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A Developmentally-Informed, Stage-Based Model of Music Therapy in Cancer Care

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A Developmentally-Informed, Stage-Based Model of Music Therapy in Cancer Care

By

Cheryl Lynn Olson

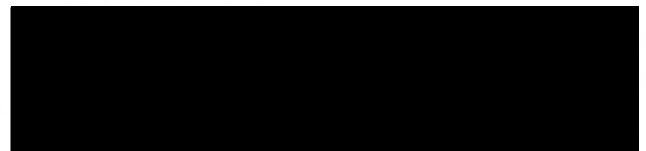
A Master's Thesis Submitted to the Faculty of
Montclair State University

In Partial Fulfillment of the Requirements
For the Degree of
Master of Arts in Music Therapy
August 2015

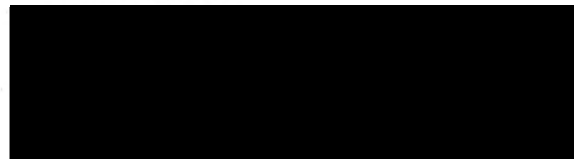
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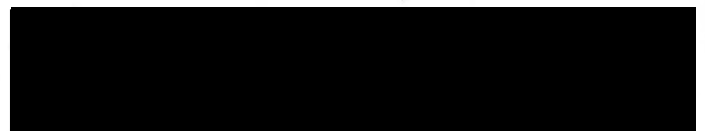
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Montclair State University

Montclair, NJ

2015

Abstract

The physical needs of cancer patients have been documented and accounted for in various methods and theories. Some of the emotional needs of patients have been addressed as well. However, the purpose of this paper is to address the need for a music therapy model that relates developmental life stages to the needs of cancer patients. A brief literature review of physical and emotional needs of cancer patients will be presented, as well as a life-stage model of cancer in terms of Diagnosis, Treatment, and Outcome. Based on the existing literature, this study will develop a music therapy model targeting the various developmental life stages and examining the need for specific music therapy interventions for each stage as it relates to cancer Diagnosis, Treatment, and Outcome. The results and implications of this model include a data-based method for assessment and session planning that can be adapted to individual music therapists and corresponding sessions based on existing models of development as well as patient need. In the future, further study and an expansion of this model would be beneficial to patients and music therapists alike, providing that more research is established in terms of both music therapy and cancer care.

Acknowledgements

Sometime in the winter of 2008, I happened to stop by and visit my friend, Lorraine Sullo after a mutual friend of ours informed me that she had recently been diagnosed with cancer. I listened as she described her experiences with diagnosis and chemotherapy treatments, and the emotional roller coaster involved. After much thought, I came to the conclusion that there is a distinct need for more music therapy interventions for adults undergoing treatments for cancer. So I started to work on my thesis.

Halfway through the process, another friend of mine by the name of Bruce Bousquet was diagnosed with cancer. Again, I had no choice but to watch as he coped with his diagnosis, endured his treatments, and experienced the same emotional roller coaster as Lorraine. I was reminded of my conclusion that there is a distinct need for more music therapy interventions. His journey kept me going.

As often happens, I had my own setbacks and emotional roller coaster in writing my thesis. Then one of my best friends, by the name of Ascenza Montalbano-Pla was diagnosed with cancer. Like Lorraine and Bruce, she coped with her diagnosis, treatments, and emotions with the kind of strength that is nothing short of amazing. Her process inspired me to finish.

Nearly three years later, I can happily say that my friends are all in good places both physically and mentally. Their passages through the stages of Diagnosis, Treatment, and Outcome were inspiring and their journeys kept me going throughout my own process. It is with this thought in mind that I lovingly dedicate the completion of my thesis to Lorraine, Bruce, and Ascenza. May you all stay healthy and continue to be the strong and amazing people you are.

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A Developmentally-Informed, Stage-Based Model of Music Therapy in Cancer Care

I. Statement of Problem

With only 6 letters to its name, cancer can be one of the scariest and most life-changing words a person can hear. As Froelich writes, "A diagnosis of cancer generally evokes change. Depending on the type of cancer and stage of illness, cancer can alter the levels of physical comfort, as well as challenge daily routines, expectations and performance abilities. Since treatments can be long and rigorous, there may be changes in lifestyle, family role responsibilities and social contacts. The illness and the treatments for the illness as well, can change one's appearance, level of energy, and can shake established self-identity and independence" (1996, p.107). In addition, cancer patients may need to be hospitalized, not only because of the actual disease and its physically debilitating effects, but also because of adverse side effects caused by the severe nature of a chemotherapy or radiation regimen, as a result of complications due to the disease, or for surgical care. Kruse (2003) writes on the concept of inpatient settings and how patients are more likely to be physically ill and to experience more nausea than those patients in outpatient settings.

Simply put, the physical rigors included with the treatment of any type of cancer for any patient are hard enough to bear. Unfortunately, the patient experiencing cancer also has to deal with the emotional roller coaster associated with the disease. However, according to Robb (2000), music offers a sense of safety and security because of its natural boundaries and structure. Because of this, patients can find immediate success and alleviate their fears. Music therapy interventions for oncology patients cover the entire spectrum of cancer care, from diagnosis to treatment and then to remission or continued care. However, there do not appear to be any music therapy methods addressing the developmental concerns of cancer patients. It is therefore the purpose of this study to examine cancer as its own developmental stage theory, linking similarities to the developmental stages as described by Erik Erikson. In addition and conclusion, this study will propose a taxonomy of music therapy methods/interventions that specifically address developmental needs with regards to cancer as its own stage theory.

II. Summary of Basic Needs of Persons with Cancer at Each Stage of Cancer: Diagnosis, Treatment, and Outcome

Cancer is not a stagnant diagnosis. It is clearly a life-changing event encompassing a person's entire physical and mental being and involves more than just putting a name to a disease. According to Henselmans, Seltman, Helgeson, de Vries, Sanderman, and Ranchor (2010), not only is a cancer diagnosis cause for adjustment and stress, but the resulting treatments and path that the illness takes can cause equal, if not more stress to cancer patients. Ringdal, Ringdal, Jordhoy, and Kaasa (2007) discuss the various needs of cancer patients with regards to the adaptive tasks they confront. And Henselmans et al. further conclude that during the first year of cancer, several meaningful events can be identified including: diagnosis, surgery, adjuvant treatment, the transition to survivorship or reentry phase, and, finally, the (short-term) survivorship phase. It can therefore be concluded that although cancer is *medically* divided into stages (based on tumor size and how far it has spread throughout the body), there is also a need to divide cancer into stages, *psychologically*, based on the typical process and pathology paralleling the medical stages of Diagnosis, Treatment, and Outcome.

1. Diagnosis

A diagnosis of cancer can be a frightening thing to anyone, particularly considering the psychological implications it implies. Froelich simply states, "A diagnosis of cancer generally evokes change" (1997, p.107). According to Ringdal, Ringdal, Jordhoy, and Kaasa (2007), the needs of a patient during the Diagnosis stage include access to information about prognosis and treatment, which can be very daunting with the amount of information (and in some cases, misinformation) available. Hou, Law, Yin, and Fu (2010) acknowledge how in previous studies, those patients that were unable to resource for themselves, psychologically, were more likely to suffer harsher physical effects from treatment and/or were more likely to have a decreased likelihood of survivorship. This is particularly true within the year following diagnosis. For many patients, the very concept of diagnosis sparks a veritable snowball effect of a psychological journey. Affirming this, Zebrack (2009) describes the nature of cancer

diagnosis, adding the caveat that one's stage of life development has a bearing on the nature of the reaction: when cancer is diagnosed (i.e. young adulthood versus middle age) can significantly influence the level of disruption to one's self image, as well as his or her life's aspirations and relationships. Regardless of when cancer is diagnosed, patients experience some mental anguish in coping with a diagnosis. Santacroce (2008) compares the mental effects of diagnosis and treatment regime in cancer survivors with those of Post Traumatic Stress Disorder (PTSD). Santacroce writes that the mental effects of cancer can effect a patient's well being, health practices, and future prospects, not to mention the likelihood of co-morbid symptoms such as depression and/or anxiety.

2. Treatment

Regardless of how a patient copes with his or her issues regarding diagnosis, he or she must content with the subsequent experience of treatment. A common modality of treatment is chemotherapy, in which caustic substances are used to treat cancer cells that have spread, or metastasized, throughout the body. Because it travels throughout the bloodstream, chemotherapy can be administered orally or through injection and is usually given in cycles ranging anywhere from three to nine months (although the most common length of treatment is about six months) (www.cancer.org). Its side effects can include: nausea, vomiting, hair loss, lowered white blood cell or platelet counts, tiredness and mouth sores (Ferrer, 2007). Hair loss can also occur for some patients, although not all patients suffer from this particular side effect, regardless of the particular form of chemotherapy administered (www.cancer.org).

Another common form of medical treatment is radiation therapy (RT). Because cancer cells can grow and divide more rapidly than most of the normal cells around them, RT is used for its ability to target specific areas where the cancer is located. RT uses "penetrating beams of high energy waves or streams of particles called radiation" (Clark, Iasaacks-Downton, Wells, Redlin-Frazier, Eck, Hepworth, et al., 2006, p. 250) to treat tumors while protecting the normal areas of tissue surrounding them. The medical side effects of RT primarily involve the effect on the skin, and can include irritation or red coloration (sometimes looking sunburned or tanned), dryness, itching, and general discomfort. Occasionally, additional side effects can include hair loss, difficulty eating,

lowered blood counts, dry or irritated mouth or throat, nausea, diarrhea, and frequent or painful urination (Clark et al., 2006). The emotional side effects relate both to the medical effects as well as the anxiety of undergoing treatment which involves lying on a treatment table with protective devices in position while a large machine moves across the area to be treated.

Treatments such as chemotherapy and radiation therapy can create stressors on multiple levels for patients and their families. Froelich (1997) writes on the general nature of change caused by cancer. Apart from the obvious physical discomforts that coincide with treatment, cancer patients are often forced to change their daily routines and, in some cases, their family role responsibilities depending on the stage and nature of a particular diagnosis, resulting in a loss of self-identity and perceived independence. Similarly, Ringdal, Ringdal, Jordhoy, and Kassa (2007) state that emotional support is particularly needed during a hospital stay and that after a lengthy hospitalization, patients may require help from their family members just to get back to everyday tasks and to be a productive member of a household.

3. *Outcome*

The American Cancer Society (www.cancer.org) lists a number of common physical effects from of cancer. These include unexplained weight loss; fever; fatigue; pain, skin changes such as darker skin (hyperpigmentation) or yellowish skin (jaundice); as well as some symptoms that relate to certain types of cancer such as changes in bowel habits or bladder infection; sores that do not heal; unusual bleeding or discharge; or a nagging cough or hoarseness. Furthermore, studies such as that by Clark, Iasaacks-Downton, Wells, Redlin-Frazier, Eck, Hepworth, et al. (2006) list the effects of treatment as hair loss, difficulty eating, lowered blood counts, dry or irritated mouth or throat, nausea, diarrhea, and frequent or painful urination. All of these can lead to long-term emotional and physical effects for cancer patients. Some studies, for example, that by Matchim and Armer (2007) have examined the emotional/physical effects of cancer such as cardiopulmonary and gastrointestinal symptoms, emotional irritability, depression, and cognitive disorganization. Furthermore, Santacroce (2010) lists the long-term effects such as cognitive avoidance, emotional reactivity, hypervigilance, disturbed sleep, and

difficulty concentrating. And these suggested mental consequences are not an isolated viewpoint; Hagger, Wood, Stiff, and Chatzisarantis (2010) report that people experience subjective fatigue when mental resources are taxed. In other words, the physical effects felt by cancer patients, such as extensive fatigue may not be entirely related to the physical rigors of treatment and bodily function. That cancer patients are often excessively tired is a common fact (American Cancer Society website, 2010) but the question of whether the exhaustion is purely physical still remains. Hagger et al. (2010) further conclude that fatigue experienced by cancer patients (post-treatment) may not only be an indicator of ego depletion (i.e. loss of self and/or loss of interest in one's life goals) on subsequent task performance. In addition to all of these symptoms and the emotional toll required for them to cope with their diagnosis and treatments, cancer patients must then find a way to psychologically move on from the Treatment stage to their personal cancer Outcome.

Whether the outcome of one's treatment involves end-of-life care or looking toward life after cancer, a patient is faced with having to re-examine his or her sense of self. According to the American Cancer Society Website (2010), the completion of treatment often brings about mixed emotions. Although the end of treatment can be viewed as a new beginning, the feelings of hope for the future can often merge with the fear of relapse which, for many patients, can be very intense. Other authors have come to similar conclusions. For example, according to Hall, Chipperfield, Heckhausen, and Perry (2010), despite the potential for many cancer patients to make a veritable health comeback after being declared officially cancer free, health crises in later life can also threaten their motivation and emotional well-being because of the fear of cancer reoccurrence and long-term effects, such as physical impairments. Henselmans, Helgeson, Seltman, deVries, Sanderman, and Ranchor (2010) concur that there is a need for psychological aid towards the end of cancer and possible reoccurrences, stating, that emotional distress in the outcome phase of cancer might be a delayed psychological response to the hectic period of diagnosis and treatment. Furthermore, they conclude that future research may be beneficial if it examines the contributing factors of emotional

distress in this period, as they may be preventable, perhaps more so than those evidences of emotional distress following diagnosis. As described by Zebrack (2009),

Cancer survivorship is a life journey initiated by the shock of being told you have cancer ... and ultimately transitions into one of several possible extended periods of off-treatment cancer-free survival, chronic health problems, of the end of one's life (p.45).

III. Summary of Music Therapy for Persons with Cancer at Each Stage of Cancer: Diagnosis, Treatment, and Outcome

Some possibilities for resourcing are common knowledge and are often considered basic prescriptions for cancer patients. Even Hagger, Wood, and Stiff (2010) note the importance of rest and relaxation for increasing one's endurance through any mental feat. However, it is extremely difficult for anyone to go through the process of cancer diagnosis, treatment, and prognosis on his or her own. Fortunately, music therapy can provide a supportive resource for cancer patients and their families. According to Clark, Iasaacks-Downton, Wells, Redlin-Frazier, Eck, Hepworth, et al. (2006), there are many studies (i.e. Frank, 1985; Standley 1992; and Watkins, 1997) that have shown the benefits of music for cancer patients. These benefits include reductions in stress response including decreased anxiety, blood pressure, heart rate, and changes in plasma stress hormone levels (Watkins); decreased anxiety in patients when compared to usual care controls (Frank); and a delayed onset of nausea and reduced self-reported anxiety pre to post-treatment in a specific study with chemotherapy patients (Clark et al, 2006; Standley). Nilsson (2008) reports similar effects of music with the justification that music acts as a distraction from negative stimuli and instead focuses on positive response. Taylor (1997) further adds to this theory in writing that "Music influences human behavior by affecting the brain and subsequently other bodily structures in ways that are observable, identifiable, measurable, and predictable, thereby providing the necessary foundation for its use in treatment procedures" (p. 52). In other words, music therapy interventions can help not only to reduce pain, but to speed healing. All of these concepts can also be applied specifically to the stages of cancer in terms of Diagnosis, Treatment, and Outcome:

1. Diagnosis

Upon getting diagnosed with cancer, many patients feel that they are forced to give up a great deal of control in their lives and that the cancer is now the main factor

controlling them. Dileo (1999) writes on the use of diagnostic song choice for patients, particularly with regards to the concept of “Locus of control” (p.154). According to Dileo, a loss or gain of a patient’s locus of control can be a deciding factor on his or her ability to thrive following a cancer diagnosis. Diagnostic song choice is a technique that serves several purposes: First, it allows a patient to identify a song or songs that he or she feels best represents him/herself, his/her feelings toward illness, and potential coping styles that he/she will need to undergo the treatment process. Second, there is significant research implying the need for patient preference in music therapy for anxiety reduction. Based on their study, Lepage, Drolet, Girard, Grenier, and DeGagnel (2001) conclude that music is best effective as an anxiolytic when it is selected by the individual, as opposed to the therapist, because personally selected music is more likely to reduce an adverse reaction to negative stimuli.

Techniques such as improvisation can play a role in helping cancer patients to deal with the many emotions associated with diagnosis. Turry and Turry (1999) illustrate the use of improvisation to act as a catalyst within the therapeutic process. In this case, improvised music can function to amplify a client’s expressions and to guide him or her through potentially painful emotional progressions. This was illustrated in a case study about a woman who benefited greatly from vocal improvisation in music therapy sessions around the time of cancer diagnosis. Following the improvisations, the client (Judith) created lyrics to express her feelings about her illness, the decisions she faced in choosing doctors and medical procedures, and how to communicate her situation to family and friends. According to Turry and Turry, Judith was able to use the music and the issues presented therein to relate to her own issues. Furthermore, as the sessions progressed, the music therapist was able to use the music to help specifically support Judith’s emotions, by using the music to reflect them.

2. Treatment

The rigors of treatment are clearly stressful to cancer patients, physically and mentally. Many studies, including that by Burns, Sledge, Fuller, Daggy, and Monahan,

(2005) report the effectiveness of various music therapy interventions. According to Dileo (1999), "Cancer patients inevitably need strategies ... to deal with the pain and anxiety of their illness and the medical procedures they must undergo" (p.156). The use of music therapy strategies such as music-based biofeedback; vibroacoustic therapy; techniques that include muscle relaxation, autogenic training, integrative breathing, meditation, and imagery; and (depending on patient preference) strategies such as toning, chanting, and singing pre-composed songs are all possibilities to help patients cope with the rigors of treatment. Burns et al. (2005) write on the importance of interactive music interventions such as instrumental improvisation, drumming, and singing in that they have shown promise in improving mood in cancer patients and further discuss the need for patient preference in music therapy sessions. Individualized sessions, such as the above case study by Turry and Turry (1999) illustrate the use of vocalization in music therapy to help support a cancer patient's emotions regarding her treatment and its effects on her body and emotions. As was presented in the study, both Judith's vocalizations and her song lyrics became more reflective of her personal journey.

One of the most important factors to consider is the fact that music therapy interventions offer choices to patients, including (but not limited to) song choice, instrument choice, length of sessions, and even level of participation. Clients in any medical setting, particularly immuno-compromised patients, often are reported as feeling out of control with their surroundings. Allen, Golden, Izzo, Ching, Forest, Niles, et al. (2001) describe the nature of hospitalized and surgical patients to feel a loss of control, as they are naturally more prone to these notions because of the need for patient compliance in surgical procedures. However, Lepage, Drolet, Girard, Grenier, and DeGagne (2001) assert that music can serve as a link to patients' emotions, thus modulating responses to stress and serving as an accessory during therapeutic interventions.

Outcome

Dileo (1999) writes that "Perhaps the final stage of the music therapy process involves the realization and acknowledgement of the willingness to change..." (p. 164).

The concept of changing one's life direction is one that is faced by every cancer patient in terms of whether he or she is defined as a cancer survivor or a cancer victim. In Turry and Turry's case study, Judith was able to use music therapy interventions to address and consequently work through the painful feelings and inner conflicts caused by her diagnosis and treatment, and eventually move on towards a healthy outcome after her cancer went into a spontaneous regression.

Unfortunately, there is a reality that many patients' treatment outcome is that of a cancer victim, rather than a survivor. This process encompasses a multitude of adjustments and emotions, some of which can take many music therapy sessions to address properly. Dileo (1999) talks about using music therapy as a means of "*detoxifying death*" and allowing patients to address the smaller, more controllable issues such as pain, loss of physical abilities and functions, and relationships with family members. In some regrettable cases, there is simply not enough time for multiple music therapy sessions. Magill, Levin, and Spodek (2008) write on the use of one-session music therapy coupled with Cognitive Behavioral Therapy (CBT) for critically ill patients. Essentially, Magill, Levin, and Spodek used the CBT hypothesis that reframing distorted perceptions can improve associated emotions, and when combined with a music therapy component, it can serve as a more upbeat (rather than neutral) position on life and death in an oncological context.

IV. Erikson's Developmental Model

Erik Erikson (1902-1994) was a student of Anna Freud (daughter of Sigmund Freud) and did a great deal of study on child psychoanalysis. Through his studies, he wrote and published *Childhood and Society* (1950) in which he mapped out his eight stages of life: Oral, Anal, Phallic (Oedipal), Latency, Genital (Adolescence), Young Adulthood, Adulthood, and Old Age. Each stage holds for the individual a developmental conflict and a potential resolution that would result in "ego strengths" (Crain, 2005, p.282). Each of the stages describe qualitatively different behaviors, refer to general issues, unfold in an invariant sequence, and are culturally universal. However, it is important to note that Erikson's stage theory does allow for the Freudian concepts of fixation and regression. In other words, an individual can remain at one stage for a length of time depending on an individual's "excessive gratification or excessive frustration at the stage in question" (i.e. fixation) and his or her "tendency to regress [which] is determined by both the strength of the fixation in childhood and the magnitude of the current frustration" (Crain, 2005, p. 255). Although all eight stages of life are important and can likely be revisited within the stages of Cancer Diagnosis, Treatment, and Outcome, this study will focus on four of the predominantly relevant stages: Oral, Anal, Young Adulthood, and Old Age; as well as the corresponding developmental conflicts for each stage: Basic Trust Versus Mistrust, Autonomy Versus Shame and Doubt, Intimacy Versus Isolation, and Ego-Integrity Versus Despair.

The Oral Stage (Birth to one year)

According to Erikson, babies' ego development is strongly if not entirely influenced by their interactions with their parents and/or caretakers. What is most important in these interactions is that babies come to find some consistency, predictability, and reliability based on their parents or caretakers' actions. When babies sense that a parent or caretaker is consistent and dependable, they develop a sense of basic trust in them. According to Erikson, the alternative is a sense of mistrust, or the feeling that the parent/caretaker is "unpredictable and unreliable, and may not be there when needed" (Crain, 2005, p.280). Consequently, Erikson describes the major conflict

within the Oral stage as *Basic Trust versus Mistrust*. Similarly, babies must also develop a sense of trust within themselves at this stage. According to Erikson, this can be seen through interactions of breastfeeding, biting, grasping, and even insofar as a baby's reaction to his or her parent/caretaker leaving a room (often described as separation anxiety). If the conflict of *Basic Trust versus Mistrust* is resolved and balanced, Erikson said that babies will have developed *hope*. As Crain (2005) writes,

Hope is the expectation that despite frustrations, rages, and disappointments, good things will happen in the future. Hope enables the child to move forward into the world and take up new challenges (p. 282).

The Anal Stage (one to three years)

The most outstanding feature of the Anal stage is that children are primarily trying to exercise a choice. Whether it is learning to assert themselves to the perceived "normal" social expectations as set by their parents, caregivers, and society, or whether it is simply a matter of self-regulation of bodily functions, this can be a critical stage for many children. The consequential downfall of not properly conforming oneself to societal norms (or in some cases, those expressed by parents and caregivers) can result in a sense of rejection and in self-deprecation. It is this exact reasoning that lead Erikson to define the major conflict of the Anal stage as *Autonomy versus Shame and Doubt*. Crain (2005) describes this conflict in that

Autonomy comes from within; biological maturation fosters the ability to do things on one's own – to control one's own sphincter muscles, to stand on one's own feet, to use one's hands, and so on. Shame and doubt, in contrast come from an awareness of social expectations and pressures (283-284).

However, if this conflict is successfully balanced and resolved, Erikson describes the result of *will*, or the ability to use both free choice as well as self-restraint regarding one's actions.

Young Adulthood

Labeled by Freud as *Adolescence*, the life stage as defined by Erikson as Young Adulthood primarily focuses on a sense of identity. As described by Crain (2005), adolescents are mainly concerned with their appearances and how they look with regards to others' opinions. During this time in their lives, they are attempting to develop a stronger sense of identity, however this sense is principally defined by their peers and by those peers' judgments. Crain specifically states that "The adolescent is preeminently self-centered" (p. 289). As a result of this, real intimacy is not possible until "a reasonable sense of identity has been established" (Crain, p. 289).

Old Age

Casting aside the more stereotypical views of an "old age" individual as someone with limited mental and physical capacity, Erikson's final life stage is an important catharsis within or at the end of a person's developmental journey. According to Crain (2005), the stage of old age often involves painful feelings but has potential for inner growth and understanding, however this insight comes at a price. During this stage, an individual struggles with Erikson's conflict of *Ego integrity versus despair*. Primarily, this concerns coping with physical and social losses (i.e. jobs, income (through retirement), spouses, relatives, and friends) as well as coping with a loss of "status" and feeling as though they are "old, inactive, and useless" (Crain, p. 291). It is at this stage where individuals often find themselves engaging in a life review – looking back on life and wondering if it was worthwhile. Crain (2005) appears to describe it best:

In this process they confront the ultimate despair – the feeling that life was not what it should have been, but now time has run out and there is no chance to try alternative lifestyles. Frequently, disgust hides despair. Many older people are disgusted by every little thing; they have no patience for the struggles and failings of others. Such disgust, Erikson said, really signifies their contempt for themselves (p. 292).

Resolution of this conflict results in *wisdom* which may be expressed in many ways, but is always defined as continuing to reflect and find value in life in the face of death.

V. A Rationale For a Developmentally-Informed, Stage-Based Model of Music Therapy in Cancer Care

The Relevance of Erikson's Developmental Model to Stages of Cancer

The Oral Stage: Basic Trust Versus Mistrust

Developmentally, these new challenges relate to the next stages in Erikson's theory (i.e. Anal, Phallic, etc). However, when examined from the perspective of a cancer patient, it is just as important for adults to experience trust from their friends and family in the form of social support. Ringdal, Ringdal, Jordhoy, and Kaasa (2007) discuss the importance of social support from family and friends for patients undergoing such stressful life events as terminal cancer. The authors state that "social support has a direct effect on health independent of the stress level experienced" (p.63). In the same way that Erikson describes the concept of trust as a basic, infantile need that all humans must experience as well as the fact that babies learn to trust themselves based on the examples of support given to them by parents and/or other caregivers, the above authors essentially maintain that adults continue to need this sort of collaboration regardless of any external forces (i.e. health or stress). Adults experiencing cancer, however, are therefore even more susceptible to bouts of negative impact on their health and well-being if they are unable to access a strong social network of support. The results of the study conducted by Ringdal, Ringdal, Jordhoy, and Kaasa (2007) confirmed that patients with higher social support reported better emotional functioning and less serious stress reactions than patients with a low degree of social support. Once again, when compared with Erikson's theory of development, it can be concluded that the presence or lack of social support is likely to be a major contributing factor in a cancer patient's physical well-being. Concurrent with Erikson's theory of a resolution conflict *Trust Versus Mistrust* resulting in the core ego stage of *hope*, Reynolds (2008) discusses the effects of hope on one's physical being. According to Reynolds, hope can be defined as "an important and effective coping mechanism associated with positive coping and adaptation and quality of life" (p. 259). As a result of a study examining the effects of hope over time as experienced by adults ages 20-59 with advanced stage cancer, Reynolds

concluded that the presence of hope (or in some cases, the lack thereof) was directly related to the physical prognosis of the study participants. Essentially, when a person has more hope, he or she is less likely to experience negative effects such as nausea, fatigue, pain, anxiety, or even irritability, all of these being common issues experienced by cancer patients (Reynolds, 2008; Clak, Isaacks-Sownton, Wells, Redlin-Fraizer, Eck, Hepworth, et al, 2008).

The Anal Stage: Autonomy Versus Shame and Doubt

The act of free choice can be a concept that is near unreachable for some cancer patients, given the nature and limitations of treatment. In a study conducted by Allen, Golden, Izzo, Ching, Forrest, Niles, et al. (2001), many of the participants (who were hospitalized surgical patients) described feeling as though they had relinquished all personal control on entering the facility. Generally speaking, whether it is a question of surgery, number of treatments, length and duration of hospitalizations, medications, etc, many cancer patients' lives become dictated by their disease, rather than their own personal choices. These personal choices (or lack thereof) can lead to a sense of personal control, or in the case of many patients, a lack thereof. Mitchell (2007) explains personal control as the belief in the ability to respond in a way which will decrease the aversiveness of [an] event and goes on to describe the correlation between perceived control and lower levels of disability and disruption of activities as well as an increased quality of life in chronic pain patients. Likewise, Henselmans, Seltman, Helgeson, and de Vries (2010) write that personal control over life, or mastery, constitutes the belief that one is personally able to influence the outcomes of important events or situations. This is clearly an asset to a cancer patient's odds of survival as the above authors further conclude their research to demonstrate that optimism can promote a sense of psychological well-being in cancer patients.

Young Adulthood: Intimacy Versus Isolation

According to Harden, Northouse, Cimprich, Pohl, Liang, and Kershaw (2008), many middle aged cancer patients continue to battle with an increased desire for intimacy and companionship, but a diagnosis and resulting treatment process can often exacerbate this conflict. Their struggles directly parallel a college professor's recounting of his battle with cancer as a young adult, particularly concerning his identity. Zebrak (2009) writes, "cancer has an impact on so many aspects of people's lives – physical, emotional, social, spiritual – and these effects can vary depending on when the cancer occurs" (p. 44). According to Zebrak's article, factors such as changing one's social life because of the concern for infection, body image, sexuality, intimacy, and fear of rejection from potential partners (all of which Erikson describes as typical milestones in young adulthood) are made more difficult because of the complications from having cancer. Young (2007) describes the social and emotional problems that cancer creates for its patients, including the need for family members to adjust to the various stages involved. Furthermore, Young writes that when compounded with the typical side effects of treatment regimes fatigue, depression, and feelings of isolation and social withdrawal are likely to occur for the person with cancer. This can be linked to Erikson's notes on how an adolescent is primarily concerned with how others view him/her and the need for that individual to develop a strong sense of identity. If he or she is the one undergoing treatment and none of his or her peers are doing so, that adolescent is likely to pull away (isolate) and feel disconnected and unaccepted. The same goes for any adult undergoing the cancer treatment process.

Old Age: Wisdom Versus Despair

With specific regards to cancer patients, Erikson's descriptions of the life conflicts surrounding "old age" are most noticeable in those patients of advanced years. Simply put, old age begets old age. Holland, Poppito, Nelson, Weiss, Greenstein, Martin, et al. (2009) describe the multitude of issues facing geriatric cancer patients including (but not limited to) demoralization, isolation, depression, existential despair, hopelessness, helplessness, and a loss of meaning and purpose in life. The authors

illustrate the importance of attaining ego integrity in order to make peace with the life that they have led, continue to feel connected to others, and experience a sense of meaning and coherence. The alternative consequence is of despair and a sense of regret over the life one has lived, as well as a feeling of hopelessness. Furthermore, it is important for elderly cancer patients to seek out peer support because those individuals who share their cancer experience with others in the same situation are more likely to begin the process of "*cognitive restructuring*" (looking at life from a new perspective) and to experience a positive sense of meaning in their lives. They are also more likely to engage in cognitive coping skills such as reframing and processing of difficult events. Hall, Chipperfield, Heckhausen, and Perry (2010) warn against the possibility of older adults engaging in unhealthy disengagement and self-protection as a result of concerns with managing losses and sustaining basic functioning. They conclude that adults with less frequent uses of goal engagement are more likely to develop a higher risk of mortality. This can be easily understood when examined in conjunction with the physical and mental stressors of cancer treatment.

Relevance of Erikson's Developmental Model to Music Therapy

The Oral Stage: Basic Trust Versus Mistrust

Despite these common issues of pain, anxiety, and irritability, music therapy interventions have historically proven useful in prolonging hope in patients of varying diagnoses, including cancer. Aldridge and Aldridge (1999) discuss the importance of music therapy in prolonging hope for patients stating that, "Music therapy can offer hope in situations of seeming hopelessness and is, in this sense, a means of transcendence" (p. 81). Burns, Sledge, Fuller, Daggy, and Monahan (2005) write that cancer patients have benefited from interactive music therapy interventions including drumming, singing, and improvisation. Logically, with improved mood comes improved outlook, otherwise known as hope. Magill (2001) confirms this theory, describing the relationship between music and emotion. Clearly he is not the first to discuss this, however he does reflect that

music portrays emotions and elicits feelings and because of this, music has the power to elicit changes in patients' outlook, feelings, experiences, and overall moods.

The Anal Stage: Autonomy Versus Shame and Doubt

Psychological well-being and independence, or to use Erikson's word *will*, can be encouraged through patient-centered music therapy interventions. Mitchell (2007) describes the benefits of interventions such as music listening for the alleviation of pain and anxiety. He further concludes that these interventions may alter the meaning of the sensation and promote a sense of independence and coping ability. The results of the study by Allen et al. (2001) reported improved blood pressure as well as improved patient perceptions when a choice of music was offered to surgical patients. LePage, Drolet, Girard, Grenier, and DeGagne (2001) concluded in their study that "For it to contribute to anxiety reduction, the music selected ... should be chosen by the patient, because personally selected music seems more likely to reduce autonomic reactivity"(p. 915).

Young Adulthood: Intimacy Versus Isolation

Music therapy offers interventions that focus on creating a sense of community and bonding for those patients fighting cancer. Young (2007) writes

The fact that all members of a cancer support group are facing the same disease becomes a bonding force, and can create a sense of community... Disease related feelings and experiences become normalized within a support group context that also provides a safe forum for much needed emotional expression (p.18).

Because of this, group music therapy interventions such as the community based singing groups as described by Young are a good way for cancer patients of any age to find the kind of peer support and acceptance that healthy adolescents work towards. By using music as a safe and healthy meeting place for all patients, the healing processes are meant to occur through the musical and social experiences. On a similar note, Aldridge and Aldridge (1999) describe the use of music therapy for breast cancer patients, particularly concerning the nature of patients to feel distanced from others. In this case, music

therapy plays a vital role in giving a voice and order to these feelings that otherwise may not be manageable.

Old Age: Ego-Integrity Versus Despair

Music therapy can offer many levels of support to patients facing the conflict of Ego integrity versus despair. Aldridge and Aldrige (1999) specifically state that “In the course of a life-threatening illness, goals change” (p.81). This can relate to either cancer patients to turn out to be survivors or those that must qualify themselves as cancer victims. According to the authors, the advantage of music therapy is that it has the ability to offer an experience that focuses on qualitative, not quantitative measures. Dileo (1999) discusses the use of song discussion for end-stage cancer patients in order to identify, confront, discuss, and provide resolution to some of the smaller issues such as pain, chemotherapy and radiation, loss of physical abilities, and function. Furthermore, there is a direct correlation between Erikson’s concept of *life review* and the music therapy intervention of a musical song-biography. Simply described, a patient selects songs that represent significant times, events, or messages he or she wants to portray, all of this with structure provided by a music therapist (Dileo, 1999). The use of song-biography can act as a cathartic re-telling of an individual’s journey through cancer all the way from diagnosis, to treatment, to its outcome, and then serve as something for a patient’s friends and family long after he or she has moved on or succumbed to his or her illness.

The Role of a Taxonomic Model Integrating Erikson’s Developmental Model as Guiding Principle for Understanding Particular Aspects of Each Stage of Cancer Survivorship, and for Selecting Appropriate Music Therapy Interventions to Address those Aspects within Each Stage

In their study concerning the influence of developmental life stage on quality of life in survivors of prostate cancer and their partners, Harden, Northouse, Cimprich, Pohl, Liang, and Kershaw (2008) specifically concluded that interventions should be tailored to

specific developmental life stages and that personally tailored interventions are likely to benefit cancer survivors, regardless of age. The question then becomes how to go about specifically tailoring interventions for each individual. It is not simply a matter of which developmental conflict a patient appears to be wrestling with because, in the words of How, Law, Yin, and Fu,

While events like the loss of a loved one, terrorist attacks, or natural disasters are distinct and retrospective, cancer stressors are multiple and exist both in the past and the future, ranging from diagnosis and aggressiveness to treatments to impaired daily functioning and uncertainty of prognosis (p.486).

Clearly, there is a need for a taxonomic model addressing not only the developmental conflicts of cancer patients, but also with regards to the particular cancer stage (Diagnosis, Treatment, Outcome) that each patient may be facing.

In order to directly address both Erikson's developmental stages as well as the particular stages of cancer, interventions should (as stated by Harden et al., 2008) be specifically tailored to the individual. As each individual experiences cancer and all of its encompassing challenges, it may be best to directly apply to a more cognitive approach. Or more specifically, it may be best to appeal to an individual's emotional well-being. According to Krumhansl (2002) an individual's emotions can define his or her ability to react and/or thrive in adverse situations. Furthermore, Magill (2006) writes on the ability of music therapists to work in conjunction with multidisciplinary team members as partners in the care of patients and families. This involves complementing mainstream treatment and goals while also working to address the physical, psycho-emotional, and spiritual needs and issues presented by patients, as well as their family members, and caregivers. In other words, emotion and cognition can be directly linked to physical and mental health. Therefore, to fully address the issue of individual mental health needs, Krumhansl (2002) states that "psychological evidence indicates musical emotions are at least to some degree like other emotions" and therefore, music (and thus, music therapy interventions) can act as a foundation for selecting appropriate interventions based on individual need (p.46). In this particular case, it can also serve as the link between cognition, emotion, and developmental stages within the span of cancer Diagnosis, Treatment, and Outcome.

VI. The Taxonomic Model

Based on the existing literature and research, it has been the purpose of this study to develop a model of music therapy addressing the developmental concerns of cancer patients (as described by Erikson) in direct relation to examining cancer as a stage theory in terms of physical and emotional effects and the previously described corresponding role of music therapy in all stages. It is presented, here, as a taxonomy including interventions specific to each developmental stage and cancer stage and can be individualized to the particular music therapist(s) and patient(s) involved within the treatment process:

Proposed Taxonomy of Music Therapy Interventions for Cancer Patients by Cancer Stage

Diagnosis:

<i>Erikson Life Stage/Conflict</i>	<i>Rationale / Patient needs</i>	<i>Suggested MT Intervention(s)</i>	<i>Resource(s) for Intervention(s)</i>
Basic Trust vs Mistrust	patients need to feel supported in their new diagnosis	Interactive music therapy interventions	Burns, Sledge, Fuller, Daggy, and Monahan (2005)
Autonomy vs Shame and Doubt	patients need to feel they have a choice in their therapy	Patient-selected music activity	Mitchel et al.(2007)
Intimacy vs Isolation	patients need to not feel “alone” in their diagnosis	Group music therapy sessions	Young (2007)
Ego Integrity vs Despair	patients need to develop a sense of goals and positive self-engagement techniques	Improvisational music therapy with the goal of self-recognition and finding strengths	Hall, Chipperfield, Heckhausen, and Perry (2010)

Treatment:

<i>Erikson Life Stage/Conflict</i>	<i>Rationale / patient needs</i>	<i>Suggested MT Intervention(s)</i>	<i>Resource(s) for Intervention(s)</i>
Basic Trust vs Mistrust	Music therapy's "iso principle" plays an important role here in enabling patients to have support they need throughout treatment	Improvisational music therapy interventions focusing on expression of emotions	Magill (2001)
Autonomy vs Shame and Doubt	the stress and rigors of treatment can be taxing for patients and they will need the opportunity to relieve anxiety, however there is still a need for choice and a feeling of "being in control"	Music listening and imagery using patient-selected music	Allen et al.(2001)
Intimacy vs Isolation	Patients need to feel "heard" during this period when they are often being told what to do	Songwriting, particularly concerning the need to express one's need(s) of others	Aldridge and Aldridge (1999)
Ego Integrity vs Despair	Patients need continued support from their peers, no matter what age they are undergoing treatment	Group music therapy sessions with a focus on improving self-esteem and perceived peer support	Holland et al.(2009); Young (2007)

Outcome:

<i>Erikson Life Stage/Conflict</i>	<i>Rationale / patient needs</i>	<i>Suggested MT Intervention(s)</i>	<i>Resource(s) for Intervention(s)</i>
Basic Trust vs Mistrust	Whether they are classified as survivors or cancer victims, patients need the support of others to process this new stage of their lives	Family-centered music therapy sessions based on patient needs for support	Henselmans, Helgeson, Seltman, deVries, Sanderman, and Ranchor (2010)
Autonomy vs Shame and Doubt	Following treatment, both survivors and victims need to feel that they are able to take back control of their lives	Continued songwriting and patient-preferred music therapy interventions	Mitchell et al.(2007); LePage, Drolet, Girard, Grenier, and DeGagne (2001)
Intimacy vs Isolation	Survivors and victims alike are forced, at this stage, to re-define themselves based on the outcome of their treatment(s)	Improvisation for self-discovery	Tury and Turry (1999, p.171)
Ego Integrity vs Despair	Survivors need to reflect on their journeys in order to prepare for the next stages of life; Victims need to process their lives and mentally/emotionally prepare for death	Song selection and discussion; music-biography for life review; One-Session Music Therapy with CBT	Crain (2005); Aldridge and Aldridge (1999); Dileo (1999); Cournos and Goldfinger (2008)

VII. Examining the Model

Diagnosis

Basic Trust vs Mistrust

Within the conflict of Basic Trust vs Mistrust, Erikson describes the primary needs of an individual as coming to find consistency and predictability in that person's caretakers. Similarly, the individual needs to develop trust within him or herself. Consequently, the greatest need for cancer patients experiencing this particular conflict is the need to feel supported in their new diagnosis. Patients are suddenly forced to confront issues of hospitalization, possible extended leave from work, having to change their diets, making decisions regarding possible treatment options, etc. Oftentimes, patients can be overwhelmed with the amount of information (or in some cases, the lack thereof) regarding their diagnoses and all of the treatments, data, previous studies, etc concerning them. The very concept of "having cancer" can be a frightening and overwhelming experience for any person, regardless of age or previous life experiences. Questions such as "Why me?" "Why do I have to be the one to have cancer?" may arise. Patients may find themselves grappling with emotional outbursts of anger, frustration, or possibly even questionable guilt (i.e. "Did I do something wrong to deserve this?" "Maybe if I was a better person, I wouldn't have gotten cancer...").

All of these emotions are, of course, normal but they can still seem foreign to even the most emotionally expressive people under those circumstances. This is where music therapy can play an important and individually specific role. Burns, Sledge, Fuller, Daggy, and Monahan (2005) state that "Interactive music interventions such as instrumental improvisation, drumming, and singing have shown promise in improving mood in cancer patients." Therefore, a music therapy intervention for a patient experiencing Basic Trust vs Mistrust might encompass a musical improvisation using drums and vocalizations so that a patient will have the opportunity to express him/her self as well as his/her feelings regarding cancer diagnosis and still feel supported.

Wigram (2004) describes the a means by which trust is cultivated in terms of creating a symbiotic relationship, in which the client feels that he or she is contributing as much as the therapist and vice versa (p.82). In this case, the patient would be encouraged to say whatever he or she felt with an emphasis on the fact that no emotions or feelings are wrong. For example, a therapist would encourage the patient to use a drum, his/her voice, or instrument of choice to illustrate any feelings regarding treatment. The therapist would then use improvisational supportive techniques such as *mirroring* (creating the same music as the patient, as if he/she were singing/playing into a mirror) or *accompanying* (using voice, piano, or other instruments in conjunction with a patient's music) to create a supportive environment. The primary goals of music therapy for Basic Trust vs Mistrust are support and validation, and the improvisations make the music more personalized – because the music is coming directly from the patients.

Autonomy vs Shame and Doubt

As was expressed by Erikson in the developmental stages, the primary goal within this stage is to exercise a choice. Unfortunately, when given a diagnosis of cancer, many patients may feel that they do not have choices regarding their upcoming treatments and lifestyles. Treatments are based on needs, not wants, and often have to follow a strict schedule. Previous social (and in some cases, professional) plans need to be altered to fit the treatment schedules. Dietary restrictions are put in place in order to “starve the cancer” while still feeding the person. There is very little room for a patient's personal preferences and choices, here. Patients are likely to feel frustrated and “stuck” in this new diagnosis. They may even feel that they have to follow along with whatever they are told because, in a sense, cancer has made the choices for them.

What can be helpful, then, is if patients feel they have a choice within their therapy sessions. Interventions that include patient-selected music activity are therefore an appropriate choice. Mitchel, MacDonald, Knussen, and Serpell (2007) describe personal control in terms of its ability to relieve pain and emotional discourse in patients, regardless of the nature of their treatment. They state that people can display different reactions to various pieces of music based on their personal experiences. It can easily be

surmised, then, that personal control will also be beneficial to newly diagnosed oncology patients who may feel that they have very few “choices” now that they have to follow a treatment regime based on their diagnosis/prognosis. The individualized music therapy can be catered to suit the clients’ personal experiences and needs.

In this case, a therapist would start the session by asking the patient what he or she wants to do or “feels like” doing at that particular time. The patient may select to play an instrument, or to sing a song, or to listen to a recorded piece of music of his/her choice. During this time, the patient may be encouraged to express his or her feelings on the subject of choices. How does it feel to be “stuck” with a diagnosis? What would you rather be doing right now? What can we do to facilitate that within the therapy session? Mitchel, MacDonald, Knussen, and Serpell (2007) illustrate the use of patient-preferred music and its ability to increase pain tolerance (p. 40) which, again, can be generalized to reflect the need for patient-preferred music in individualized music therapy sessions for oncology patients. The primary goals of music therapy for Autonomy vs Shame and Doubt would be increasing self-expression and facilitating positive choices.

Intimacy vs Isolation

According to Erikson, adolescents are looking for approval from their peers and spend this period of development attempting to develop an identity. Much of the same can be said for cancer patients experiencing this conflict. Many patients may feel that they are alone in having to deal with all aspects of cancer because they are the only ones actually diagnosed. They may experience a gamut of reactions from friends and family ranging from “Oh, no! What can we do for you?” to “I know someone who had cancer too – not the same kind as yours, but it was still cancer” to “Well look on the bright side...” Different people will react differently to these responses and while all of the responses are likely put forward with the best of interests, the patient may still feel that no one actually understands what is going on. At this point, there is a potential for social withdrawal. Some patients may feel that it is simply easier to just shut people out, rather than having to explain and in some cases comfort others concerning their diagnosis.

Similarly, family members can be greatly impacted by diagnosis, whether by fear of the unknown implications or by fear of the disease itself. There is a distinct potential for feelings of helplessness concerning having to watch a loved one undergo the process of having cancer.

Regardless of which perspective (patient or family member), there is a need for patients and their families to understand each other and communicate their feelings. While each person may have similar feelings as the rest of his/her family, they may not all be directed the same way (i.e. one person may be afraid because there is a possibility for infections while another may be afraid because he or she does not understand what is involved with treatment planning). Therefore, patients and family members alike need the opportunity to come together to process these concepts as described by Young (2007). Group music therapy sessions that allow all parties involved to express themselves and to process their feelings for better understanding and support can be beneficial to these situations.

Based on the singing groups as described by Young (2007), a hypothetical music therapy session for Intimacy vs Isolation might begin with a family coming together in a structured, group improvisation. Each person would get an opportunity to play on his/her own as well as the opportunity to work with the whole group. A therapist would use the music making to process with the family about how each person may experience the music in a different way, and use this as an analogy to evoke discussion and group processing regarding the patient's cancer diagnosis. In some cases, the music may be able to express more than the people creating it and again, statements and feelings would all be validated and supported by the therapist. The primary goals of music therapy for Intimacy vs Isolation would be increasing communication, increasing emotional expression, and increasing group cohesion.

Ego Integrity vs Despair

Developmentally, the conflict of Ego Integrity vs Despair already encompasses the concept of dealing with changes and loss. Older adults face changes in work situations (i.e. retirement) and changes in family situations (i.e. children moving on and out, friends

moving away, loved ones dying, etc) and eventually, there is the concept of one's own mortality. As has been previously stated, a diagnosis of cancer can bring about many of these changes, and in some cases, the changes can feel premature. With all of these come a variety of thoughts and emotions for patients. Fear, anger, guilt, sorrow, grief, and confusion are but a handful of the multitude of feelings a cancer diagnosis can evoke. Because of the enormity of cancer diagnosis as a whole and coupled with the complexity of emotions, there is a danger within the stage of cancer Diagnosis of patients becoming socially withdrawn and/or clinically depressed.

In order to prevent this, patients need to develop a sense of goals and positive self-engagement techniques. Hall, Chipperfield, Heckhausen, and Perry (2010) conclude that adults with less frequent uses of goal engagement are more likely to develop a higher risk of mortality. In other words, the process of cancer involves both physical and mental healing, particularly concerning the issues of wellness and self-worth. Music therapy interventions such as improvisational music therapy with the specific goal of self-recognition and finding personal strengths can help to address the impending issues of self-worth after a cancer diagnosis.

Music therapy sessions, here, should be geared toward creating goal engagement (i.e. personal strengths to consider for "getting through" the upcoming treatment process). A sample session might include teaching a patient a new skill such as playing piano or guitar, as is suggested by Cassity and Cassity (2006). In this case, learning a new skill becomes something that they can not only use as a tool to help with the mental and physical aspects of a cancer diagnosis, but also something to promote a sense of looking towards the future (i.e. the next lesson, the next song to learn, and possibly even a performance). The primary goals of music therapy for Ego Integrity vs Despair would include increasing self-esteem, decreasing isolation, and creating personal long-term goals and objectives.

Treatment

Basic Trust vs Mistrust

Similar to the need expressed in “Diagnosis” of being supported, patients within the “Treatment” stage of cancer need to feel validated and supported throughout all of their experiences within the treatment process. The entire “Treatment” stage encompasses many challenges for patients, including physical, mental, social, and emotional challenges. The physical rigors of treatment include (but are not limited to) changes in appetite, taste of food, extreme fatigue, body aches, and potential weight and/or hair loss. Mentally, cancer patients are faced with the fact that they are working to save their own lives, a concept that is near astronomical for some. Being immunocompromised means a much greater chance of contracting illnesses, so that even the simplest of colds can turn into a major bout of flu. As a result of this, cancer patients are suddenly forced to re-vamp their normal plans of where they spend their time and with whom they spend it. Between the social limitations and the physical stressors, it is understandable for cancer patients to undergo a plethora of emotional challenges.

Music therapy’s *iso principle* (meeting a patient, musically, based on where he or she is experiencing his/her emotions) plays an important role in enabling patients to have the support they need throughout treatment, particularly when considering the impact these treatments can have on all of the encompassing aspects of one’s life. Improvisational music therapy sessions where a therapist is supporting and validating a patient’s emotions (via music) would again tap into Krumhansl’s (2002) expressions of the link between cognition and emotion using music. Magill’s theory of “mobilizing moods” via music suggests an allowance of emotions to manifest themselves within a safe and supportive environment (2001). In other words, by supporting the patient’s changing moods and emotions, music therapy allows that patient a safe and supportive environment to experience these changes, while providing a structured and (as appropriate to Erikson’s developmental model) predictable format.

Based on the needs expressed regarding Basic Trust vs Mistrust, a typical music therapy session for this stage would best include two aspects: predictability and support. A patient entering a music therapy session during the Treatment stage of cancer would

likely feel more at ease if he or she knew what was expected of him or her during the session and what the format of the session would likely be. Montello (2003) illustrates this process as she used improvisation, songwriting, and a clear-cut session format to support the client, Jennifer, through her journey of self-realization. Based on this taxonomy, a music therapist would likely help the patient to design his or her session so that it reflects a comfortable and logical design. Additionally, the therapist would apply music therapy's *iso principle* and base any musical interventions on what the patient is feeling/experiencing at the time so that the patient feels supported and guided through whatever he or she is working through. The primary goal of music therapy for Basic Trust vs Mistrust would be to increase feelings of support and comfort.

Autonomy vs Shame and Doubt

That the stress and rigors of treatment can be taxing for patients is practically an understatement. The physical challenges alone can seem absolutely overwhelming for a patient undergoing treatment and the resulting mental and emotional challenges create the need for opportunities to relieve anxiety. But most importantly, when examining patient needs from the perspective of Autonomy vs Shame and Doubt, patients need to feel that they have a choice within the music therapy sessions. So much of treatment is prescribed, and so much of a patient's life is dictated by his or her treatment (diet, work schedule, vacations, family, friends, social events, etc) that it may cause some patients to feel that they no longer have control over their own lives. Emotionally, this can lead to some psychological regression and acting out towards friends and family, such as with depression, anger, or other more unpleasant social interactions. These outbursts are less directed toward the actual people but more so for the patient to have some kind of control over his or her life. Still, this is not always the healthiest option, nor is it amicable in terms of a developmental lifespan.

What is necessary, then, is to address some of the more immediate physical and emotional symptoms before appealing to the underlying psychological needs. For

example, interventions such as music listening can allow patients to physically and mentally relax, therefore relieving anxiety and potentially reducing perceived pain and similar physical symptoms (Allen et al., 2001). Being able to feel in control of one's own body can help cancer patients to feel in control of their emotions. However, there is still a need for choice and a feeling of "being in control" of the sessions considering the often strict schedule of treatments, not to mention the many physical limitations of being immuno-compromised. The advantage of GIM in this scenario would be that the patient and therapist would be working together to "navigate" through the patient's journey. This can be pre-established and give the patient a sense of accomplishment and control following the session. In terms of music listening sessions, there is a greater window of opportunity in terms of music selection and a therapist could then include the patient's preferred music within the session.

A typical music therapy session for someone experiencing Autonomy vs Shame and Doubt would likely involve letting a patient select the music for listening. By offering choices such as musical tempo (speed) or dynamic (volume) the therapist can allow the patient to create what he or she feels is a helpful and healthful musical atmosphere, while still enabling the therapist to direct the patient (and part of the session) to what is psychologically healthy and necessary given a patient's individual need. Although there is no specific example of this type of session in the literature reviewed for this taxonomy, the research of Mitchell, MacDonald, Knussen, and Serpell (2007) does strongly support the use of patient-preferred music. For the purposes of the use of this taxonomy in oncology treatment, once the patient is able to relax and focus, he or she is more likely to feel "in control" of him or herself and therefore is more likely to be able to process some of the underlying psychological and emotional factors encompassed in the Treatment stage of cancer. The primary goals of music therapy for Autonomy vs Shame and Doubt would include increasing emotional expression, increasing relaxation, and decreasing unwanted impulsive behaviors (i.e. acting out).

Intimacy vs Isolation

Developmentally, the conflict of Intimacy vs Isolation deals with developing a sense of identity and in an adolescent's relations to his or her peers. At this stage of life, it is often more that is popular that ranks in value, rather than what is personal. Unfortunately, this concept of popularity and values is often lost during the Treatment stage of cancer. Whether it's a matter of when to go for treatment, how long the actual sessions will take, what they should be wearing, what they should be eating, and how they should be acting, it may seem to patients as if they are constantly being told what to do, where to do it, and exactly how things need to be done. During all of this, patients still need to feel that they not only have social support, but are connected to their friends and family members, and that their feelings can be heard, despite all of the medical jargon and day-to-day necessities that are being put into spotlight.

The therapeutic perspective, then, would be to give patients a musical "voice" and enable them to feel "heard" concerning their reactions to everything in the treatment process (i.e. medications, limitations, emotional fears, concerns, etc). Aldridge and Aldridge (1999) discuss the importance and use of songwriting during any prolonged illness and in this case, songwriting can serve as a cathartic outlet for patients to express their needs and in some cases, what they need from others. Because, while others' opinions are important at this point in development, others' support can serve just as much of a purpose in dealing with treatments and all that they encompass.

A typical music therapy session for Intimacy vs Isolation would include asking the patient about his or her feelings towards the situation as a whole – are they scared? do they feel angry? what do other people need to know about? A music therapist would then take these feelings and help a patient to translate them into a song. In some cases, the song would already be written and the therapist would use *lyric substitution* in which, some of the words and/or phrases from an existing song would be changed to suit the patient. In some cases, the patient may benefit more from *composition*, or creating an entirely new song. In composing the lyrics, melody, and accompaniment, the patient can feel as though all of his or her emotions are being expressed. Montello (2003) describes a client's song writing experience as a process of exploration and self-healing. The

client, Jennifer, was able to create a safe place, to feel brave, to fight back against childhood abusers, and to feel confident in standing alone and being loved.

Consequently, for a cancer patient, it would then be important to give him or her the opportunity to play or perform his or her composition for friends and loved ones, encouraging those present to be supportive of the patient's song. This serves two primary music therapy goals: firstly, there is an increase in emotional expression, and secondly there is an increase in socialization.

Ego Integrity vs Despair

In Erikson's descriptions of developmental stages, Ego Integrity vs Despair focuses mainly on old age and a person's acquisition of wisdom and experience. A person would draw on his or her life experiences and use them to decide whether or not his or her life was well-lived. Despite the fact that this particular development stage focuses on those of advanced age and life experience, it is important to note that patients need continued support from their peers, no matter what age they are undergoing treatment, particularly because they are still faced with the possibility of more intensive treatments, surgery, hospitalizations, and isolation from their friends and loved ones.

Group music therapy sessions focused on supporting and validating patients' experiences through Treatment are important to this stage of cancer. Referring back to Holland et al. (2009), it is important for patients at any age to feel that they have the support of their peers during cancer treatment because they are more likely to begin the necessary cognitive restructuring needed to continue on with Treatment. Group music therapy provides the situation and the structure for such interventions to happen, while still enabling all those involved to have a "voice" within the sessions. Furthermore, peer interaction encourages the development of new coping skills such as reframing and processing of events.

Young (2007) presents several examples of group music therapy sessions in the form of group singing. She describes the "normalization" of feelings because of similar experiences. Even though Young's descriptions are all of group music therapy for

patients, the same concept can be applied to group sessions for patients and their peers/family members. By giving all of the members of the group a chance create roles for themselves and to process their experiences with each other and based on each other's views, a music therapist can facilitate new coping skills based on these experiences. Clearly, the primary goals of music therapy for Ego Integrity vs Despair during the Treatment stage of cancer include increasing self-expression, increasing socialization, and increasing coping skills.

Outcome

Basic Trust vs Mistrust

In terms of cancer Outcome, the stage can be looked at in terms of good news and bad news. The good news is that there will, in fact, be an end to the cancer. The bad news is that the end is not always in the form that patients want it to be. For some, the end of cancer is a positive and relieving experience. They go into remission, treatments are completed, their bodies begin to feel more like the "normal" they were used to before being diagnosed with this disease, and their personal/social lives can begin to pick up where they may have left off. Still, there is often the looming possibility of relapse which presents itself with each follow-up doctor's visit. Even though they are technically "well" cancer survivors are still considered to be at risk for resurgence of the disease for years afterwards. And then there are the patients who are not so fortunate. Many patients find themselves facing the unfortunate fact that they were not meant to survive cancer and must begin to see themselves as cancer victims. This can obviously be a frightening and overwhelming experience, possibly more so than when they were first diagnosed. Decisions need to be made including whether or not to seek additional treatments, end of life care, how the victims' families and friends are going to be affected, etc. It can be an all-encompassing experience and no person should have to face it alone.

Whether they are classified as survivors or cancer victims, patients need the support of others to process this new stage of their lives. Family-centered music therapy sessions based on patient needs for support are still important, even after the cancer itself

is gone. According to Henselmans, Helgeson, Seltman, deVries, Sanderman, and Ranchor (2010), the end stages of cancer (survivor and victim alike) can bring about delayed psychological responses for all of those involved. Caretaking roles may have been reversed during the Diagnosis and Treatment stages, and now that life may be getting “back to normal” there may be a need to re-establish the roles of who is taking care of whom. Or, in some cases, the roles may continue to stay reversed and there is a need to normalize and validate all of those involved with those changes.

Music therapy sessions for Basic Trust vs Mistrust for cancer Outcome would likely be based on previous sessions in order to formulate the possibility for termination of treatment. Even though the patient(s) may not need the therapist, it is still the end of a relationship, particularly one associated with the cancer process, and a transition from depending on a therapist to relying more on friends and family is a healthy step. A therapist might take the opportunity to allow the group to process what the experience has been like and how they can use it to continue on with their lives, post cancer. For those patients facing being cancer victims, the group process may involve assuring the patient, friends, and family that they can still “be there” for each other throughout the end-of-life process. Primary goals for music therapy for Basic Trust vs Mistrust at this stage are varied, depending on the particular patient(s)’ outcome and can range from closure of sessions to end of life care.

Autonomy vs Shame and Doubt

After months and maybe even years of having to follow a strict regime of treatments, dietary restrictions, social interactions, and scheduling according to doctors, cancer survivors and cancer victims both need to feel that they are able to take back control of their lives and begin to move on. For the cancer survivors, it may be a matter of being able to make their own choices regarding food or travel – those things that may have been restricted during the Diagnosis and Treatment stages of their disease. For victims, the concept of choice may surround everything from continued treatment to end of life care. Regardless of whether they are victims or survivors of cancer, all patients need support and validation to move forward with their lives.

For the developmental stage of Autonomy vs Shame and Doubt with regards to cancer Outcome, music therapy interventions would best include continued songwriting and patient-preferred music therapy interventions in order to facilitate choice and future implications. Mitchell, MacDonald, Knussen, and Serpell (2007) describe the concept of choice as a potential coping mechanism for those patients in a situation involving chronic pain. For cancer victims, choice is important in developing coping skills to combat any psychological barriers involved in end-of-life care as well as further chronic pain caused by cancer. LePage, Drolet, Girard, Grenier, and DeGagne (2001) concur in that patient-selected music is more likely to positively effect perceived pain and depression. For survivors, the choice of sessions and choice of music may aid them in making healthy choices based on their new identities as cancer survivors, and help them to avoid making poor impulse-based decisions.

Music therapy sessions would differ from survivors to victims, in this case, because the goals would be more case-by-case based. For cancer survivors, the primary goals of music therapy would likely be increasing emotional expression as well as establishing self-care in order to terminate treatment. For cancer victims, choice in music and session format can be essential in helping them to through the grieving process and in facing their own deaths. The goals here would be formulating choices, increasing coping skills, and decreasing anxiety.

Intimacy vs Isolation

As has been previously established, at this developmental stage, a person's main focus tends to shift more towards his or her peers than him or herself. However, now that the Treatment stage of cancer is over, survivors and victims alike are forced, at this stage, to re-define themselves based on the outcome of their treatment(s). Victims need to come to terms with their own mortality, and potentially the mortality of those they have gotten to know through the treatment process. Survivors may need to re-establish relationships with their peers and find new relationship roles now that they do not need to be "cared for" on a daily basis.

Whether they are cancer survivors or cancer victims, there is still a need for re-evaluation of the self and music therapy interventions for this stage should include improvisation for self-discovery. As was discussed in the case study by Tury and Turry (1999), improvisation enabled the subject to find herself, even after an unexpected remission. For those patients not so fortunate, it is still important to develop a clear sense of self in order to prepare for the final developmental stage of *Ego Integrity vs Despair*.

Based on earlier stages and earlier sessions, a music therapist would likely follow a similar session format as that described in the Diagnosis stage concerning Basic Trust vs Mistrust. For cancer survivors, music therapy goals would include establishing a positive self-identity and preparations for termination of treatment. For cancer victims, self-identity might need to be redefined, however it is still an important music therapy goal, along with increasing emotional expression and developing coping skills that include peers and family to avoid social withdrawal and severe depression.

Ego Integrity vs Despair

At the end of cancer, there is a need for moving on. For survivors, it is a matter of beginning a new stage of live, and the potential need to reflect on their journeys in order to prepare for doing so. Many of them may have changed, physically and emotionally because of their experiences with cancer. Questions of “What do I do with my life now?” and “How do I move on from such a traumatic experience?” may need to be answered in conjunction with the previously established need to re-define one’s identity. Victims need to process their lives and mentally/emotionally prepare for death, regardless of age or life experience. Depending on the individual cancer victim, this may include having to wrestle with an early death, a painful one, or even just the need to process death as a whole. Issues concerning anger, guilt, depression, hopeless, helplessness, and worthlessness are all concerns that may need to be addressed and processed.

Music therapy interventions and potential sessions for Ego Integrity vs Despair for the Outcome stage of cancer can vary depending on the individual and what he or she needs to process:

For cancer survivors, song selection and discussion may help to re-establish identity and to reflect on a person's journey through the stages of cancer. The individual may be led through creating a music-biography, as described by Dileo (1999), in order to process the journey from Diagnosis, through his or her battles during Treatment, and now the need to re-establish themselves as a cancer survivor as an Outcome. Fears of potential relapse and resurgence of trauma from treatment need to be addressed. The fact that the individual may no longer need music therapy can be a blessing and a frightening concept, in that there is a loss of relationship with the therapist as well as a clear pathway towards moving on with one's life.

For cancer victims, music therapy interventions and sessions are likely to be more directed towards end-of-life care. These patients might also create a music-biography for life review, however the goal of these is more directed toward Erikson's concept of life review in preparing for death. For some cancer victims, there may not be much time for extensive sessions for processing working through the grief process, so Cournos and Goldfinger's (2008) descriptions of One-Session Music Therapy with CBT would be more appropriate. The goals for these patients would likely include decreasing anxiety, decreasing depression, increasing emotional expression, and increasing self-worth in preparation for death.

VIII. Discussion, Implications, and Conclusions

Despite its seemingly brief and concise appearance, the above taxonomy can serve as a basis for treatment planning. By providing a concise model, it is easy for treatment planning to be established according to previously-established psychological and music therapy literature. By measuring patient needs based on cancer stage, life stage, and previously established music therapy methods, the above model addresses a plethora of possibilities for treatment design. It is the goal of this model to create a format that can be easily adapted for individual needs.

In utilizing this taxonomy, music therapists will have a specific psychological basis on which to build their session planning in accordance with patient needs. Hanser (1999) writes of the need for “introducing objective evaluation into the subjective therapeutic relationship without cross-interference” and the need to do so with “the establishment of expected therapeutic outcomes in identifiable, behavioral terms” (p.35). This taxonomy presents an objective rationale of patient needs coupled with established therapeutic goals, suggested interventions, as well as possible outcomes but it is, by no means, a prescriptive method. It can, however, function as a form of music therapy assessment for patients undergoing the various stages of cancer (Diagnosis, Treatment, Outcome). Again, Hanser (1999) can be referred to in terms of the implications of assessment in that, “[a] data-based model is not to examine personality traits or inner states as much as it is to provide opportunities to observe a wealth of social and emotional behaviors in a carefully controlled context” (p. 79). The carefully controlled context of this particular taxonomy provides music therapists with the information necessary to construct sessions based on Erikson’s described social and emotional behaviors. With regards to the age range of patients, the task of the music therapist would then be to apply the taxonomy as a stage-based model. In other words, because of the nature of life stages to progress and regress, it can be assumed that children, adolescents, and adults alike would benefit from the above suggested interventions.

One of the most difficult aspects in creating this particular model was a lack of sufficient literature. Despite a recent surge of publications regarding the need for therapeutic interventions for cancer care, there is almost no published information

specifically for music therapy in this aspect. Many resources were explored, however there is little to no documented evidence of specific music therapy sessions for patients undergoing any aspect of cancer care, let alone those as specifically defined by this study. It was therefore the responsibility of this study to create those scenarios so that they may (hopefully) be played out within the proper context of professional music therapy sessions. Should they be reenacted, it would be beneficial to this study, as well as the implication of any further studies, that those results be published and properly documented so that future clinicians have the opportunity to reapply them as needed.

Clearly, there is a need for further study and future expansion. In creating a basic model of music therapy, it became evident that (as has been previously stated) despite the recent surge of information regarding therapeutic interventions for cancer patients, particularly in the music therapy vein, there is still very much to be discovered. Patients need to be interviewed for quantifiable information, however there is also a need for qualitative study regarding all of the above interventions. Any therapist can speculate the outcome of an intervention, but in the end, it is the patient(s) who decides the effectiveness. Perhaps there is even a need for patient-led interventions as this study has clearly defined that no one can truly understand the rigors of Diagnosis, Treatment, and Outcome better than someone who has been through the process. Further implications for study would include a more expansive study of literature, providing such literature exists. Perhaps in the future, the model could be expanded to include more of Erikson's stages of development, as well as more specific music therapy interventions, provided that such things are available. Similarly, the literature review could be expanded to include the implications for friends and family members of cancer patients. So much of Erikson's developmental model focuses on the need for support from one's peers and family, however there is little to no published literature on the effects suffered by this population. Perhaps in the future, it may be discovered that a patient's family and friends can play as essential (if not more important) of a role as the physical and psychological treatments involved in Diagnosis, Treatment, and Outcome.

With all of these results, implications, and the process involved in creating this study, it has been (and continues to be) the hope of this writer that such studies do continue to develop in order to provide better resources for cancer patients and therapists

alike. In reviewing the literature, many aspects of the cancer process (Diagnosis, Treatment, Outcome) have come to light in a more personal perspective. If nothing else has become more evident, it is truly the hope of this writer that clinicians addressing the needs of their patients remember that cancer itself can be identified as a process, and that the therapeutic process therefore needs to be reviewed and addressed accordingly. There may be setbacks, great leaps forward, and unfortunate endings that come all too soon. Despite this, music therapy still appears to be a vessel in which clinicians and patients alike can travel. The journey toward physical healing is one in itself throughout the cancer process. The journey toward emotional acceptance of each stage is an entirely different process that must be accounted for and, above all else, respected. Hopefully, there will come a time when a cure for cancer is discovered, and such methods as these or any future studies are not necessary in the first place. Until then, it is the mission of this study and all of its implications to create a sense of hope, inspire possibility, and provide a gift toward healing as only music can. Simply put in the words of Hans Christian Anderson, "Where words fail, music speaks."

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