of the patient's choice (including a brief discussion of patient's preferred music); dialogue #2 was an explanation of the benefits of music therapy (including research); and dialogue #3 included engaging the patient in casual conversation, not mentioning music therapy initially. Each participant's response (acceptance or non-acceptance) to the music therapy offer for services was recorded. An anxiety Visual Analogue Scale (VAS) – also devised by the PI – was used to collect patient-reported anxiety levels. Patient sex and age were obtained through the electronic patient appointment records. All data were recorded onto the Data Collection Sheet created by the PI, and frequencies for each independent variable (introduction dialogue, anxiety level, sex, and age) and dependent variable (acceptance or non-acceptance of music therapy offer for services) were calculated and recorded onto a frequency table (Table 2).

To compare the influence of introduction dialogue on patient response, and the impact of patient-reported anxiety level, sex, and age, frequencies were calculated for each sub group and entered into an overall table (Table 2). Due to a small number of participants in the study (thus, some empty cells in Table 2), results are discussed descriptive

Table 2

Description of Participants and Response Frequency Table

Sex	Anxiety VAS	Age Group	Introduction	Response	Frequency
Female	Low	18-40	#1	No	1
		41-60	#1	Yes	1
			#1	No	1
			#2	Yes	3
			#2	No	3
			#3	No	6
		61+	#1	Yes	2
			#1	No	3
			#2	Yes	5
			#2	No	2
			#3	Yes	3
			#3	No	1
	Medium	41-60	#1	No	1
		61+	#2	No	1
			#3	Yes	1
	High	61+	#2	Yes	1
			#2	No	1
Male	Low	18-40	#1	No	1
		41-60	#1	Yes	1
			#1	No	1
			#2	Yes	1
			#3	No	2
		61+	#1	Yes	1
			#1	No	1
			#2	Yes	2
			#2	No	1
			#3	Yes	2
			#3	No	4
	Medium	61+	#1	Yes	4
			#3	Yes	1
	High	41-60	#1	No	1

Introduction Dialogue

Three music therapy introduction dialogues were indicated as "#1," "#2," and "#3" on equal sized slips of paper and drawn blindly from a bowl. Each drawn slip of paper was not replaced until all three slips had been drawn, and thus represented blocked randomization. Blocked randomization allowed each introduction dialogue to be drawn at random and to be drawn an equal number of times. Introduction dialogue #1 was drawn and used to introduce music therapy a total of 19 times. Introduction dialogues #2 and #3 were each drawn and used to introduce music therapy a total of 20 times, for a total of 59 introductions (one study participant was eliminated due to a non-cancer diagnosis).

Among the 59 patients who participated in the study, a total of 28 (47%) accepted the offer for music therapy services, and a total of 31 (53%) declined. For those who accepted music therapy services, introduction dialogue #2 (benefits of music therapy, including research, explained) had the highest acceptance rate of the three dialogues at 60% (n = 12). Introduction dialogue #1 (offer to sing/play song of patient's choice with brief discussion of patient's music preferences) followed with an acceptance rate of 47% (n = 9), and introduction dialogue #3 (casual conversation held between patient and PI) had the lowest acceptance rate at 35% (n = 7).

Anxiety Level

All participants indicated their current level of anxiety with a vertical mark on an anxiety VAS devised by the PI (Appendix C). The vertical marks were then measured from the left end of the scale (*Not at all anxious*) and rounded to the nearest millimeter by the PI. Then all anxiety ratings were placed into one of three categories that indicated

different levels of severity: low anxiety (rating ≤ 3), moderate anxiety (rating between 3 and7), and high anxiety (rating ≥7).

For the 59 participants who were approached by the PI, 48 (81%) had a VAS rating less than or equal to 3, indicating low anxiety; 8 (14%) had a VAS rating between 3 and 7, or moderate anxiety; and only 3 (5%) participants had a VAS rating greater than or equal to 7, indicating high anxiety. Of those in the low anxiety group, 21 (44%) accepted the offer for music therapy services and 27 (56%) declined. Six participants (75%) within the moderate anxiety group accepted music therapy services while two (25%) declined. Finally, out of the three participants indicating high anxiety, one (33%) accepted music therapy services and two (66%) declined.

Responses to each introduction dialogue varied between the different anxiety groups. Within the low anxiety group, a majority of participants accepted the music therapy offer with introduction dialogue #2 (n = 11; or 52%). Out of the six participants who accepted the music therapy offer in the moderate anxiety group, four (67%) accepted with introduction dialogue #1, and two (33%) accepted with introduction dialogue #3. Only one out of the three participants in the high anxiety group accepted the offer for music therapy, and that was with introduction dialogue #2.

Sex

A total of 23 (39%) males and 36 females (61%) were approached and offered music therapy services during the study. Twelve, or 52%, of the males accepted the music therapy offer and 11, or 48%, declined. Of the females offered music therapy services, 16 (44%) accepted and 20 (56%) declined. Males and females both responded similarly in regard to introduction dialogues. Both sexes had the highest acceptance rate

with introduction dialogue #2: males (*n* = 3; or 75%); females (*n* = 9; or 56%). However; it should also be noted that a greater number of males were presented with introduction dialogue #1, of which a majority accepted (*n* = 6; or 60%).

Age

A majority of the participants approached in the study were in the 61+ age group (*n* = 36; or 61%). Twenty-one participants (36%) were in the 41-60 age group, and only two participants (3%) fell into the 18-40 age group. The highest acceptance rate for music therapy services was in the 61+ age group (*n* = 22; or 61%). The second highest acceptance rate was among the 41-60 age group (*n* = 6; or 29%), even though a majority of participants within this group actually declined the music therapy offer (*n* = 15; or 71%). Both participants within the 18-40 age group declined the offer for music therapy services (100%).

Patient response to each introduction dialogue was somewhat similar among the three different age groups. Within the 61+ age group, acceptance rates were somewhat consistent for each introduction dialogue; only slightly more patients responded “yes” (or acceptance) to introduction dialogue #2 (*n* = 8; or 36%). Seven individuals (32%) in the 61+ age group accepted the music therapy offer for both introduction dialogues #1 and #3. Among the participants in the 41-60 age group, the highest acceptance rate occurred with introduction dialogue #2 (*n* = 4; or 57%). One interesting finding to note in this age group is that all eight participants presented with introduction dialogue #3 declined the music therapy offer for services. No individuals within the 18-40 age group were presented with introduction dialogues #2 and #3; both participants in this age group were presented with introduction dialogue #1 and declined the offer for music therapy services.

Overall – across the categories of patient anxiety level, sex, and age – the highest acceptance rate was among females 61 years of age or older self-reporting low on anxiety level (*n* = 10; or 17%). It is interesting to note that males 61 years of age or older, also self-reporting low on anxiety level, had an acceptance rate of only 8% with a greater *non-acceptance* rate at 10%. However, the overall highest non-acceptance rate across the categories of anxiety level, sex, and age included females between 41 and 60 years of age with a low anxiety level (*n* = 10; or 17%).

CHAPTER V

DISCUSSION

The primary aim of this research study was to determine which of three music therapy introduction dialogues (developed by the PI) was most effective with cancer patients, based on patient acceptance or non-acceptance of the offer for music therapy services. Secondly, this study sought to determine if relationships existed between patient anxiety level, sex, and age, and patient acceptance or non-acceptance of the music therapy offer. Results seemed to indicate that patients receiving introduction dialogue #2 had the greatest acceptance rate. When looking at the other groupings individually, males, individuals 61 years of age or older, and patients indicating moderate anxiety seemed to accept the offer for music therapy services most often. Across the combined groupings of patient anxiety level, sex, and age, females 61 years of age or older self-reporting low on anxiety level accepted the offer for music therapy services most frequently.

Findings from the present study both contrast and support the existing literature. O'Callaghan and Colgrove (1998) evaluated seven music therapy "introductory themes" with cancer patients and discovered that a majority of patients accepted the offer for services with the theme, "music preferences discussed" (p. 72). In contrast, the current study found that most patients accepted the music therapy offer when the benefits of music therapy and research were explained (introduction dialogue #2) rather than either an offer to play/sing a song of the patient's choice (introduction dialogue #1) or engaging the patient in casual conversation (introduction dialogue #3).

Considering the results synthesized in the review of literature, it came as somewhat of a surprise that this introduction dialogue #2 had the greatest overall acceptance rate (n = 12; or 60%). There are a couple of premises that may help to explain these results, especially when comparing the different qualities of each introduction dialogue. Introduction dialogue #2 was longer in length than introduction dialogue #1 (but shorter than introduction dialogue #3), allowing patients slightly more time to make up their minds about accepting or declining the music therapy offer. Introduction dialogues #2 and #1 were scripted, and thus consistent – unlike dialogue #3, which varied somewhat in length and content depending on patient qualities, patient reactions, and the treatment room environment.

Informal Observations

Patient comfort levels appeared to affect a number of participant's responses in the present study. O'Callaghan and Colgrove (1998) found that patients who experienced a great amount of pain or discomfort, as well as those feeling relatively good, tended to decline the music therapy offer more frequently. Similarly, in the present study the PI informally noted that patients who complained of physical discomfort (i.e. feeling too tired, or nauseous) after the music therapy introduction declined the offer for music therapy services more frequently. Certain comments from individuals who were tired led the researcher to believe that patients would feel disrespectful for sleeping during a music therapy visit. Furthermore, it is common practice in Western culture to applaud after a live musical performance; applause and verbal praise were frequent in patient interactions throughout the study, supporting the hypothesis that some patients who were tired or uncomfortable may have declined because they did not have the energy to participate in

the "traditional" sense (i.e. applause, praise, etc.). No complaints of pain were reported in the present study, and for those participants with no physical complaints in general, the response to music therapy was most frequently the choice to decline services, perhaps indicating the perception that they did not need the therapeutic services due to "feeling" fine.

Many of these responses to the offer for music therapy services can be explained through specific comments patients made. A couple of patients with no physical complaints (i.e. comfortable) declined music therapy services, saying they would prefer that patients with greater needs receive services. Another reason given for declining the music therapy offer was feeling too tired and preferring to rest in a quiet environment. One patient declined music therapy services and complained of feeling very unwell due to nausea. These findings came as no surprise to the PI and are consistent with the literature (Davis, West, Weeks, & Sirovich, 2011; O'Callaghan & Colegrove, 1998; Shumay, Maskarinec, Gotay, Heiby, & Kakai, 2002).

Fouladbakhsh and Stommel (2010) looked at cancer survivors' gender and age, among other independent variables, as it related to the use of Complementary and Alternative Medicine (CAM). Their results showed that females and middle-aged individuals used CAM with the greatest frequency. Results from the present study showed just the opposite, where there was a slightly higher acceptance of music therapy services among males and individuals 61 years of age or older. Sex participation rates in the study were more or less consistent with the cancer center's statistics as reported in their most recent annual report: 42% of patients are male; 58% are female.

In considering previous literature (Chang et al., 2011; Fouladbakhsh & Stommel, 2010; Shumay et al., 2002), it is somewhat surprising that males in the present study had a higher music therapy acceptance rate than females. One explanation for this result may be the fact that a greater proportion of the males in the study were 61 years of age or older (16 out of 23, or 70%), which is the age group that accepted music therapy services with the greatest frequency. This latter finding that the 61+ age group had the greatest acceptance rate was less surprising. Older adults, in general, do not have as many commitments as their younger counterparts, who are more likely to be working and raising children; it is not uncommon for working individuals to bring work with them to their chemotherapy treatment to pass the time. Another reason for the greater acceptance rate among older adults could be their unique outlook on life. Older adults typically view death and dying differently than middle-aged adults, which may influence their openness to new professionals (e.g. the music therapist or intern) offering "new" services or modes of treatment.

Other therapist, patient, and situational variables came into play throughout the study, and may or may not have influenced patients' responses to the music therapy offer. Some of these variables could not have been predicted, while others were inevitable. What follows is a more detailed discussion of each of these variables. These variables include timing (stage of infusion, waiting on medical personnel), already listening to media (music, book on tape, TV), presence of friends and family, as well as individual patient characteristics (personality type, and familiarity with the infusion process).

Timing played a large role in the decision to accept or decline music therapy services. Patients nearing the end of their infusion or waiting for a doctor or nurse

practitioner visit tended to decline the music therapy offer more frequently. While most patients declined music therapy services during these times, a few asked if it was possible to hear a song or two in the time that was remaining. Furthermore, many of these patients expressed interest in music therapy and asked additional questions about it. This would often be followed by a brief conversation about music preferences and the role music played in the patient's life. Before departing, many patients requested a future music therapy visit at a better time (e.g. earlier during the infusion process).

Patients wearing headphones and listening to music on an iPod or mp3 player also tended to decline the music therapy offer with greater frequency. Some patients said, "I'm doing my own music therapy," illustrating a common misconception about the profession and what music therapy involves. This provided an opportunity following the introduction dialogue and patient's response to briefly educate the patient about the nature and goals of music therapy. The development and growing popularity of electronic devices such as the iPod/mp3 player, iPad, cell phone, and eReader has created additional options for patients wanting to pass the time during their treatment. There is no doubt that future technological advances will continue to promote the use of electronic devices, but this should not be seen as a threat to the practice of music therapy within a cancer treatment setting; rather, the availability of electronics may serve to enhance the music therapy experience by providing opportunities to share patient's preferred music in the moment (thus personalizing the experience), and having access to a tool that can be used for creative development and expression. Furthermore, the option for live music and personal interaction may be a welcomed change from listening to a recorded playlist.

Family members and friends present during the music therapy introduction often influenced the patient's response in the present study. A majority of patients had visitors with them in the treatment room (i.e. family or friends). In almost all of these instances, patients looked to the visitor(s) for a response to the music therapy offer. A typical patient interaction usually involved the introduction dialogue being presented, the patient looking at the visitor and saying, "I don't know; what do you think," to which the visitor would respond, "I don't care. *You're* the patient." Most patients with visitors tended to accept the music therapy offer after receiving validation by the visitors. Visitors usually participated in music therapy through listening to live music, making song requests, and engaging in related discussions between selections.

Certain patient characteristics or situations may have resulted in the patient being more or less receptive to the introduction dialogue given. For instance, with some patients, engaging in casual conversation prior to receiving the offer for music therapy services was more effective (introduction dialogue #3). These may have included individuals who had been receiving chemotherapy treatment for a considerable amount of time, would identify themselves as extroverted, or require additional time to make decisions, such as the decision to accept or decline the music therapy offer. O'Callaghan and Colgrove (1998) suggest that patients in extreme pain or discomfort may be less receptive to casual introductions, and therefore do not recommend the music therapist to use this type of approach when these elements are present.

Among the 59 patients approached in the study, approximately six were receiving their first chemotherapy treatment. These patients were comprised of both males and females above the age of 41, varied between low and high anxiety ratings on the anxiety

VAS, and accepted the offer for music therapy services more often than not. New patients were more difficult to approach due to long and frequent visits by other medical personnel. Patients in this situation may have been more receptive to music therapy simply because they were already accustomed to frequent interactions with the medical staff. Additionally, these patients may not have been prepared with alternative activities to occupy themselves with during their treatment, and therefore agreed to music therapy.

Although not a primary focus of this study, the intervention type used most frequently for patients accepting music therapy included listening to live music, followed by singing, and then instrument playing. The wording in each introduction dialogue ("...may I offer to play a song or two of your choice?") most likely contributed to the listening intervention being selected most frequently. Another contributing factor for the choice in intervention was the length of the music therapy session. While session lengths ranged from less than five minutes to about 35 minutes, most were between 10 and fifteen minutes long. Interruptions by equipment alarms (indicating the end of a medication cycle or a block in the I.V. tube), or medical staff (usually a nurse, scheduler, or physician) typically ended the music therapy visit. Due to the high frequency at which cancer patients are approached during their treatment (between 21 and 26 times in one visit, according to J. Hoyt, personal communication, March 19, 2014), it can be difficult to offer more than two or three songs – or interventions – in one music therapy session.

In conclusion, it appears that the music therapist who is most attentive and responsive to the patient's present condition and needs (including knowledge of each of the variables described above) will be most effective in his/her approach in introducing music therapy services. This includes the therapist's ability to obtain pertinent

information about the patient prior his/her initial introduction of services, such as the patient's anxiety level, sex, age, cycle of treatment, length of treatment, physical status (e.g. tired, nauseous, pain, etc.), and the presence or absence of family or friends in the treatment room. From this information, the therapist can then tailor his or her "introduction dialogue" accordingly. Both verbal and non-verbal cues are used to introduce music therapy, and the therapist's ability to match the patient's current energy and affective state should be monitored and adjusted accordingly. Finally, a quick evaluation of the patient's unique situation and environment (e.g. patient's use of an mp3 player or iPad, watching T.V., or visiting with family) will help the therapist in choice of introduction dialogue and manner of presentation.

Limitations of the Study

Careful consideration is recommended in the interpretation of the study's results, as some study limitations are noted. The fluency and confidence in which the PI presented the introduction dialogues may have been a contributing factor in the patient acceptance rate. O'Callaghan and Colgrove (1998) identified a similar effect they called "performance anxiety" (p. 72). Near the beginning of the study, the PI may have been less fluent and confident due to less practice and experience. Toward the end of the study, the PI would have gained more practice and experience in presenting the introduction dialogues and may have also adapted a more fluid and solid manner of presentation. This variation in presentation may have influenced some patients to respond in one way or another, thus skewing results. This particular limitation would be difficult to eliminate, as increased opportunities to present music therapy would most likely result in increased fluency and confidence in the presentation and introduction of music therapy.

Participants' approach to responding may have also impacted the results. Some study participants interjected with their response even before the PI had finished giving the introduction dialogue. Among this group, some agreed to the music therapy offer and others declined. These patients made up their minds very early during the interaction and either decided to participate in music therapy or forego the service altogether perhaps for additional time to socialize with family or friends, rest quietly, or engage in another activity (e.g. watching TV, reading, etc.). In these instances, the patient's decision-making capacity may have been the major influence over the patient's response rather than the introduction dialogue, anxiety rating, patient's sex, or patient's age.

The small number of participants served as another limitation in the calculation and interpretation of results. Fifty-nine participants were not enough to account for all of the possible combinations and outcomes among the four independent variables (introduction dialogue, anxiety VAS, patient sex, and patient age). For instance, no participants within the high anxiety group were presented with introduction dialogue #3, and therefore could not be evaluated.

Future Recommendations

Future researchers in this area of interest may want to evaluate some of the other therapist, patient, or situational factors involved in introducing music therapy to cancer patients, and how they may or may not influence patient response to music therapy. The supporting literature discusses variables such as therapist nonverbal behavior, patients' disease and prognosis, and presence or absence of family members with the patient. Relationships between each of the aforementioned variables and patient response

(acceptance or non-acceptance of the music therapy offer) are recommended for future analysis and discussion.

The evaluation of specific patient characteristics as it relates to the effectiveness of each introduction dialogue, or manner of presentation, is another recommended area of study. Specific patient characteristics may include patient verbal and non-verbal cues (e.g. signs of discomfort or distress), or patient activity (e.g. sitting quietly, interacting with visitors, reading, watching TV, etc.). Possible research questions could be, "How do patients sitting alone with no visible means of distraction compare to patients engaged in an activity in their responses to three, predetermined music therapy introduction dialogues?" Or, "How does a patient sitting in an upright position compare to a patient sitting in a reclined position in their responses to three, predetermined music therapy introductions?"

For the present study, all instruments and equipment were left outside the treatment room during the delivery of the introduction dialogue. The inclusion of instruments and equipment would have introduced yet another variable to consider in the patient's response to the music therapy offer. The mere size of the instrument cart made it somewhat challenging to move in and out of treatment rooms, and it may have been viewed as intrusive by some patients. Leaving the instrument cart right outside of the treatment room was effective in the present study, because when patients responded "yes" to the music therapy offer, it was quickly and easily retrieved and added fluidity in the transition between the music therapy introduction and music therapy intervention(s). Additionally, a few patients in the study who were hesitant to respond to the introduction

dialogue accepted the music therapy offer after learning that the instruments and equipment were close at hand.

Conclusion

The purpose of this study was to compare the effectiveness of three different music therapy introduction dialogues with cancer patients, based on patient acceptance or non-acceptance of the offer for music therapy services. Additionally, patient-reported anxiety level, patient sex, and patient age were obtained and examined for potential relationships with patient response (acceptance or non-acceptance of offer for music therapy services). The outcomes showed greatest acceptance rate, or effectiveness, for introduction dialogue #2 (explanation of the benefits of music therapy, including research). Additionally, individual patient groups reporting moderate anxiety levels, males, and individuals 61 years of age or older accepted the music therapy offer with greater frequencies.

A number of additional factors are involved in introducing and offering music therapy services to cancer patients. When considering the study's findings in addition to supporting literature, it is recommended that the music therapist working in a cancer setting consider the patient's physical condition and unique situation, the therapist's own personal qualities (especially verbal and non-verbal behaviors that reflect empathy and confidence in the introduction and presentation of music therapy), and the environment of the treatment space in which the introduction takes place. These considerations will allow the therapist to present music therapy in the most effective manner, thus creating more opportunities for cancer patients to accept the offer for music therapy services and attain its many treatment benefits.

References

American Music Therapy Association. (2014). *Music therapy and medicine.* Retrieved from http://www.musictherapy.org/assets/1/7/MT_Medicine_2006.pdf

Amir, D. (1992). *Awakening and expanding the self: Meaningful moments in the music therapy process as experienced and described by music therapists and music therapy clients*. (Doctoral dissertation). Retrieved from ProQuest dissertations & theses. (9237730)

Auxier, C. R. (2001). *The initial counseling session: A phenomenological analysis of clients' experiences*. (Doctoral dissertation). Retrieved from ProQuest dissertations & theses. (3003975)

Balneaves, L. G., Weeks, L., & Seely, D. (2008). Patient decision-making about complementary and alternative medicine in cancer management: context and process. *Current Oncology, 15*(2), S94-S100. Retrieved from http://www.ncbi.nlm.nih.gov.www2.lib.ku.edu:2048/pmc/articles/PMC2528558/?report=reader

Beatty, L., Oxlad, M., Koczwara, B., & Wade, T. D. (2008). The psychosocial concerns and needs of women recently diagnosed with breast cancer: A qualitative study of patient, nurse and volunteer perspectives. *Health Expectations, 11*, 331-342. doi: 10.1111/j.1369-7625.2008.00512.x

Bruscia, K., Dileo, C., Shultis, C., & Dennery, K. (2009). Expectations of hospitalized cancer and cardiac patients regarding the medical and psychotherapeutic benefits of music therapy. *The Arts in Psychotherapy, 36*, 239-244. doi:10.1016/j.aip.2009.05.002

Burdick, W. P. (1915). The use of music during anesthesia and analgesia. In F. H. McMechan (Ed.), *The American year-book of anesthesia & analgesia* (164-167). New York: Surgery Publishing Company.

Burns, D. S. (2001). The effect of the Bonny method of guided imagery and music on the mood and life quality of cancer patients. *Journal of Music Therapy, 38*(1), 51-65.

Burns, D. S., Azzouz, F., Sledge, R., Rutledge, C., Hincher, K., Monahan, P. O., & Cripe, L. D. (2008). Music imagery for adults with acute leukemia in protective environments: A feasibility study. *Support Cancer Care, 16*, 507-513. doi: 10.1007/s00520-007-0330-z

Burns, D. S., Sledge, R. B., Fuller, L-A., Daggy, J. K., & Monahan, P. O. (2005). Cancer patients' interest and preferences for music therapy. *Journal of Music Therapy, 42*(3), 185-199.

Chambers, S. K., Girgis, A., Occhipinti, S., Hutchison, S., Turner, J., Morris, B., & Dunn, J. (2012). Psychological distress and unmet supportive care needs in cancer patients and carers who contact cancer helplines. *European Journal of Cancer Care, 21*, 213-223. doi: 10.1111/j.1365-2354.2011.01288.x

Chang, K. H., Brodie, R., Choong, M.A., Sweeney, K. J., & Kerin, M. J. (2011). Complementary and alternative medicine use in oncology: A questionnaire survey of patients and health care professionals. *BMC Cancer, 11*, 196-204. doi:10.1186/1471-2407-11-196

Clark, M., Isaacks-Downton, G., Wells, N., Redlin-Frazier, S., Eck, C., Hepworth, J. T., & Chakravarthy, B. (2006). Use of preferred music to reduce emotional distress and symptom activity during radiation therapy. *Journal of Music Therapy, 43*(3), 247-265.

Daugherty, C. K., Hlubocky, F. J., Hu, J-J., Lee, R. T., & Stafford, R. S. (2008). An international pilot study of oncology physicians' opinions and practices on complementary and alternative medicine (CAM). *Integrative Cancer Therapies, 7*(2), 70-75. doi: 10.1177/1534735408319059

Davey, H. M., Barratt, A. L., Butow, P. N., & Deeks, J. J. (2007). A one-item question with a Likert or Visual Analog Scale adequately measured current anxiety. *Journal of Clinical Epidemiology, 60*, 356-360. doi: 10.1016/j.jclinepi.2006.07.015

Davis, W. B. (1993). Keeping the dream alive: Profiles of three early twentieth century music therapists. *Journal of Music Therapy, 30*(1), 34-45. doi:10.1093/jmt/30.1.34

Davis, W., & Gfeller, K. (2008). Music therapy: Historical perspective. In W. B. Davis, K. E. Gfeller, & M. H. Thaut (Eds.), *An Introduction to music therapy: Theory and practice* (pp. 17-32) (3rd ed.). Silver Spring, MD: American Music Therapy Association, Inc.

Davis, M. A., West, A. N., Weeks, W. B., & Sirovich, B. E. (2011). Health behaviors and utilization among users of complementary and alternative medicine for treatment versus health promotion. *Health Services Research, 46*(5), 1402-1416. doi: 10.1111/j.1475-6773.2011.01270.x

Daykin, N., Bunt, L., & McClean, S. (2006). Music and healing in cancer care: A survey of supportive care providers. *The Arts in Psychotherapy 33,* 402-413. doi:10.1016/j.aip.2006.07.001

Daykin, N., McClean, S., & Bunt, L. (2007). Creativity, identity and healing: participants' accounts of music therapy in cancer care. *Health (London), 11*(3), 349-370. doi: 10.1177/1363459307077548

Ferrer, A. J. (2007). The effect of live music on decreasing anxiety in patients undergoing chemotherapy treatment. *Journal of Music Therapy, 44*(3), 242-255.

Fouladbakhsh, J. M., & Stommel, M. (2010). Gender, symptom experience, and use of complementary and alternative medicine practices among cancer survivors in the U.S. cancer population. *Oncology Nursing Forum, 37*(1), E7-E15. doi: 10.1188/10.ONF.E7-E15

Fouladbakhsh, J. M., Stommel, M., Given, B. A., & Given, C. W. (2005). Predictors of use of complementary and alternative therapies among patients with cancer. *Oncology Nursing Forum, 32*(6), 1115-1122. doi: 10.1188/05.ONF.1115-1122

Frass, M., Strassl, R. P., Friehs, H., Müllner, M., Kundi, M., & Kaye, A. D. (2012). Use and acceptance of complementary and alternative medicine among the general population and medical personnel: A systematic review. *The Ochsner Journal, 12*, 45-56. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3307506/

Ghetti, C. M. (2012). Music therapy as procedural support for invasive medical procedures: toward the development of music therapy theory. *Nordic Journal of Music Therapy, 21*(1), 3-35. doi: 10.1080/08098131.2011.571278

Gotay, C. C., & Lau, A. K. (2002). Preferences for psychosocial interventions among newly diagnosed cancer patients from a multiethnic population. *Journal of Psychosocial Oncology, 20*(4), 23-37. doi: 10.1300/J077v20n04_02

Graham, R. E., Ahn, A. C., Davis, R. B., O'Connor, B. B., Eisenberg, D. M., & Phillips, R. S. (2005). Use of complementary and alternative medical therapies among racial and ethnic minority adults: Results from the 2002 national health interview survey. *Journal of the National Medical Association, 97*(4), 535-545. Retrieved from http://search.proquest.com/docview/214055337?accountid=14556

Griffith III, C. H., Wilson, J. F., Langer, S., & Haist, S. A. (2003). House staff nonverbal communication skills and standardized patient satisfaction. *Journal of General Internal Medicine, 18*(3), 170-174. doi: 10.1046/j.1525-1497.2003.10506.x

Hanson-Abromeit, D., & Colwell, C. (Eds.). (2010). *Medical music therapy for adults in hospital settings: Using music to support medical interventions*. Silver Spring, MD: American Music Therapy Association, Inc.

Ho, S. S. M., So, W. K. W., Leung, D. Y. P., Lai, E. T. L., & Chan, C. W. H. (2013). Anxiety, depression and quality of life in Chinese women with breast cancer during and after treatment: A comparative evaluation. *European Journal of Oncology Nursing, 17*, 877-882. doi: 10.1016/j.ejon.2013.04.005

Hogan, B. (1999). Music therapy at the end of life: Searching for the rite of passage. In D. Aldridge (Ed.), *Music therapy in palliative care* (pp.68-81). London: Jessica Kingsley Publishers.

Hume, V. (2010). Creative care: The role of the arts in hospital. *Nursing Management, 17*(5), 16-20. Retrieved from http://search.proquest.com/docview/751281076?accountid=14556

Ilsen, I. (1925). Music's new vocation. *The American Journal of Nursing*, *25*, 981-985 doi: 10.2307/3409625

Jacobsen, P. B., & Jim, H. S. (2008). Psychosocial interventions for anxiety and depression in adult cancer patients: Achievements and challenges. *CA Cancer Journal for Clinicians, 58*(4), 214-230. doi: 10.3322/CA.2008.0003

Kane, E. O. (1914). The phonograph in the operating room. *Journal of the American Medical Association, 57*, 1829.

Kristoffersen, A. E., Fonnebo, V., & Norheim, A. J. (2009). Do cancer patients with a poor prognosis use complementary and alternative medicine more often than others? *The Journal of Alternative and Complementary Medicine, 15*(1), 35-40. doi: 10.1089/acm.2008.0262

Kwekkeboom, K. L., Bumpus, M., Wanta, B., & Serlin, R. C. (2008). Oncology nurses' use of nondrug pain interventions in practice. *Journal of Pain and Symptom Management, 35*(1), 83-94. doi: 10.1016/j.jpainsymman.2007.02.037

Lafferty, P., Beutler, L. E., & Crago, M. (1989). Differences between more and less effective psychotherapists: A study of select therapist variables. *Journal of Consulting and Clinical Psychology, 57*(1), 76-80. doi: http://dx.doi.org/10.1037/0022-006X.57.1.76

Magill, L. (2006). Role of music therapy in integrative oncology. *Journal of Society for Integrative Oncology, 4*(2), 79-81. doi: 10.2310/7200.2006.009

Magill, L. (2001). The use of music therapy to address the suffering in advanced cancer pain. *Journal of Palliative Care, 17*(3), 167-172. Retrieved from http://search.proquest.com/docview/214201505?accountid=14556

Marom, M. K. (2008). "Patient declined": Contemplating the psychodynamics of hospice music therapy. *Music Therapy Perspectives, 26*(1), 13-22. doi: 10.1093/mtp/26.1.13

Moher, D., Hopewell, S., Schulz, K. F., Montori, V., Gøtzsche, P. C., Devereaux, P. J., Elbourne, D., Egger, M., & Altman, D. G. (2010). CONSORT 2010 exploration and elaboration: Updated guidelines for reporting parallel group randomized trials. *Journal of Clinical Epidemiology, 63*, e1-e37. doi: 10.1016/j.jclinepi.2010.03.004

National Center for Complementary and Alternative Medicine (2014, Jan. 20). *Complementary, alternative, or integrative health: What's in a name?* Retrieved from http://nccam.nih.gov/health/whatiscam

O'Callaghan, C., & Colegrove, V. (1998). Effect of the music therapy introduction when engaging hospitalized cancer patients. *Music Therapy Perspectives, 16*(1), 67-74. doi: 10.1093/mtp/16.2.67

O'Callaghan, C., & McDermott, F. (2004). Music therapy's relevance in a cancer hospital researched through a constructivist lens. *Journal of Music Therapy, 41*(2), 151-185. doi: 10.1093/jmt/41.2.151

Pedersen, B., Koktved, D. P., & Nielsen, L. L. (2013). Living with side effects from cancer treatment – a challenge to target information. *Scandinavian Journal of Caring Sciences, 27*, 715-723. doi: 10.1111/j.1471-6712.2012.01085.x

Pederson, S. N., & Emmers-Sommer, T. M. (2012). "I'm not trying to be cured, so there's not much he can do for me": Hospice patients' constructions of hospice's holistic care approach in a biomedical culture. *Death Studies, 36*(5), 419-446. doi: 10.1080/07481187.2011.584024

Philippot, P., Feldman, R. S., & Coats, E. J. (Eds.). (2003). The role of nonverbal behavior in clinical settings: Introduction and overview. In *Nonverbal behavior in clinical settings.* Retrieved from http://site.ebrary.com.www2.lib.ku.edu:2048/lib/kansas/docDetail.action?docID=10084844

Pickrell, K. L., Metzger, J. T., Wilde, J. N., Broadbent, R. R., & Edwards, B. F. (1950). The use and therapeutic value of music in the hospital and operating room. *Plastic and Reconstructive Surgery, 6*, 142-152.

Rabin, C., Simpson, N., Morrow, K., & Pinto, B. (2011). Behavioral and psychosocial program needs of young adult cancer survivors. *Qualitative Health Research, 21*, 796-806. doi: 10.1177/1049732310380060

Ramseyer, F., & Tschacher, W. (2011). Nonverbal synchrony in psychotherapy: Coordinated body movement reflects relationship quality and outcome. *Journal of Consulting and Clinical Psychology, 79*(3), 284-295. doi: 10.1037/a0023419

Richardson, M. M., Babiak-Vazquez, A. E., & Frenkel, M. A. (2008). Music therapy in a comprehensive cancer center. *Journal of the Society for Integrative Oncology, 6*(2), 76-81. doi: 10.2310/7200.2008.0006

Robb, S. L. (1999). Marian Erdman: Contributions of an American Red Cross hospital recreation worker. *Journal of Music Therapy, 36*(4), 314-329. doi: 10.1093/jmt/36.4.314

Rogers, J. (1918). Music as medicine. *The Musical Quarterly, 4*(3), 365-375.

Rorke, M. A. (1996). Music and the wounded of World War II. *Journal of Music Therapy, 33*, 189-207.

Schreier, A. M., & Williams, S. A. (2004). Anxiety and quality of life of women who receive radiation or chemotherapy for breast cancer. *Oncology Nursing Forum, 31*(1), 127-130. doi: 10.1188/04.ONF.127-130

Shumay, D. M., Maskarinec, G., Gotay, C. C., Heiby, E. M., & Kakai, H. (2002). Determinants of the degree of complementary and alternative medicine use among patients with cancer. *The Journal of Alternative and Complementary Medicine, 8*(5), 661-671. doi: 10.1089/107555302320825183

Stanczyk, M. M. (2011). Music therapy in supportive cancer care. *Reports of Practical Oncology and Radiotherapy, 16*, 170-172. doi:10.1016/j.rpor.2011.04.005

Stark, D. P. H., & House, A. (2000). Anxiety in cancer patients. *British Journal of Cancer, 83*(10), 1261-1267. doi: 10.1054/bjoc.2000.1405

Steele, A. L., & Young, S. (2011). A descriptive study of Myers-Briggs personality types of professional music educators and music therapists with comparisons to undergraduate majors. *Journal of Music Therapy, 48*(1), 55-73. Retrieved from http://search.proquest.com/docview/871377133?accountid=14556

Taylor, D. B. (1981). Music in general hospital treatment from 1900 to 1950. *Journal of Music Therapy, 18*, (2), 62-73.

The Myers & Briggs Foundation (2013). *My MBTI results*. Retrieved from http://www.myersbriggs.org/

Tickle-Degnen, L., & Gavett, E. (2003). Changes in nonverbal behavior during the development of therapeutic relationships. In E. J. Coats, R. S. Feldman, & P. Philoppot (Eds.), *Nonverbal Behavior in Clinical Settings* (p. 76). Cary, NC: Oxford University Press.

Transference. (2014). In *Dictionary.com*. Retrieved from http://dictionary.reference.com/browse/transference?s=t

Van de Wall, W. (1948). Music in hospitals. In D. M. Schullian & M. Schoen (Eds.), *Music and medicine* (pp. 293-321). New York: Henry Schuman, Inc.

Wetzel, M. S., Eisenberg, D. M., & Kaptchuk, T. J. (1998). Courses involving complementary and alternative medicine at US medical schools. *The Journal of the American Medical Association, 280*(9), 784-787. doi: 10.1001/jama.280.9.784

Winslow, L. C., & Shapiro, H. (2002). Physicians want education about complementary and alternative medicine to enhance communication with their patients. *Archives of Internal Medicine, 162*(10), 1176-1181. doi:10.1001/archinte.162.10.1176

Yates, J. S., Mustian, K. M., Morrow, G. R., Gillies, L. J., Padmanaban, D., Atkins, J. N., Issell, B., Kirshner, J. J., & Coleman, L. K. (2005). Prevalence of complementary and alternative medicine use in cancer patients during treatment. *Support Care Cancer, 13*, 806-811. doi: 10.1007/s00520-004-0770-7

Yinger, O. S., & Standley, J. M. (2011). The effects of medical music therapy on patient satisfaction: As measured by the Press Ganey Inpatient Survey. *Music Therapy Perspectives, 29*(2), 149-156.

Appendix A

Description of Music Therapy Introduction Dialogues

Introduction Dialogue	Description	Script
Introduction Dialogue #1	Offer to play/sing a song of the patient's choice (brief discussion of patient's preferred music)	"Hello; my name is Leanne and I am a music therapist. May I offer to play a song or two of your choice today?"
Introduction Dialogue #2	Explain benefits of music therapy with patient (including research)	"Hello; my name is Leanne and I am a music therapist. I am here because research has shown that music can promote relaxation, reduce stress and anxiety, provide symptom management and emotional support, and improve quality of life among other things. May I offer to play a song or two of your choice today?"
Introduction Dialogue #3	Engage patient in casual conversation (e.g. weather, decorations in the room, patient's illness, or introduction of family members if present. Music therapy is not initially discussed)	"Hello; my name is Leanne. How is your day going? (Conversation may continue with topics relating to the weather, family, hobbies, objects in the room, etc., depending on the environment and verbal or social cues given by the patient)

Appendix B

Data Collection Sheet

Music Therapist:					
Date:					
	Pt. 1	Pt. 2	Pt. 3	Pt. 4	Pt. 5
Pt. sex	M / F	M / F	M / F	M / F	M / F
Pt. age					
Pt. anxiety level *(0-10)					
Intro Dialogue **(1, 2, or 3)					
MT accepted? (Yes / No)	Y / N	Y / N	Y / N	Y / N	Y / N

* Patient's self-reported anxiety level on VAS: 0 = Not at all anxious; 10 = Extremely anxious

** Music therapy introduction dialogue used (drawn at random):

1. Offer to sing/play song of patient's choice.
2. Explain benefits of music therapy (including research)
3. Engage patient in casual conversation

Appendix C

Visual Analog Scale

Please indicate your *current* anxiety with a vertical mark (/) on the line below.

Not at all anxious

Extremely anxious