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The Role of Compositional Music Therapy in the Treatment of Adults with Bipolar Disorder

Tyese Andrea Brown
Montclair State University

MONTCLAIR STATE UNIVERSITY

The Role of Compositional Music Therapy in the Treatment of Adults With Bipolar Disorder

by

Tyese Andrea Brown

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Thesis Committee:

[redacted]

Professor Brian Abrams, Thesis Sponsor

[redacted]

Professor Ying Hu, Committee Member

[redacted]

Professor Karen Goodman, Committee Member

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Abstract

The purpose of this thesis is to expand on a desire to expand our knowledge, and understanding about Bipolar Disorder and its relationship with compositional music therapy as a possible beneficial treatment for this illness. Compositional music therapy is both a music therapy intervention and process in which the client and therapist work together to generate an original, permanent musical model. The music may be instrumental or vocal, of any genre, and may be musically notated as a score, handwritten/types, or recorded (CD, Tape, MP3, etc.) It may incorporate the client's original song/rap, lyrics, poetry (set to music), or be instrumental-only. This leads me to answer the research question, what are the benefits of compositional music therapy for clients diagnosed with Bipolar Disorder? This question will be further examined in three subordinate questions as follows: 1.What are the basis and/or rationales for selecting music composition as a method to address client goals for adult patients diagnosed with Bipolar Disorder? 2. How is the compositional music therapy process useful and/or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder? 3. How is the compositional music therapy product useful and/or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder? This research study also seeks to answer both the research question and subordinate questions by consulting with various music therapists who have worked directly with adult patients diagnosed with Bipolar Disorder. This survey research examines the benefits of compositional music therapy as differentiating from other forms of music therapy, as well as what is important about the music compositional product and process in adult clients diagnosed with Bipolar Disorder.

Introduction and Personal Background

The personal motivation for my thesis began as a college undergraduate. I witnessed how much Bipolar Disorder had nearly destroyed the life of a young lady, a close friend, and musical composer. Following her hospitalization for an acute episode in the early 1990s, I developed a greater interest in wanting to learn more about this illness. I began examining the varying literature on Bipolar Disorder throughout the years and found that the majority of the information was primarily focused on medical treatment while literature on music therapy for Bipolar Disorder remained scarce. Currently, and as a future music therapist, my curiosity about possible links regarding music composition and how music composition can therapeutically benefit adults with Bipolar Disorder has sparked my interest in wanting to study past famous music composers such as Ludwig Van Beethoven (1770-1827), Robert Schumann (1810-1856) and Thelonious Monk (1917-1982) who all lived with the illness (Jamison, 1993; Teachout, 2006; Mai, 2008). However, since I was unable to directly interview these composers in person concerning how they managed and coped with their illness especially during a time when pharmacological treatment was either limited or non-existent, I focused my research instead on the benefits and psychological aspects of compositional music therapy for adult clients with Bipolar Disorder as told from a clinical perspective by music therapists who work with these patients. Compositional music therapy involves "such techniques as songwriting and recording (by the client alone, with the therapist, or by the therapist alone" (Wheeler, 2015, p.381). The patient will create a musical product or model for the purpose of often addressing "psychoemotional and psychospiritual goals" (Wheeler, 2015, p. 363). My thesis was

based on discussions about the patients' creation of music compositions as opposed to composing music for the client by the therapist.

Literature Review

Bipolar Disorder

Definition, main features, and symptoms. Bipolar Disorder is a mental illness characterized by extreme shifts in one's mood, ability to function, and energy level (Emilien, Septien, Brisard, Corruble & Bourin, 2007). Symptoms of Bipolar Disorder remain very severe and disabling often resulting in job loss, damaged relationships, and suicide (Emilien et, al., 2007).

When *The Diagnostic and Statistical Manual of Mental Disorders (3rd ed.; DSM-III*; American Psychiatric Association, 1980), was published, the term Manic Depressive Illness was changed to Bipolar Disorder covering the varying subtypes in relation to the following accompanying episodes:

1. Manic Episode: Involves severely elevated and persistently expansive moods with augmented energy considered to be abnormal that lasts minimally for "one week [and is] present nearly every day or any duration if hospitalization is [necessitated]" (American Psychiatric Association, 2013, p. 124).
2. Hypomanic Episode: Involves elevated-persistently expansive mood with augmented energy considered to be abnormal lasting minimally for "four consecutive days [and is] present nearly every day" (American Psychiatric Association, 2013, p. 124). However, unlike Mania, Hypomania is less severe because its symptoms do not result in overall "marked impairment [and it lacks] psychotic features" (American Psychiatric Association, 2013, p. 125).

3. Major Depressive Episode: Involves depressed mood that consist of much loss of pleasure, and interest most of a day (American Psychiatric Association, 2013). All symptoms within a Major Depressive Episode must occur within "the same two week period and present a change from previous functioning" (American Psychiatric Association, 2013, p. 133).
4. Mixed Episode: Consists of present symptoms of manic, hypomanic and depressive episodes (American Psychiatric Association, 2013).

Clinical features of the illness include mood swings that can involve a mild depression that either leads to hypomania, severe psychotic mania or major depression (Emilien et. al., 2007). The symptoms from both poles consisting of major depression and mania occur simultaneously (Bleiberg & Markowitz, 2008). However, "the boundaries between 'pure' mania and mixed mania are not [completely] clear because depression often lurks beneath the manic exterior and is easily evoked by situational factors" (Bleiberg & Markowitz, 2008, p. 422).

Bipolar Disorder falls under the following five spectrums/types: Bipolar I, Bipolar II, Bipolar Disorder and Related Disorder Due to Another Medical Condition, Unspecified Bipolar and Related Disorder, and Cyclothymia (National Alliance on Mental Health, 2011) each defined below:

1. Bipolar I Disorder: Involves symptoms consisting of a history of mania that is severe enough to result in treatment commonly requiring hospitalization (Parker, 2014). Mania, experienced by persons with Bipolar I, often contains psychotic features (Parker, 2014). Diagnostic features of Bipolar I includes a clinical course involving the occurrence of "at least one manic episode [that] may be followed by

hypomanic or major depressive episodes" (American Psychiatric Association, 2013, p. 123-124).

2. Bipolar II Disorder: Involves having a history that is limited to episodes of hypomania and major depression, severe enough to require hospitalization (Parker, 2014). The person has not experienced any manic episodes and instead has had "at least one hypomanic [and] major depressive episode [that reoccur]" (American Psychiatric Association, 2013, p. 134). The hypomanic episode must last every day for "at least four days [and] at least two weeks [for the] major depressive episode" (p. 135).
3. Bipolar Disorder And Related Disorder Due to Another Medical Condition: There is evidence from laboratory findings that "the disturbance is [directly due to a] patho-physiological consequence of another medical condition" (American Psychiatric Association, 2013 p. 145). The occurring disturbance of Bipolar must not be due to another mental disorder and should not occur during the period of a delirium.
4. Unspecified Bipolar and Related Disorder: Includes symptoms that characterize Bipolar and a related disorder but does "not meet the full criteria for any of the disorders in the Bipolar and related disorders diagnostic class" (American Psychiatric Association, 2013, p. 149). Clinicians will often apply such diagnosis when choosing "not to specify the reason that the criteria are not met for a specific Bipolar and related disorder" (p. 149). The presentations in relation to symptoms are lacking in the information needed "to make a more specific diagnosis" (p. 149).

5. Cyclothymia: Symptoms include, "chronic hypomanic and depressive symptoms" (Van-Meter et. al., 2012 p. 230). Cyclothymia involves many periods of fluctuating hypomanic and depressive symptoms, which must be present (American Psychiatric Association, 2013). The hypomanic symptoms need not "meet the criteria for [both a full-blown] hypomanic episode [and] major depressive episode" (p. 139). Symptom free periods must also last no longer than two months within a two-year time period.

Discussions based on the psychiatric nosology or science behind the classification of psychiatric diseases like mania and depression began many years ago by a physician named Soranus of Ephedras during the reign of emperor Trajan (98-177 A.D.) in the second century A.D. (Mondimore, 2005). He believed that both mania and melancholia were completely separate diseases that had distinctive causes (Angst & Marneros, 2001).

In 1801, psychiatrist Phillipe Pinel (1745-1826), a pre-nineteenth century psychiatrist became an advocate for the humane treatment of the insane by indicating in his work that manic illness like that of many mental illnesses was very capable of responding to treatment (Mondimore, 2005). Fifty years later both Jules Baillarger (1809-1890) and Jean-Pierre Falret (1794-1870), considered French alienists, simultaneously described a single mental illness that is characterized as having both mania and depression (Mondimore, 2005). This mysterious illness was however characterized by both men as having symptoms of episodes that alternate between mania and melancholia with the inclusion of intermittent intervening periods that are lucid (Jackson, 1986). By 1885, a diagnosis of mania represented "any state of overactive insanity" (Reddy, 2012, p. 1). Karl Kahlbaum (1828-1899), identified the terms,

Hebephrenia (predecessor to the word "Schizophrenia") and Cyclothymia as separate diseases about 10-years before German psychiatrist, Emil Kraeplin (1856-1926) (Mondimore, 2005).

In his fifth edition of his *Textbook of Psychiatry,* Emil Kraepelin (1882) identified mania and melancholia alone with circular insanity as "'periodic insanity'" (Mondimore, 2005, p. 50). Kraepelin (1882) created the term Cyclothymia, which derived from the Greek word "*kyklos,* cycle and *thymos,* mood, to encompass the full spectrum of Bipolar Disorder from sub-clinical to the most severe" (Kraepelin, 1882, as cited in Van, Youngstrom, & Findling, 2012, p. 230). He preferred the term *Manic Depressive,* which is believed to more consistently reflect Bipolar I Disorder rather than Cyclothymia (Goodwin & Jamison, 2007). Emil Kraepelin (1907) later diagnosed Manic Depressive Illness as Manic Depressive Insanity (Barnett & Smoller, 2009). He discusses Manic Depressive Insanity in a later article as follows:

> "Manic Depressive insanity….. includes on one hand the whole domain of periodic and circular insanity, on the other hand simple mania, the greater parts of the morbid states termed Melancholia." (Kreaplin, 1924, as cited in Reddy, 2012, p. 1-2).

Kraeplin's (1921) broad definition of Manic Depressive Insanity Syndrome gradually evolved between the 1880s and the early 1900s (Trede, Baethge, Gerhard, Maggini, Baldessarini, 2005). His concept of diagnosing was based on observations of severely mentally ill patients hospitalized in extensive public institutions (Trede et al., 2005). He utilized much of his own inner willpower and imagination to influence how case material (as case summaries) on the mentally ill was documented (Trede et al.,

2005). Kraeplin (1921) aligned his concept of observation and diagnosis with the utilization of the clinical method, which involved observing the clinical course over time, as well as signs and symptoms, of Manic Depressive Insanity (Trede et al., 2005). He noted the clinical worth in separating and being able to predict the possible outcome of both episodic and chronic conditions such as Manic Depressive illness in order to facilitate clinical planning and treatment for the severely mentally ill while providing valuable service and support to their families (Trede et al., 2005). According to a number of leading researchers in the field of Bipolar Disorder, Kraeplin's spectrum concept of Manic Depressive Illness, based on identifying a range of symptoms in relation to severity levels, has been considered a more precise description in defining the Bipolar spectrum (Akiskal, 2001).

By the 1950s, since Kraepelin's concept was perceived as too inclusive, (Reddy, 2012), German psychiatrist, Karl Leonhard (1957) proposed that Manic Depressive Illness be divided into 2 subgroups, as both "Bipolar and Unipolar, the only difference being a presence/absence of mania" (Reddy, 2012, p. 2). Karl Leonhard (1957) was the first to apply the term "Bipolar Disorder in place of Manic Depressive Illness" (Phillips & Kupfer, 2013, p.1663). Years later, in the *DSM-III* (American Psychiatric Association,1980), Leonhard (1979) would describe Unipolar and Bipolar as 2 separate diagnostic entities as follows:

> "Bipolar and Unipolar diseases have different clinical pictures. The Bipolar form displays a considerably more colorful appearance; it varies not only between the two poles, but also in each phase offers different pictures. The Unipolar forms return, in a periodic course, with the same symptomatology." (Leonhard, 1979, as

cited in Reddy, 2012, p. 2).

Interest grew in the field of Bipolar Disorder during the 1960s due to a couple of important studies by Jules Angst and Carlo Perris (Angst, Perris, & d'Elia, 1966, as cited in Meter et al., 2012). Jules Angst and Carlo Perris (1966) in their studies helped to explain Bipolar Disorder from Unipolar Depression by theorizing that factors involving genetics and the environment influence the origin and course of Bipolar Disorder, contributing to its heterogeneity (Angst & Sellaro, 2000).

Following the studies of Jules Angst and Carlo Perris (1966), there were methodological advances made in the study of Bipolar Disorder that involved understanding suicidal risk, and the reoccurring episodes experienced by patients (Angst & Sellaro, 2000). In 1970, a meta-analysis of suicide risk in patients with Bipolar Disorder was developed and published by Gaze and Robins (1970) (Bostwick & Pankratz 2000). This meta-analysis, based on the evidence of their research concluded that there was "a lifetime risk of 15% [of suicide in patients with Bipolar Disorder]" (Bostwick & Pankratz, 2000, p. 1925). The research of both Gaze and Robins (1970) led to the later generalization of their figure (15%) to all depressive disorders as uncritically cited in numerous papers and textbooks (Bostwick & Pankratz, 2000). Years later the research of Gaze and Robbins (1970) would be replicated by Goodwin and Jamison (1990) who both "concluded that 18.9% of depressed patients would die by suicide" (Bostwick & Pankratz, 2000, p. 1925). A decade later, Bostwick & Pankratz (2000) found that both influential studies in Bipolar Disorder, which utilized the proportionate mortality method (Gaze & Robins, 1970, as cited in Bostwick & Pankratz, 2000) resulted in less accurate accounting of suicide in patients in the depression phase than applying the case fatality

method. The researchers also found that applying the case fatality method in studying suicide completions in patients with Bipolar Depression allowed for greater accuracy of data than the earlier proportionate method. Fatality rates differed within groups of these patients as was clarified by the history of treatment and suicidality.

In answering the question concerning re-occurrences of episodes in Bipolar Disorder, another methodological advancement in researching Bipolar Disorder involved the application of more accurate terminology and transparent definitions about remission, recovery, relapse, and reoccurrence (Frank, Prien, Jarrett, Keller, Kupfer, & Lavori, 1991). A second methodological advancement according to Morton Kramer (1969) involved the introduction of a "life table analysis into psychiatry" (Angst & Sillaro, 2000, p. 449). Such method was first applied as a measure for gathering data on patients with Bipolar Depression based on the length of hospitalization and follow-up after recovery (Klerman, DiMascio, Weissman, Prusoff, Paykel, 1974). This method was later applied in several longitudinal studies on Bipolar Disorder during the late 1970s and mid 1980s (Lavori, Keller, & Klerman, 1984). Much of the clinical standards of research during the 1960s and 1970s following the production of the *DSM-II* (2nd ed.; American Psychiatric Association, 1970) placed tremendous emphasis on the role that hospitalization played in verifying the diagnosis of mania (American Psychiatric Association, 1970, as cited in Calabrese, Rapport, Shelton, & Kimmel, 2001).

When the *DSM-III* (American Psychiatric Association, 1980) was developed, it was no longer required for patients with Bipolar Disorder or other mental illnesses to be hospitalized during the time of being studied and confirming a diagnosis (Calabrese et, al., 2001). The removal of this requirement, following the creation of the *DSM-III*

(American Psychiatric Association, 1980), resulted in the inclusion of patients considerably less impaired in the varying studies on the disease (American Psychiatric Association, 1980, as cited in Calabrese et al., 2001). As such, the Research Diagnostic Criteria (RDC) for diagnosing patients with Bipolar Disorder had changed since the earlier studies of the 1960's and 1970's (Costello et al., 2002). Patients once diagnosed as having Bipolar Disorder in the much earlier studies (1960's and 1970's) with mood-incongruent psychotic symptoms were later diagnosed in the newer RDC (1980's) as having Schizoaffective disorder (American Psychiatric Association, 1980, as cited in Calabrese et al., 2001). Such changes and improvements made in the diagnostic criteria from both the *DSM-III* (American Psychiatric Association, 1980) and later the *DSM-IV-TR* (4th ed. text revised; American Psychiatric Association, 2000) changed the RDC for diagnosing Bipolar Disorder and the way in which future studies on this disease would be carried out (Nemade & Dombeck, 2009).

The current *DSM-5* (5th ed., American Psychiatric Association, 2013) utilizes "an etiological and pathophysiological based diagnostic system as opposed to the symptomatological and syndromic approach of [earlier] editions (Keener & Phillips, 2007, p. 2). The approach to diagnosing mental illnesses is based on enhancing knowledge on disease origin as well as their pathophysiological commonalities between each disorder (American Psychiatric Association, 2013). Developers of the *DSM-V* (American Psychiatric Association, 2013) wanted to examine whether scientific validators such as neural substrates shared (genetic risk factors and family traits) could explain possible new groupings of related disorders inside the current categorical framework. Such recent approach to diagnosing mental illnesses like Bipolar Disorder

will hopefully enable future research that will help in expanding our understanding about mental illness while leading towards improved diagnostic approaches without interrupting both present clinical practices and current research. In expanding our understanding about Bipolar Disorder is to also examine the social impact and difficulty of stigma often faced by these patient in our society.

Social impact and stigma. In terms of stigma, very little attention in the scientific literature has been paid to the topic of Bipolar Disorder with the majority of reports focusing instead on patients with Schizophrenia (Thome et al., 2012). The process of stigma consists of four components that have been arranged in a logical order beginning with the identification and labeling of differences, and finishing with loss of status and discrimination (Link, Struening, & Rahav, 1997). Stigma in Bipolar Disorder can further manifests from persistent diagnostic labeling, utilization of psychiatric medication, and a historical past of psychiatric treatment (Stuart, Milev, & Koller, 2005). Other factors that have been associated with both stigma and low-grade psychosocial functioning in patients with Bipolar Disorder include a lack of social activities, low socio-economic level, unmarried status, substance abuse, male sex, many previous episodes, psychosis, and longer periods of the illness (Thome et al., 2012).

Family members or caregivers often feel stigmatized as well, due to their association with a loved one with the illness (Thome et al., 2012). The overall severe nature of Bipolar Disorder such as functional impairment, significantly affects their perception of stigma. Depressive symptoms of Bipolar Disorder has led to impairment in cognitive functions further resulting in bias and poor insight. As a result of the poor insight in these patients, stigma-related perceptions and experiences could possibly be

symptomatic manifestations of the mental disorder. The vicious cycle of stigmatization may lead to further stress and worsening of the mental illness. Stigmatization, as a whole, continues to immensely influence patients with Bipolar Disorder in terms of their self-esteem and life experiences as well as affecting many important functioning areas from within.

Challenges in living and coping with bipolar disorder. Living with Bipolar Disorder is extremely difficult and it is not exclusively based on being either well or ill (National Collaborating Centre for Mental Health, 2006). Many find it very challenging as well as frustrating to attempt to distinguish between that which is normal mood, and that which is not. To develop a clearer picture about some of the challenges faced by many persons living with Bipolar Disorder, the following discussion on two patients with the disorder has been included.

A patient with the pseudonym of Mike mentioned his experience of living and coping with Bipolar I Disorder (National Collaborating Centre for Mental Health, 2006). Mike was diagnosed at the age of 19. Following his diagnosis, he immediately found psychiatric and medical help. Mike was placed on a combination of medications such as Lithium and Carbamazepine, which appeared to help. A year later he and his psychiatrist agreed to cut back on his medication, which unfortunately resulted in a gradual decline into severe depression. However, Mike, instead believed that he was experiencing a "difficult patch because [he] was stuck at home convalescing with severe back pain" (p. 2). He had ultimately developed sub-syndromal symptoms, which consisted of severe back aches and other pain resulting in "muscular trigger points [experienced] all over [his] body [directly] caused by [his] depression" (p. 2). Other severe sub-syndromal

symptoms included anxiety, which resulted in his developing a speech impediment that manifested as stuttering. The patient had also developed suicidal ideation and had later attempted suicide. This prompted his psychiatrist to immediately prescribe the medication Mirtazapine. Mike was later switched to the mood stabilizer, Lamatrogine and his mood began to improve, and stabilize, and his physical aches and pains gradually subsided.

Another patient with Bipolar Disorder who often suffered with mania experienced rapid cycling at the age of 19 (National Collaborating Centre for Mental Health, 2006). The patient felt "'on top of the world,' much more sociable than normal and very active and self-confident" (p. 4). The patient's highs would last about 9 days followed by lows for the same amount of time. When in a manic state, the patient remained euphoric "in overdrive [and] would only sleep for an hour or two [each] night" (p. 4). The patient coped with Bipolar Disorder prior to receiving pharmacological treatment by satisfying their inner craving for personal stimulation in a variety of ways. To satisfy their inner craving, the patient turned to a variety of reckless and unusual behaviors that included "smoking, even though [this patient was] a non-smoker, driving [dangerously] fast or listening to [much] louder music than normal" (p. 4). When depressed, the patient's thoughts became suicidal, irrational, very negatively distorted and would spend about 18 hours a day in bed. This patient appeared to have been suffering with symptoms of what is known as rapid cycling in Bipolar Disorder.

Patients with Bipolar Disorder that suffered from rapid cycling illness compared to those without it experienced more severe mood symptoms, functional impairment and tended to be more treatment resistant (Schneck et al., 2004). Patients with rapid cycling

Bipolar Disorder are also more prone to substance abuse and have higher occurrences of depressive episodes (National Collaborating Centre for Mental Health, 2006). Based on several longitudinal investigations in large samples over several years, rapid cycling Bipolar equally occurs in both Bipolar I and Bipolar II Disorders (Kupka et al., 2005). Overall functioning between episodes in persons with Bipolar I is "approximately 30%" (American Psychiatric Association, 2013, p.131). For Bipolar II, in "in-between mood episodes, at least 15% continue to have some inter-episode dysfunction [while] 20% transition directly into another mood episode without inter-episode recovery" (American Psychiatric Association, 2013, p. 138). In both Bipolar I and II, demonstrate "severe impairment in work role function" (American Psychiatric Association, 2013, p. 131). Persons with Bipolar often suffer with cognitive impairments as demonstrated in cognitive test of which these patients performed "more poorly than healthy individuals" (American Psychiatric Association, 2013, p. 131). Cognitive impairment includes:

1. Deficits in executive functioning,
2. Deficits in verbal/working memory,
3. Deficits in attention that also persists during the euthymic phase or phase of a normal mood state,
4. Deficits in varying vocational and interpersonal difficulties that persist throughout the person's lifespan.

Treatment of Bipolar Disorder

Pharmacological approaches. In terms of coping with Bipolar Disorder, such can also involve both pharmacological and non-pharmacological treatment. Pharmacological treatment for Bipolar Disorder involves specific drug treatments in

helping to stabilize the patient's mood (Miklowitz, 2008). Prior to 1960, patients with Bipolar Disorder were hospitalized over many years at a time. Patients are currently treated with varying mood stabilizers, some antidepressants and antipsychotics that have done much to relieve and improve the course of the illness. These various drugs not only help to control acute episodes of the disease, they have a value that is prophylactic in that they aid in preventing future episodes by decreasing the duration and severity of occurring episodes. Psychiatrists treat Bipolar Disorder in three phases:

1. "Acute Phase: The goal is to control the most severe symptoms of the manic mixed or depressive disorder;
2. Stability Phase: The goal is to help the patient recover fully from the acute phase [which] means treating residual symptoms (e.g., mild depression) or levels of social-occupational impairment;
3. Maintenance Phase: The goal is to prevent recurrences and continue to treat residual symptoms" (p. 424).

In the medical treatment of Bipolar Disorder, the recommendations of each drug will vary based on the phase of treatment (Miklowitz, 2008). In an acute and stabilization phase, a mood stabilizer may accompany an antidepressant. Following a manic episode that has been stabilized, if the patient continues to experience residual depressive symptoms, an antidepressant might be recommended. These three phases of treatment for Bipolar Disorder reflect that of psychosocial and psychotherapeutic treatment.

When the patient maintains a pattern of medication non-adherence, this results in a breakthrough of episodes (Miklowitz, 2008). Patients with Bipolar Disorder are

required to adhere to their prescribed medications in order to reduce the possibility of breakthrough episodes.

Accompanying pharmacological treatment involves psychotherapy (Miklowitz, 2008) sometimes alone with the creative/expressive arts. As an adjunct to pharmacological treatment, the goal of psychotherapy for patients with Bipolar Disorder is to help teach skills that involve the management of symptoms in order to increase social and occupational role functioning and maintain patient adherence to their drug regiments. In major psychiatric disorders like Bipolar Disorder, psychotherapy is also based on the objective that physiology and psychology are not completely separable. As an outpatient treatment, psychotherapy is able to aid patients in better coping with stress triggers and it can help guide patients towards adaptive coping mechanisms needed to fend off the possibility of a future relapse.

In sum, patients with Bipolar Disorder are currently treated with varying mood stabilizers, antidepressants, and anti-psychotics that have done much to relieve and improve the course of the illness (Miklowitz, 2008). These various drugs not only help to control acute episodes of the illness, they help to avoid future episodes by minimizing the duration and severity of the occurring episodes.

Non-pharmacological approaches. Non-pharmacological treatments for Bipolar Disorder that are therapeutic without relying on talk therapy include bodywork, light therapy, and other interventions (Waltz, 2000). Other alternative treatments include:

1. Auditory Integration training/[Auditory] Processing Stimulation: [This] involves listening to particular sounds through headphones [which] is believed to retrain the hearing mechanisms.

2. Occupational Therapy: [Is not only used for those that have difficulties with fine motor skills. This form of therapy is also used to address specific issues that involve building one's self-esteem].
3. Sensory Integration: [Helps in reducing or enhancing varying] sensitivity levels [especially in patients with this disease]. Sensory disturbance can be cyclical [and when experiencing a] manic phase, [the patient will experience] heightened sensitivity that may be perceived as pleasurable, but in some cases it [is actually] painful.
4. Speech Therapy: [Persons with Bipolar may experience certain speech defects such as] Dyspraxia, Stuttering, or cluttering slightly more often [than persons with other mood disorders.]
5. [Dance, Music and Art Therapy: The expressive arts therapies such as these aide in drawing] out [a variety of] hidden talents, [which] helps in [channeling] a sense of joy and accomplishment, [while helping the patient] communicate nonverbally. Such therapies are often integrated as alternative treatments in the patient's therapy program [(music therapy will be discussed later in this paper in more detail])" (Waltz, 2000, p. 226-229).

Non-pharmacological treatments also include Somatic treatment, which involves Electroconvulsive therapy (Lam, Chan, & Howard 2013). This form of therapy can be either a primary or secondary intervention in the treatment of very severe or treatment-resistant Bipolar Disorder encompassing all three phases of this illness (Lam et al., 2013). Other somatic treatments involve constant Transcranial Magnetic Stimulation, Vagus Nerve Stimulation and Deep Brain Stimulation, which have been further suggested for

treatment-resistant Bipolar Disorder (Lam et al., 2013).

Additional non-pharmacological treatments involve mindfulness meditation, which is considered to be one of the main components found in Mindfulness-Based Cognitive therapy (Segal, Williams, Teasdale, 2002). Mindfulness-Based Cognitive Therapy includes:

1. "Body Scan Technique: The non-judgmental observation of bodily sensations;
2. Sitting Meditation: Observation of breathing in the abdominal region and any thoughts or feelings that arise;
3. The 3-minute Breathing Space: A short meditation focusing on observing physical sensations, the breath and the body, in a non-judgmental way" (Perich, Mitchell, & Ball, 2013, p. 338).

Other alternative treatments to pharmacological treatments involve the use of herbal or nutritional compounds (HNC) (Russinova, Wewiorski, & Cash, 2002). HNC is used in the treatment of both Bipolar Disorder and Major Depression commonly in geriatric populations (Keaton et al., 2009). However, HNC that is orally ingested can interact with traditional prescribed medications (Kennedy, 2005). In sum, all appear to increase the recovery process well beyond the management of cognitive and emotional impairments by the ability of these treatments to improve spiritual, social, and general self-functions (Sarris, Lake, & Hoenders, 2011). Another treatment that has been considered in working with patients with Bipolar Disorder would be Music Therapy.

Coping with bipolar disorder using music. In an effort to develop a greater understanding about coping mechanisms for Bipolar Disorder through music is to further explore the general linkage between 2 important sources, creativity and mental illness

(Pavitra, Chandrashekar, & Chouhury, 2007). In comparison with the general non-creative middle-class populations, there is believed to be a link between creativity and mental illness that is based on an existing prevalence of psychiatric stress level, morbidity, personality profiles, and coping skills (Pavitra et al., 2007). The creative individual is often viewed as being unconventional and having psychological processes that have been observed in madness (Pavitra et al., 2007). Possessing similar psychological processes as observed in madness could be an important element of the distinctive abilities of genius (Pavitra et al., 2007). Psychoses, mood disorders, intoxication, and mental instability have all been examined in general by questioning whether or not these elements are sources needed for the inspiration that leads to the creative process (Pavitra et al., 2007).

In relation to creativity, coping with Bipolar Disorder through the use of music is often viewed in therapy and health as one's personal achievement (Murray & Johnson, 2012). This creative achievement in relation to coping through music not only requires a spontaneity of a new generation of concepts, it requires attentiveness to critical thinking and detail that are often impaired during periods of mania and hypomania (Schuldberg, 2000). If creativity remains an important part of a patient's self-concept, then therapy, especially with the use of music may be best perceived as a developmental endeavor, in which identity consolidation and self-creation interact to moderate the course of Bipolar Disorder (Rothenberg, 2006).

Music seizes upon our emotions in a way that is not easily expressed in other media (Njoora, 2007). Music also aides in helping one develop higher order thinking skills, which includes synthesis, analysis, evaluation, and collective problem-solving (Njoora,

2007). Health-promoting opportunities allotted by music include development of improved socialization, reflection, linking pertinent past and present social and cultural elements within human societies, etc. (Njoora, 2007).

Research psychologist DiGiacomo, (2007) has chosen to further identify creativity in relation to persons with Bipolar Disorder as the Creative Envelope, which he describes and dissects into two distinct parts, "ritual precursor to creativity and, creativity itself" (DiGiacomo, 2007, pp. 66). The four overlapping phases found within the ritual precursor to creativity include:

1. "Disruption of homeostasis
2. Anxiety
3. Non-committal play and,
4. Mastery/New homeostasis," (DiGiacomo, 2007, pp. 66).

When utilizing music to cope by persons with Bipolar Disorder, music therapists have helped in initiating these overlapping phases of the ritual precursor to creativity by acting as catalysts for the creative process experienced by their clients (DiGiacomo, 2007). Creative approaches often used by music therapists are important sources for coping, especially through music, a guiding principle to help promote and increase the level of adaptation, interaction with the environment, and psychological health in their client. Music interventions are also used by music therapists to help in promoting creativity and improve the client's adaptive behavior patterns. The manifestation of creativity in patients with Bipolar Disorder occur when the client together with the music therapist are actively participating and sharing in the creative music making-process (Rolvsjord, 2004).

DiGiacomo (2007) also believes that the ritual precursor to creativity purposefully serves as a ritual in itself. By serving as a ritual in itself, the ritual precursor helps to narrow the focus in any discussion about the creative process allowing it to unfold into the extensive field of creativity (DiGiacomo, 2007).

The manic side of Bipolar Disorder is believed to be the source of creative activity (Johnson et al., 2012). In order to gain greater insight into persons with Bipolar Disorder such as learning which core element of their illness enables them to cope through the use of music, we need to continue to examine the precise linkage between creativity and the illness itself (Martindale, 1989).

The linkage between creativity and Bipolar Disorder is based on specific features of the creative process consisting of both positive affect and fluency of associations (Martindale, 1989). In patients with Bipolar Disorder, the act of creativity has often "occurred between two poles; a pole of Free Associations [,] Illogical Thinking, [and] another pole of Abstract, Factual, and Illogical Thinking" (Mackali, Sinan, & Timucin, 2013, p 3). Attention is not focusable at the first Pole; however, creative productivity is recognizable at this Pole mainly due to the primary thinking processes predominating (Martindale, 1989). A creative person with Bipolar Disorder is very capable of recognizing their own floating ideas during the manic phase and are able to develop these floating ideas into an integrity that is meaningful even while at the same time being mildly depressed (Glazer, 2009). The emotional components in Bipolar Disorder are more directly observed while the processes of primary thinking remains more integrated in considerably a less primitive form than in persons with Schizophrenia (Russ, 2000).

Manic patients are also more prone to combinatory thinking than both healthy

patients and patients with Schizophrenia (Solovay, Shenton, Holzman, 1987). Combinatory thinking involves combined thoughts and images that tend to be increasingly inconsistent with one another as they become more excessive and detailed in manic patients (Solovay et al., 1987). Such process of combinatory thinking is often manifested either as humorous, flippant, or flippantly arrogant (Goodwin & Jamison 2007).

The linkage between Bipolar Disorder, and creativity, in terms of its long association with psychopathology/mental disease has been previously examined and discussed by Aristotle (Kyaga et al., 2011). Understanding how patients with Bipolar Disorder cope through the use of music as in music therapy is to continue to examine the linkage between Bipolar Disorder and creativity, which appears to be a vital source for coping by enabling the patient to work through the varying emotional impasse they often encounter with this illness (Murray & Johnson, 2010).

Composition as a specific music experience in coping. Music composition is both a form of one's personal expression and original product, which consists of creative and original musical ideas that develop into structured sounds from the mind of the composer, often deriving from life experiences (Njoora, 2010). Music composition has the capacity to affect regulation and security as it generates a sense of order via complex reinforcements of melody, harmony, rhythm, and form (Graves, 2005). Due to these properties of music, certain musicians/composers (Collins, 2009) such as Ludwig Van Beethoven (1770-1827), Robert Schumann (1810-1856), and Thelonious Monk (1917-1982) with probable Bipolar Disorder were known to have benefitted from participation in compositional work. Although it is not possible to retroactively diagnose anyone,

description's from their autobiography suggests that they were each having symptoms of Bipolar Disorder (Anderegg & Gartner, 2001; Monson & Jackson, 2010). What they were doing with music composition was helping them to manage their condition as follows:

1. Beethoven: The act of composing music not only served as a therapeutic median for free and personal expressions of his alternating moods/emotions, also as a coping mechanism for his illness (Mai, 2008).
2. Schumann: He skillfully applied a variety of fictional characters found in several literary works transforming them into melodic representations of his mood states, which resulted in his obtaining greater control over his mood swings (Graves, 2005).
3. Monk: He applied a natural distinctive musical approach to music composition by placing much emphasis on its form (including melody, harmony, rhythm, and timbre) through free improvisation (Southern, 1971). This enabled him to generate recognizable musical form in his compositions during improvisation via an African American musical idiom known as Jazz (Baraka, 1963; Wilson & MacDonald, 2012).

Music composition may be beneficial for persons with Bipolar Disorder because it is able to draw "attention to modeling the human experience of music at all levels" (Collins, 2009, p. 112). Music composition thereby is both a form of one's personal expression and original product (Njoora, 2010). It consists of creative and original musical ideas that develop into structured sounds from the mind of the composer, sometimes deriving not only from specific inner feelings but also from personal life

experiences. Music compositions are often based on permeated thoughts and personal inspirations that are rooted from the cultural traditions and background of the composer. When listening to a music composition, people often develop their own individual meaning of the music within its existing structure at hand. Musical meanings are sometimes collectively understood and at other times they are personal.

Music Therapy and Bipolar Disorder

As one of the expressive arts utilized and as an alternative non-pharmacological treatment for serious mental illness like Bipolar Disorder, music therapy, an allied health profession, was officially established in 1950 (Davis, Gfeller, & Thaut, 2008). It was based on previous work done by volunteer musicians prior to 1950, as they used music (choirs, military bands, other music performances in Veteran Hospitals) to treat patients that were mainly Veterans following World War II and earlier. Music therapy attempts to bring about improved changes in patients health through the utilization of music and the therapist's self in order to influence modifications in behavior (NAMT, 1960, as cited in Davis, Gfeller, & Thaut, 2008).

Music therapy has been shown to produce positive effects in the treatment of Bipolar Disorder (Silverman & Rosenow, 2013). Creative approaches during music therapy often used by music therapists continue to serve as guiding principles in helping to promote and increase the level of adaptation, interaction within the environment, and overall psychological health (DiGiacomo, 2007).

Music therapy approaches for bipolar disorder. In the treatment of Bipolar Disorder and other serious mental diseases, there is varying current literature and research about Aesthetic Music Therapy, Guided Imagery and Music, Analytical Music

Therapy, Community-Based Music Therapy, Recreational Music Therapy, Resource-Oriented Music Therapy, and a music therapy philosophy known as the Recovery Approach. However, due to the nature of this research, the music therapy philosophy, the Recovery Approach alone with Aesthetic Music Therapy, and Resource-Oriented Music Therapy will be examined.

Music therapy as a profession involves a very important underlining fundamental feature from a mental health policy applied in several other countries known as the Recovery Approach (McCaffrey, Edwards, & Fannon, 2011). The Recovery Approach contains core beliefs that reflect and support the work of music therapists worldwide (McCaffrey et al., 2011). The Approach is based on principles that place the service user and their life experiences at the heart of making decisions about treatment and care (Lloyd, Waghorn, & Williams, 2008). The Recovery Approach also emphasizes empowerment, meaningful activity, and hope (Shepherd, Boardman, & Slade, 2008).

There is a belief based on hoping for life quality, which continues to be a large part of the Recovery orientation (Lloyd et, al., 2008). In sum, the "Recovery Approach responds to and encompasses the perspectives of the service user based on the value of hope and positive expectations in relation to one's overall treatment" (McCaffrey et al., 2011).

Aesthetic Music Therapy (AeMT), a contemporary form, which originated from Music Therapist, Colin Lee (2003), is based on music-centered-thinking. (Aigen, 2005). Aesthetic Music Therapy (AeMT) combines both music-centered and humanistic approaches to Music Therapy (Lee, 2003). AeMT attempts to comprehend the music therapy process, and session, through the intervention of improvisation in terms of its

musical universal structure.

In AeMT, clinical improvisation in music therapy, as an intervention, is also a creative process that represents the therapist's search for music while clinically, artistically, and internally reflecting that of their clients search (Aigen, 2005). This clinical reflection of their client's internal search further enables their client to discover their own place both in the world and in the musical interchange during the music therapy session (Lee, 2003).

Another form of music therapy, Resource-Oriented Music Therapy (ROMT), derived from the orientation of Humanism (Schwabe, 2005). In ROMT, music therapy is viewed as a resource-oriented psychotherapeutic conception that can integrate the varying schools of music therapy. Schwabe (2005) discusses how he began to develop his own music therapeutic concept from the perspective of resource-oriented thinking between the years 1960 through 2000. It is noted that resource-oriented action is based on a patient's ability to release self-healing energies. ROMT goals for patients with serious mental illnesses like Bipolar Disorder should include being able to express their emotions in order to develop interests, motivation, and sustained relationships with others (Gold et al., 2005). In mental health research, these goals are all closely connected to what has been identified as the negative symptoms. The concept of affordance in ROMT represents the role music can play in people's lives (Rolvsjord, 2010). Affordances in music involve resources in which music and its materials are provided during situations of use (Rolvsjord, 2010). The appropriations are based on how the affordances are applied; "the 'takings' and 'usings' of music" (Andell, 2004, p. 73).

During active music between the therapist and client with Bipolar Disorder (music

therapy), ROMT involves the process of personal empowerment (Rolvsjord, 2004). Empowerment in ROMT is based on the patient building on their own personal life experiences that represent who they are and what they are capable of doing (Proctor, 2002). Empowerment, in ROMT is also an ideology that questions current practices in the field while serving as a philosophy that remains a guiding principle of music therapeutic practical work (Rolvsjord, 2004).

Research has shown that ROMT helps to focus on the client's strengths, resources, and potentials instead of on the client's primary conflicts, and problems (Gold et al., 2005). Research has also found that due to ROMT further emphasizing equally collaborative relationships in reference to understanding the context of therapeutic processes, the philosophy of empowerment, and positive psychology produced an increase in patient motivation enabling a greater willingness for these patients to participate in therapy.

Music therapy has greatly contributed to our comprehension of music and its influence on our actions (Ruud, 2008). Continual benefits of music therapy interventions include helping to enable patients with serious mental illnesses like Bipolar Disorder to develop and encourage motivation, emotional expression, and relatedness (Mossler, Chen, Heldal, & Gold, 2012). Greater process-outcome research remains a tremendous necessity in helping to identify the most effective music therapeutic techniques in the treatment of patients afflicted with serious mental illnesses like Bipolar Disorder (Mossler et al., 2012).

Case studies of music therapy for persons with bipolar disorder. In a case study by Nolan (1991), a patient with the pseudo-name, Carla was 27-years old at the time of her third admission to a psychiatric hospital around 1985 due to severe manic symptoms of Bipolar Disorder, which resulted in irritability, aggressive behavior with customers at her job, and not being able to sleep for several days. She was upset that her father had lost his job due to the industrial plant closing and she had discontinued her psychotrophic medications within six month after her prior hospitalization a year earlier to the same hospital (Nolan, 1991). As during her previous hospitalization, Carla was placed in a music therapy group as a former client of Nolan (1991). Musical experiences for Carla included improvisation, singing songs while accompanied by instruments, the playing of instruments, songwriting, and adaptations of folk and popular music. However, the music therapy group did not utilize compositional music therapy; instead it was exclusively involved in music improvisational methods based on varying degrees of client or therapist suggested structure. Group improvisation often began with one person responsible for creating the musical statement or mood followed by the group or therapy joining in when they felt comfortable. At the end of each piece, the therapist would assess the interpersonal functioning of the group by having each group member express their musical experience and thoughts derived from the music. Such enabled Carla to freely utilize musical elements in order to establish her own unique method of communicating and relating with others. Group improvisation also allowed the music therapist to provide a safe musical holding environment for Carla so that she could feel more accepted as a social individual within the context of music and an important connection to the group. Following group music therapy, Carla's psychotic behaviors were reduced, her ability to

concentrate improved, and she was able to later maintain employment.

In a case study by Odell-Miller (2007), a patient with the pseudo-name of Malcolm, a married man in his early 30's who has three children, was diagnosed with Manic Depression. Malcolm had difficulty expressing himself to others and would rather not deal with personal problems he encountered due to feelings of "rage towards [anyone] coming into contact with him" (p. 27). Malcolm was violent towards his wife of 13-years at the time of music therapy, but not with his children. Following an assessment, Odell-Miller (2007) felt that musical expression would be beneficial in helping Malcolm work through his rage. Malcolm would attend individual music therapy sessions that involved improvisation and talking instead of compositional music therapy, in which the therapist would play the piano and Malcolm played both the metallophone and drum. Music therapy provided a safe space and container for Malcolm to express his rage and come to terms with his problems and emotional frustrations. After four years and a half of individual music therapy, Malcolm's rage toward others subsided and he was able to gain greater insight for himself through the music therapeutic relationship developed.

Even though Nolan (1991) and Odell-Miller (2007) did not utilize compositional music therapy when working with their clients with Bipolar Disorder, their studies did demonstrate how music serves as a powerful, artistic tool, allowing for many important opportunities on the part of clients. Although these two case studies involved work with adult patients diagnosed with Bipolar Disorder, and although there have been studies concerning the benefits of music therapy for persons diagnosed with Bipolar Disorder, no case studies that examine the benefits specifically of compositional music therapy for

Bipolar Disorder were found.

Compositional music therapy for mental and emotional health. Compositional music therapy involves "such techniques as songwriting and recording (by the client alone, with the therapist, or by the therapist alone)" (Wheeler, 2015, p. 381). In compositional music therapy, the client creates a musical product or model for the purpose of addressing goals, which are "psychoemotional" and/or "psychospiritual" (p. 363).

Violinist, Yehudi Menuhin (1972) further discusses the beneficial effects basic elements of musical form in music composition has on thought disorganization:

> "'Music creates order out of chaos; rhythm imposes unanimity upon the divergent; melody imposes continuity upon the disjointed; and harmony imposes compatibility upon the incongruous.' [Based on scientific research, such observation by] Menuhin (1927) [demonstrates the benefits of] music [composition in helping to regulate] affect, and security, [while creating] a sense of order [throughout the] complexities of melody, harmony, rhythm, and form." (Graves, 2005, p. 324)

Research indicates that the basic elements comprising music composition (i.e., making choices about melody, harmony, rhythm, volume, timbre, form, etc.) can significantly impact cognition and behavior in numerous areas of the brain (Unkefer & Thaut, 2005).

Music therapy techniques that include composition/songwriting can be helpful in treating persons with thought disorders (Morgan & Bartrop, 2013). For persons experiencing acute psychotic episodes, melody, harmony, and rhythm can be particularly important elements to consider (Morgan & Bartrop, 2013). For example, a melodic

contour with small, stepwise intervals can establish a sense of predictability for a listener who may not have the tolerance for less predictable, intervallic leaps (Aldridge & Aldridge, 2008).

Specifically when engaged in composition, this principle of melodic predictability can support a patient's focus and thought organization (Aldridge & Aldridge, 2008). Likewise, composing music with predictability in harmonic progressions, including expected cadences and tonal resolution within the music, can be beneficial (Aldridge & Aldridge, 2008). Furthermore, composing rhythmic aspects of music (which serve as crucial elements in organizing time) enable persons with thought disorders to create coherent time structures in their music and, hence, in their experience of the world (Unkefer & Thaut, 2005). Music therapists play a specific role in supporting client composition, by initiating creativity, and by acting as catalysts for the creative process experienced by patients, so that they may create their own musical compositions (Collins, 2009).

Case study featuring compositional music therapy for persons with in psychiatric care. In a case study by Smith (1987) the therapist utilized compositional music therapy as an intervention for a 27-year old patient with the pseudo-name Jean. Jean was dually diagnosed as having Major Depressive Disorder and Borderline Personality Disorder. She was first referred to the hospital due to suicidal gestures (she slashed her wrist), and depression. She was placed in group music therapy for four years (Smith 1987), with the goal of promoting "improved communication skills through a creative, expressive media [while increasing] social interaction" (p. 483). Her affect had improved following group music therapy and she was later discharged from the hospital due to "resolution of

suicidal ideation, cessation of self-destructive behavior and brightening of affect" (p. 483). Following her first discharge, Jean continued to see a psychiatrist for the next four months. However, she was gradually beginning to experience an emotional regression after she had visited home where she again came into contact with difficulties of her family's dysfunction (alcoholic and verbally abusive father, and passive mother who had also been physically abused as a child by her father). Jean returned to emotionally experiencing suicidal ideation that increased over weeks and months and she would be readmitted into the hospital for four and a half months (Smith, 1987). During this time, upon her request, Jean was placed in Smith's (1987) music therapy group for a second time where she felt increasingly safe in "exploring more difficult family history issues in light of the positive support [they] had developed in her previous hospitalization" (p. 483). Music therapy involved sessions of songwriting that enabled Jean to face many of her childhood and family issues. Experiences of songwriting or compositional music therapy allowed Jean a safe container and space, to receive validation from the therapist and group as well as to express in words and song many of the inner feelings and challenges (sharing her inner self) she was facing along with the group. Jean was also able to emotionally interact and communicate further with the therapist and music therapy group through the creation of individual and group life songs based on personal life experiences. Following four and a half months of compositional group music therapy with Smith (1987) along with psychiatric support from her primary therapist, Jean could share her self-destructive thoughts without acting on them in helping to better manage her behavior. She was also able to recognize "negative inner thoughts and replace them with healthier ones" (p. 491).

While Smith's (1987) case did not involve clients with Bipolar Disorder, her study did demonstrate the virtues of compositional music therapy in psychiatric care. As previously stated, no case studies that examine the benefits specifically of compositional music therapy for Bipolar Disorder were found.

Statement of Purpose

Although the literature supports the use of composition in psychiatry, generally, no literature specifically concerning compositional music therapy for persons with Bipolar Disorder was found in the literature search for this study. Yet, the related literature does suggest the importance of compositional music therapy for persons with Bipolar Disorder, and it is apparent (anecdotally) that music therapists do use composition in this context. Thus, the purpose of this study is to address the following, central research question: *What are the benefits of compositional music therapy for clients diagnosed with Bipolar Disorder?* This question will be further examined in terms of the following research subordinate questions:

1. What are the basis and/or rationales for selecting music composition as a method to address client goals for adult patients diagnosed with Bipolar Disorder?
2. How is the compositional music therapy *process* useful and/or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder?
3. How is the compositional music therapy *product* useful and/or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder?

This research study seeks to answer the research question and subordinate questions above by consulting with music therapists who have worked directly with adult patients diagnosed with Bipolar Disorder, utilizing compositional music therapy.

Method

Participants

Participants for a survey were self-selected from an email list sent by the Certifications Board for Music Therapists (CBMT). The email list consisted of 137 certified music therapists that selected psychiatry under the CBMT as one of their preferred patient population choices when applying for certification. A total of 46 music therapists actually participated in the survey study and 30 completed the survey. Out of the 30 participants that completed the survey, there were 26 females and four males. All participants that completed the survey were ages 20 and older. There were a total of eleven females between the ages of 20-34, fifteen females between the ages of 35-50 and four females over the age of 50 that completed the survey. Only one male between the ages of 20-34, two males between the ages of 35-50, and one male over the age of 50 also completed the survey.

Ethical precautions to protect the rights and welfare of all participants were carefully observed. The Montclair State University Institutional Review Board approved this study.

Materials and Procedures

Materials utilized in this study included an original online music therapy survey developed on www.SurveyMonkey.com. (please see Appendix). The purpose of the online music therapy survey was to gather data from Music Therapists about the way in which compositional music therapy has benefited their adult clients diagnosed with Bipolar Disorder.

Development of Survey

The survey consisted of 52 questions divided into three sections each based upon one of the three subordinate research questions (see bottom of page 39 for subordinate research questions and see Appendix for full survey). All questions in all sections included the option of non-applicable. The music therapy survey (please see Appendix) was developed based upon existing literature on or related to the topic, as summarized in the previous section of this thesis (literature review). Such included a summary of research about Bipolar Disorder that was gathered from prior sections of this paper such as *Bipolar Disorder/Definitions Main Features and Symptoms.* In this section of the paper, important elements of descriptions about Bipolar Disorder within the literature was extracted, further examined, summarized, reshaped, developed, and integrated into the music therapy survey in the form of questions/statements. This same process was applied to other sections in this paper, in helping to form the music therapy survey, which included *Social Impact and Stigma,* in which symptoms of Bipolar Disorder are often exacerbated by the experiences of stigma. Sub-sydromal symptoms of Bipolar Disorder alone with information concerning general coping methods were also further examined, summarized, reshaped, developed, and integrated into the survey in the form of questions/statements in creating the music therapy survey. Other sections in this paper that were integrated into the survey utilizing the same process of gathering data include:

1. Challenges in Living and Coping with Bipolar Disorder,
2. Treatment of Bipolar Disorder: Pharmacological Approaches, Non-Pharmacological Approaches,
3. Coping with Bipolar Disorder Using Music, Composition as a Specific Music

Experience in Coping, Music Therapy and Bipolar Disorder,

4. Music Therapy Approaches for Bipolar Disorder, and Compositional Music Therapy for Mental and Emotional Health

In the music therapy survey, some questions were similar in meaning to account for contextual nuances and how varying music therapists might interpret the questions differently. In responding to the survey, each participant was asked to "choose an adult client with Bipolar Disorder along with an original work of theirs that will be the focus of all your answers throughout this survey."

Section one, consisting of 24 questions, was based upon the kinds of goals that music therapists use when working with clients diagnosed with Bipolar Disorder through compositional methods. These kinds of goals include those involving the following:

1. Mood affect, emotions, sense of self, and resources for coping with problematic aspects of each of these.
2. The client's quality of interaction with the world, as well as her or his cognitive capacities in relation to being in the world in order to interact, manage, appreciate, and adapt to variations in the environment.
3. The client's inner will and ability to communicate verbally as well as non-verbally while functioning and discovering more effective and safer ways of being in the world.

Each question took the form of a statement that was to be rated along an ordinal scale of zero to four corresponding respectively to always, often, rarely, never and not-applicable, which counts as zero, all representing the frequency with which the therapists employed these goals.

Section two, consisting of 12 questions, was based on the process of working with persons diagnosed with Bipolar Disorder through compositional methods. Such compositional processes included those involving the following:

1. The act of composing music with the therapist's support, that serves as a means for gaining the insight and self-knowledge necessary for utilizing musical and interpersonal resources for coping.
2. The act of composing music that focuses on encouraging the client to construct, integrate, and later develop greater structural organization of ideas in meaningful ways to enable significant self-insight.

Each question took the form of a statement that was to be rated along an ordinal scale of four to zero corresponding respectively to strongly agree, agree, not sure, disagree, and strongly disagree agree, all representing the degree to which the therapists agreed with the statement concerning the usefulness of the compositional process in addressing clinical goals of clients diagnosed with Bipolar Disorder.

Section three, consisting of 16 questions, was based on the product of working with persons diagnosed with Bipolar Disorder through compositional methods. The compositional product included those involving the following:

1. A focus as a permanent portable artifact, serving as a qualitative source of comfort, security, and empowerment in a way in which others can experience, live, and empathize with the client's point of view of their world and story within or outside the clinical setting
2. A focus on allowing the client to take the therapy to go as an artifact so that her or him can function behaviorally better. As an artifact, the music composition also

embodies the therapeutic relationship and process for the purpose of coping and functioning more effectively. The composition is an informational record that allows the client to self assess about their mood and state of being at a given point in time.

Each question took the form of a statement that was to be rated along an ordinal scale of four to zero corresponding respectively to strongly agree, agree, somewhat agree, disagree, and strongly disagree, all representing the degree to which the therapists agreed with the statement concerning the usefulness of the compositional product in addressing clinical goals of clients diagnosed with Bipolar Disorder.

Data Collection

Data collection consisted of the administration of the music therapy survey described above. The survey was posted on Survey Monkey, which gathered participant responses. The music therapy survey was accessible through a link included in each participant's email invitation. The survey was made available for a month. The resulting data collected by Survey Monkey was downloaded into Excel Spread sheets and prepared for data analysis.

Data Analysis

Data analysis utilized a descriptive statistical process, which involved comparing and contrasting responses from the music therapy survey questions according to numerical ratings and semantic content of each question. This process involved interactive dialoging/discussion between both the researcher and thesis sponsor for the purpose of better clarifying the results from the music therapy survey as well as ensuring that all of the categories were neither too narrow nor too broad. This was accomplished

in two stages.

In the first stage, within each survey section, means of participant responses were calculated and scored for each question. The means of participant responses were calculated by taking the initial number of responses under each ranking of the survey (for i.e., always, often, rarely, never, not applicable), which was based on a zero to 4 ratio and adding them together resulting in the total number of responses. The total score for responses was then calculated by multiplying the initial number of participant responses from each ranking of the survey, (based on a zero to 4 ratio). Following this, the total number of each participants response were then added altogether and divided by the total number of responses resulting in the total means score, which was rounded off to the nearest tenth beyond the decimal point. Within each of the survey sections, means of participant responses were then ranked according to the resulting mean score and divided into 3 roughly equal sized sub-groups that were grouped based on higher, medium, and lower scores groups (note that subgroups were chosen in a way that did not interrupt or disrupt a given mean score level). Within each of the 3 subgroups, common, underlying themes were then identified/summarized, and derived, based upon the content of the question.

In stage 2, each section of the survey questions was grouped according to their surface semantic similarities in relation to their content. The content from each of these questions/statements were carefully examined and grouped together based on similar subjective themes that emerged. Interactive dialoging also occurred between the researcher and thesis sponsor, which assisted in developing the various titles for each group in this stage that would directly reflect as much as possible the main theme that

subjectively derived from each of the questions/statements as newly formed subgroups. These sub-groupings were then examined for patterns of mean participant scores. The size of the range carries some implications for the consistent meaning of the category, the smaller or narrower the range size, the stronger or more reliable the construct or given themes deriving from each of the statements. The size of the mean range determines how meaningful the semantic category is to the researchers. The location of the mean range size determines how meaningful/important the category actually is to the participants. As a review, the higher, larger and wider the means range size, the less reliable the construct but the lower, smaller and narrower the means range size, the stronger and more reliable the construct.

Results

Results of Analysis, Stage 1: Groupings According to Participant Response Means

Survey section 1: Clinical goals. In survey section one, the means of the rating scale (0-4) responses relative to clinical goals ranged from 1.2 to 2.6. This range was divided into three sub-ranges consisting of roughly equal-sized groups (eight questions each) representing higher mean (2.6 to 2.3), middle mean (2.2 to 2.0), and lowest mean ratings (1.8 to 1.2) as indicated in Tables 1, 2, and 3, and Figures 1.1, 2.1, and 3.1 respectively.

Table 1

Music Therapy Survey-Section 1 Goals, Higher Mean Scores

Ranking Level of Goal Frequency	Goals Question/Statement	Original Survey Placement #	Mean Score
1	"Emotional Expression"	11	2.6
2	"Mood Affect"	3	2.5
3	"Self-esteem"	10	2.5
4	"Insight (about self and/or illness)"	16	2.4

5	Identifying, confronting and/or working through issues linked with episodes of mood disturbance"	18	2.4
6	"Identification and validation of emotions"	22	2.4
7	"Cognitive well-being and/or organization"	1	2.3
8	"Interpersonal Support"	12	2.3

Note. The underlying themes of the higher score grouping indicate goals featuring a focus on mood, affect, emotions, sense of self, and resources for coping with problematic aspects of each of these.

Figure 1.1 Music Therapy Survey: Section 1 Goals, Higher Mean Scores

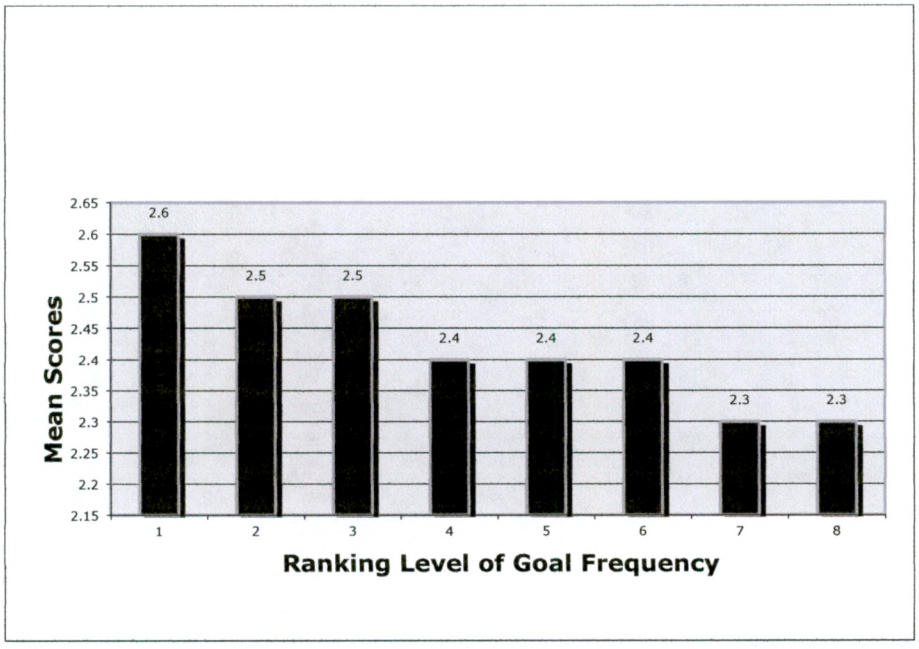

Figure 1.1 Bar graph showing high mean scores of goals. According to responses in section 1, these goals were considered the most important reason for utilizing compositional music therapy for patients with Bipolar Disorder.

Table 2

Music Therapy Survey-Section 1 Goals, Medium Mean Scores

Ranking Level of Goal Frequency	Goals Question/Statement	Original Survey Placement #	Mean Score
1	"Higher-order thinking skills"	2	2.2
2	"Control of emotions"	4	2.2
3	"Social functioning"	6	2.2
4	"Enjoyment (hedonic responses)"	15	2.2
5	"Interaction and communication skills"	23	2.2

6	"Active decision-making"	24	2.2
7	"Adaptability/flexibility/resilience in response to environment"	5	2.0
8	"Focus and overall attention skills"	19	2.0

Note. The underlying themes of the higher score grouping indicate goals featuring a focus on the client's quality of interaction with the world as well as her or his cognitive capacities in relation to being in the world in order to interact, manage, appreciate, and adapt to variations in the environment.

Figure 2.1 Music Therapy Survey: Section 1 Goals, Medium Mean Scores

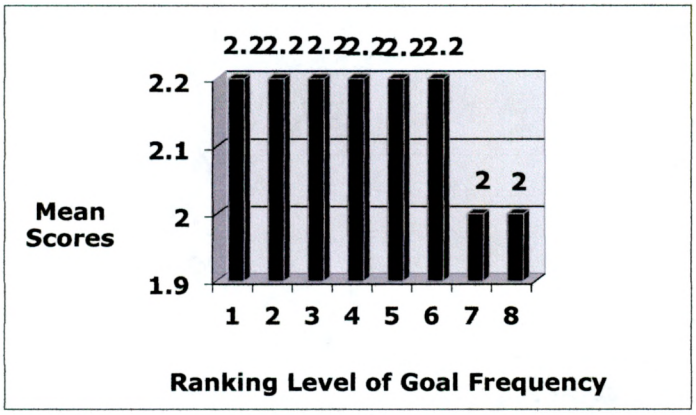

Figure 2.1. Bar graph showing medium mean scores of goals. Study participants indicated that these goals were considered a moderately important reason for utilizing compositional music therapy for patients with Bipolar Disorder.

Table 3

Music Therapy Survey-Section 1 Goals, Lower Mean Scores

Ranking Level of Goal Frequency	Goals Question/Statement	Original Survey Placement #	Mean Score
1	"Safety (self-harm, suicidality)"	7	1.8
2	"Capacity for reality-based judgment	9	1.8
3	"Non-verbal communication of clinically relevant information"	17	1.8
4	"Identification of possible triggers leading to episodes of mood disturbance"	20	1.8
5	"Control of Mood"	21	1.8
6	"Self-care (rest, hydration, nutrition, etc."	8	1.7
7	"Will (volition)"	14	1.7
8	"Mitigation of pressured speech"	13	1.2

Note. The underlying themes of the higher score grouping indicate goals featuring a focus

on the client's inner will and ability to communicate verbally as well as non-verbally while functioning and discovering more effective and safer ways of being in the world.

Figure 3.1 Music Therapy Survey: Section 1 Goals, Lower Mean Scores

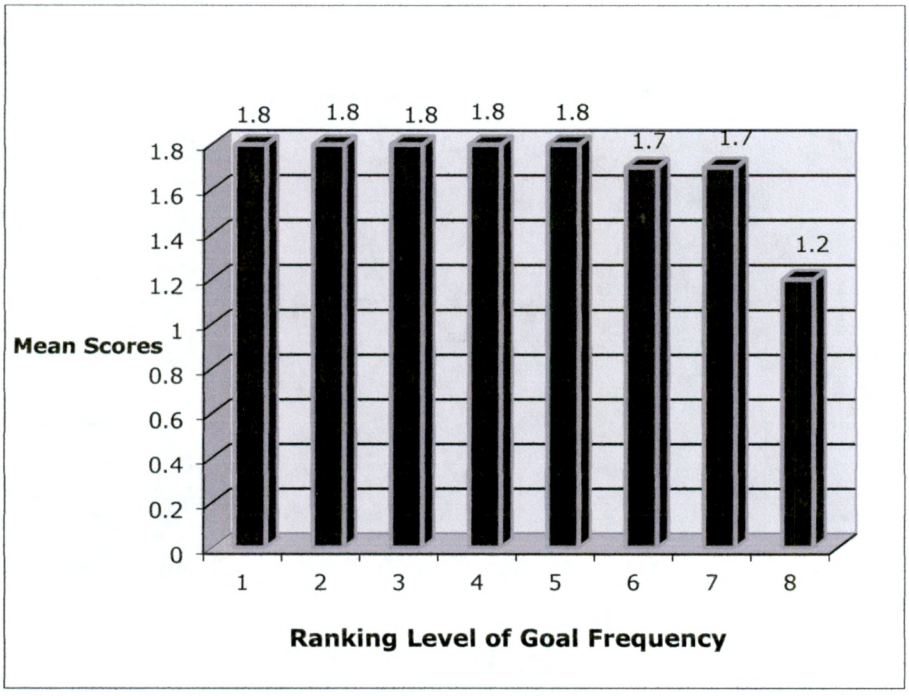

Figure 3.1. Bar graph showing lower mean scores of goals. Study participants indicated that these goals were relatively a non-important reason for utilizing compositional music therapy for patients with Bipolar Disorder.

Survey section 2: Process. In survey section 2, the means of the rating scale (0-4) responses relative to the clinical process ranged from 2.8 to 4.0. This range was divided into 2 sub-ranges consisting of roughly equal-sized groups (6 questions each) representing higher (4.0 to 3.1), and lower mean ratings (3.0 to 2.8) as indicated in Tables 4 and 5 and Figures 4.1 and 5.1, respectively.

Table 4

Music Therapy Survey-Section 2 Processes, Higher Mean Scores

Ranking Level of Goal Importance	Processes Question/Statement	Original Survey Placement #	Mean Score
1	"Involves active self-reflection and insight, through composing, and the guidance of the therapist"	25	4.0
2	"Provides a resource for coping, via the therapeutic relationship surrounding the act of composing"	26	3.4
3	"Represents and opportunity for the client to express emotions freely through composing music"	30	3.4
4	"Provides opportunities for the client to experience validation and empathy surrounding compositional work, within the therapeutic relationship"	28	3.3
5	"Provides a resource for coping, via the ideas emerging from the act of composing"	27	3.1
6	"Represents an opportunity for the client to find new ways of working and relating interpersonally (with the therapist or others through composition)"	31	3.1

Note. The underlying themes of the higher score grouping indicate processes featuring a focus on the act of composing music with the therapist's support, serves as a means for gaining the insight and self-knowledge necessary for utilizing musical and interpersonal resources for coping.

Figure 4.1 Music Therapy Survey: Section 2 Compositional Processes, Higher Mean Scores

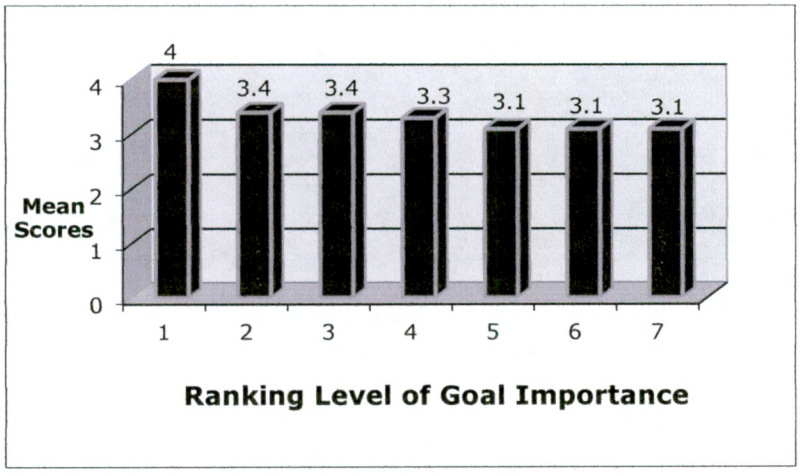

Figure 4.1 Bar graph showing higher mean scores of compositional processes. According to these responses in section 2, study participants indicated that this category of music compositional processes were very important reasons for utilizing compositional music therapy for patients with Bipolar Disorder.

Table 5

Music Therapy Survey-Section 2 Processes, Lower Mean Scores

Ranking Level of Goal Importance	Processes Question/Statement	Original Survey Placement #	Mean Score
1	"Challenges the client to utilize creative problem-solving skills that may assist them in working through emotional impasses, conflicts or other unresolved issues, and to do so at their own pace, outside of musical performance time"	32	3.0
2	"Promotes sense of self-organization through the act of configuring musical structures"	29	2.9
3	"Encourages the client to make valued-based decisions based upon priorities about what to keep and what to let go"	35	2.9
4	"Enables the client to acknowledge, consolidate, and integrate otherwise disconnected ideas, in meaningful ways"	36	2.9
5	"Allows the client to engage in the construction of an ideal musical structure, through artistic decision-making, at their own pace, outside of musical performance time"	33	2.8
6	"Allows the client to further examine their thought-processes around compositional decision-making, for greater self-insight"	34	2.8

Note. The underlying themes of the higher score grouping indicate processes featuring a focus on encouraging the client to construct, integrate, and later develop greater structural organization of ideas in meaningful ways to enable significant self-insight.

Figure 5.1 Music Therapy Survey: Section 2 Compositional Processes, Lower Mean Scores

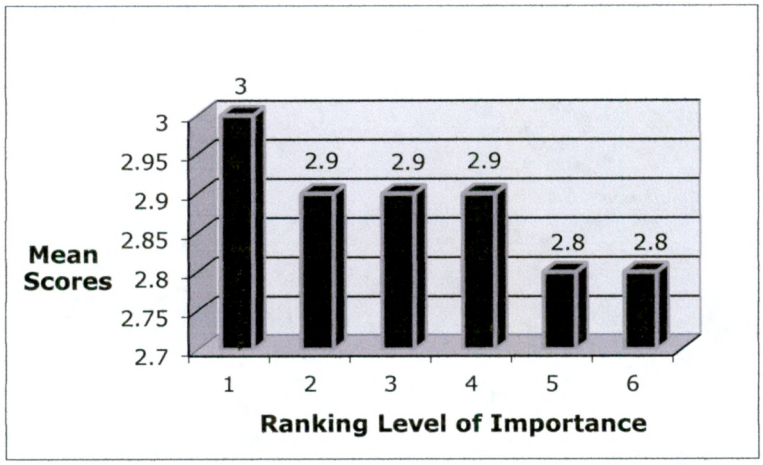

Figure 5.1. Bar graph showing higher mean scores of compositional processes. Study participants noted that this category of music compositional processes were moderately important reasons for utilizing compositional music therapy for patients with Bipolar Disorder.

Survey section 3: Product. In survey section 3, the means of the rating scale (0-4) responses relative to the clinical product ranged from 2.8 to 3.5. This range was divided it into 2 sub-ranges consisting of roughly equal-sized groups (8 questions each) representing higher (3.5 to 3.2), and lower mean ratings (3.0 to 2.8) as indicated in Tables 6 and 7, and Figures 6.1, and 7.1 respectively.

Table 6

Music Therapy Survey-Section 3 Products, Higher Mean Scores

Ranking Level of Goal Importance	Products Question/Statement	Original Survey Placement #	Mean Score
1	"Can engender a sense of personal empowerment and achievement for the client"	43	3.5
2	"Serves as a coping mechanism, as something of significance and personal value upon which the client can reflect, with which the client can identify, and which the client can take with her/him"	39	3.3
3	"Allows the client to utilize the music composition as a way of sharing	41	3.2

	something meaningful about themselves with others"		
4	"Serves as a witness to the client's journey in therapy"	40	3.2
5	"Serves as a source of comfort, security/safety via the composition's recognizable form, for the client"	42	3.2
6	"Can serve as a self-adaptive coping mechanism and/or emotional outlet, via the freedom to play (recreate) the music composition, at will (through a playback system, or through live music making, alone or with others)"	49	3.2
7	"Allows others in community (within or outside of the clinical setting) to hear, understand, and/or empathize with the client, by hearing the composition"	51	3.2
8	"Represents a reproduction or reflection of important aspects of the client's self and life, to which they themselves can relate, as well as others, potentially"	52	3.2

Note. The underlying themes of the higher score grouping indicate products featuring a focus as a permanent portable artifact, serving as a qualitative source of comfort, security and empowerment in a way in which others can experience, live, and empathize with the client's point of view of their world and story within or outside the clinical setting.

Figure 6.1 Music Therapy Survey: Section 3 Compositional Products, Higher Mean Scores

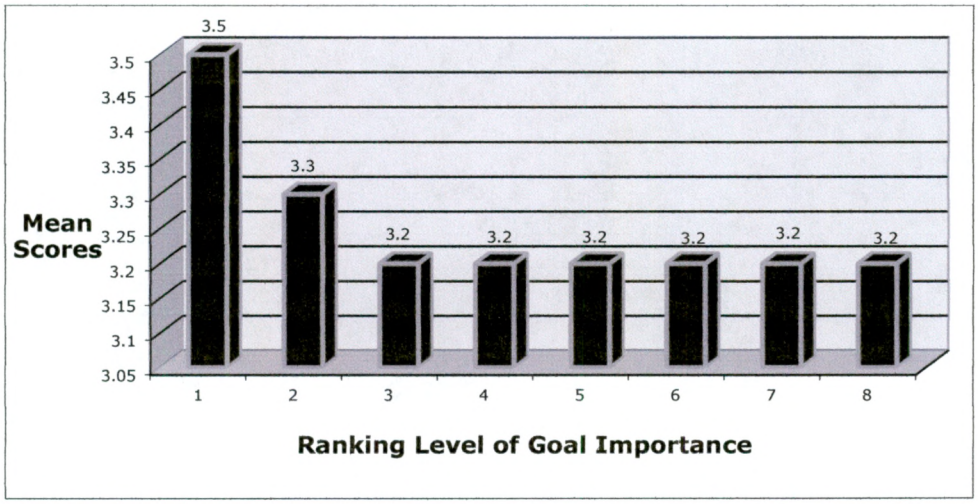

Figure 6.1. Bar graph showing higher mean scores of compositional products. According to these responses in section 3, study participants indicated that this category of music compositional products were very important reasons for utilizing compositional music therapy for patients with Bipolar Disorder.

Table 7

Music Therapy Survey-Section 3 Products, Lower Mean Scores

Ranking Level of Goal Importance	Products Question/Statement	Original Survey Placement #	Mean Score
1	"Can help to organize client's thought processing when listening back to the composition, with the therapist"	38	3.0
2	"Provides opportunities for applying metaphorical representations surrounding the client's music, in ways that embodies illness, all as part of gaining greater mood stability"	45	3.0
3	"Can help guide the client's future, independent work, via the model of the music composition as a self-adaptive coping mechanism"	48	3.0
4	"Serves as a self-transitional object relative to the therapeutic process and relationship"	50	3.0
5	"Serves as a predictable structure during periods of distress or instability"	37	2.8
6	"Can serve as a record of the client's mood state at the time of composing and recording the piece"	44	2.8
7	"Can serve as a record for self-assessment about the client's state of being at a given point in time along her/his overall trajectory of human development"	46	2.8
8	"May be arranged in certain forms (rhythmically, tonally, etc.) that enables the client to process and respond to information"	47	2.8

Note. The underlying themes of the higher score grouping indicate products featuring a focus on allowing the client to take the therapy to go as an artifact so that her or him can function behaviorally better. As an artifact, the music composition also embodies the therapeutic relationship and process for the purpose of coping and functioning more effectively. The composition is an informational record that allows the client to self-assess about their mood and state of being at a given point in time.

Figure 7.1 Section 3 Compositional Products, Lower Mean Scores

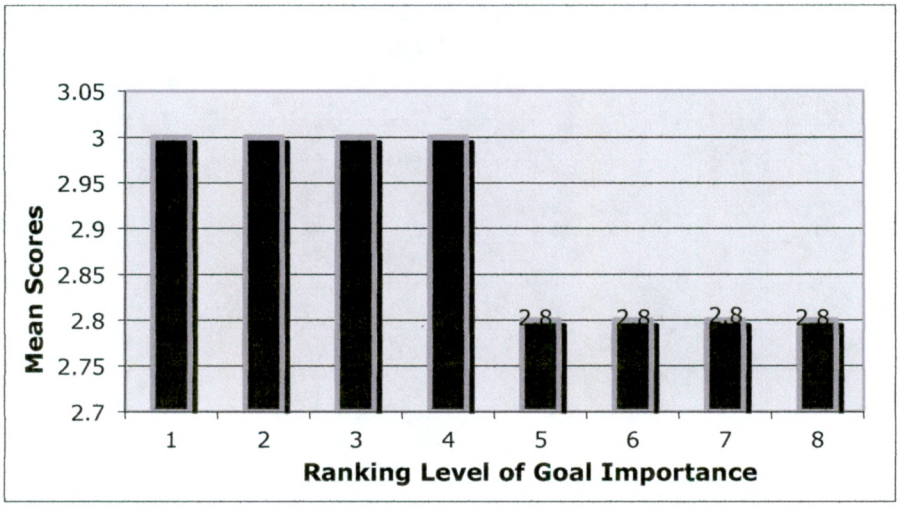

Figure 7.1. Bar graph showing lower mean scores of compositional products. Study participants indicated that this category of music compositional products were moderately important reasons for utilizing compositional music therapy for patients with Bipolar Disorder.

Results of Analysis, Stage 2: Groupings According to Surface Semantics Similarities

Each of the survey sections below (Survey section 1 clinical goals, Survey section 2 process, Survey section 3 products) have been grouped according to the findings from participant responses in ranking each question/statement as this relates to their surface semantic similarities or contextual meaning. Within each table, the results for each category (such as in Table 8, *"Social Integrity Including Interaction")* are grouped in chronological order from the largest semantic mean scores to the smallest while displaying the in-between ranges of which each category falls as well as the range size.

Survey section 1: Clinical goals. In survey section 1, clinical goals, 5 categories of semantic surface features were derived. For the content and means ranged, refer to Tables 8, 9, 10, 11, and 12, and Figures 8.1, 9.1, 10.1, 11.1, and 12.1 respectively.

Table 8

Music Therapy Survey-Section 1 Semantically Grouped Goals, Semantic Sub-Group (Below) Entitled: "Social Integrity including Interaction"

Ranking Level of Goal Frequency	Goals	Original Survey Placement #	Means Score
1	"Interpersonal Support"	12	2.3
2	"Interaction and communication skills"	23	2.2
3	"Social functioning"	6	2.2
4	"Non-verbal communication of clinically relevant information"	17	1.8
5	"Mitigation of pressured speech"	13	1.2

Note. The range of the means is 2.3 to 1.2, a range size of 1.1

Figure 8.1 Music Therapy Survey: Section 1 Goals, Social Integrity including Interaction

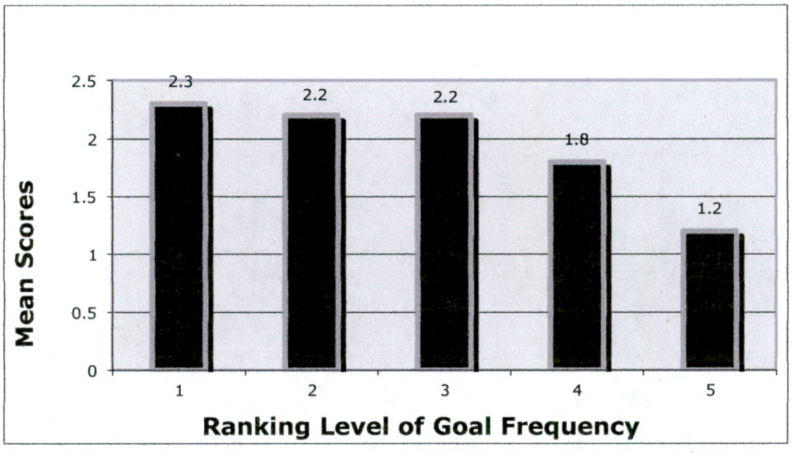

Figure 8.1. Bar graph showing *Social Integrity including Interaction* goals. Study participants indicated that these goals are meaningful in terms of their content but very weak and tremendously less meaningful in terms of their use for Bipolar Disorder.

Table 9

Music Therapy Survey-Section 1 Goals, Semantic Sub-Group (Below) Entitled: "Goals with Semantic Features Concerning Affective Integrity including Mood, Emotions, Expression, Control, Identification, and Validation of these"

Ranking Level of Goal Frequency	Goals	Original Survey Placement #	Means Score
1	"Emotional Expressions"	11	2.6
2	"(State of) Mood/Affect"	3	2.5
3	"Identification and validation of emotions"	22	2.4
4	"Control of emotions"	4	2.2
5	"Control of Mood"	21	1.8

Note. The range of the means is 2.6 to 1.8, a range size of 0.8.

Figure 9.1 Music Therapy Survey: Section 1 Goals with Semantic Features Concerning Affective Integrity including Mood, Emotions, Expression, Control, Identification, and Validation of these

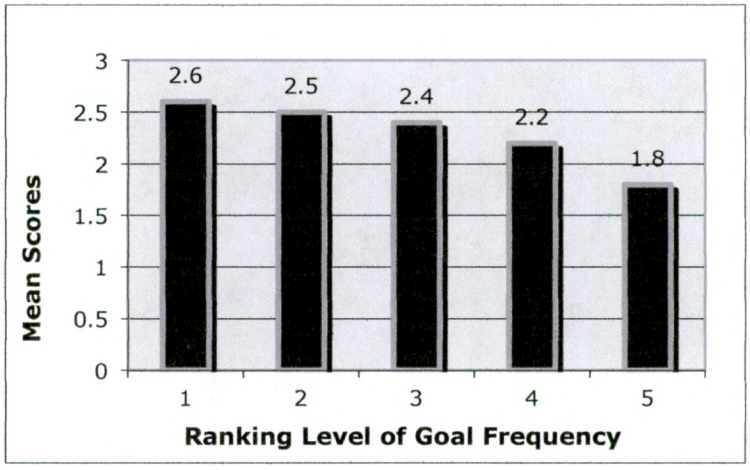

Figure 9.1. Bar graph showing goals of *Semantic Features Concerning Affective Integrity including Mood, Emotions, Expression, Control, Identification, and Validation of these.* Study participants indicated that these goals are meaningful in terms of their content but are weaker or less meaningful in terms of their use for Bipolar Disorder.

Table 10

Music Therapy Survey-Section 1 Semantically Grouped Goals, Semantic Sub-Group (Below) Entitled: "Experiential Integrity including Investment in Life, Sense of Self and Personal Experience"

Ranking Level of Goal Frequency	Goals	Original Survey Placement #	Mean Scores
1	"Self-esteem"	10	2.5
2	"Enjoyment (hedonic responses)"	15	2.2
3	"Will (volition)"	14	1.7

Note. The range of the means is 2.5 to 1.7, a range size of 0.8.

Figure 10.1 Music Therapy Survey Section 1 Goals of Experiential Integrity including Investment in Life, Sense of Self and Personal Experience

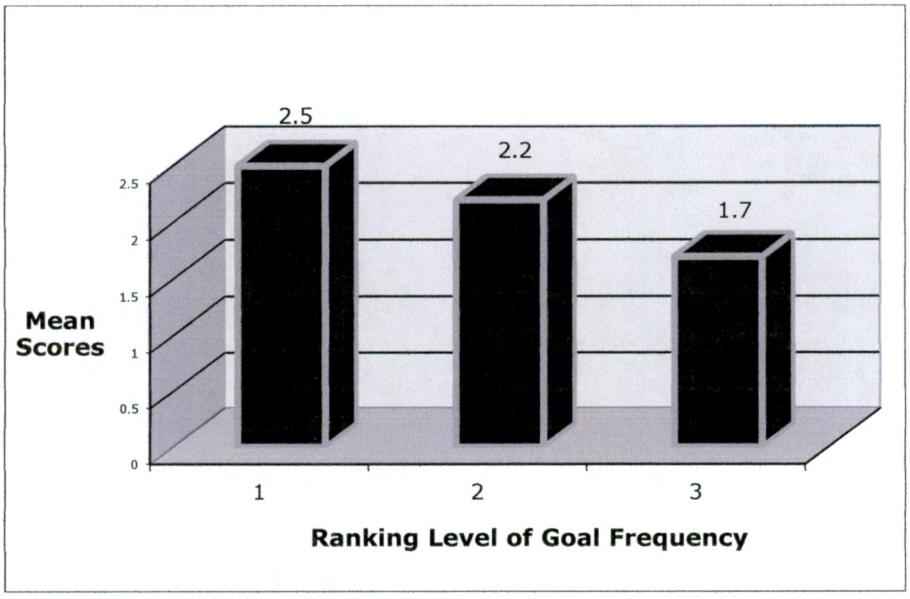

Figure 10.1. Bar graph showing goals of *Experiential Integrity including Investment in Life, Sense of Self and Personal Experience.* Study participants indicated that these goals are meaningful in terms of their content, weaker or less meaningful in terms of their use for Bipolar Disorder.

Table 11

Music Therapy Survey-Section 1 Semantically Grouped Goals, Semantic Sub-Group (Below) Entitled: "Cognitive Integrity including Executive Functioning and Insight"

Ranking Level of Goal Frequency	Goals	Original Survey Placement #	Mean Score
1	"Identifying, confronting and/or working through issues linked with episodes of mood disturbance"	18	2.4
2	"Insight (about self and/or illness)"	16	2.4
3	"Cognitive well-being and/or organization"	1	2.3
4	"Active decision-making"	24	2.2
5	"Higher-order thinking skills"	2	2.2
6	"Focus and overall attention skills	19	2.0
7	"Identification of possible triggers leading to episodes of mood disturbance"	20	1.8

Note. The range of the means is 2.4 to 1.8, a range size of 0.6.

Figure 11.1 Music Therapy Survey: Section 1 Goals of Cognitive Integrity including Executive Functioning and Insight

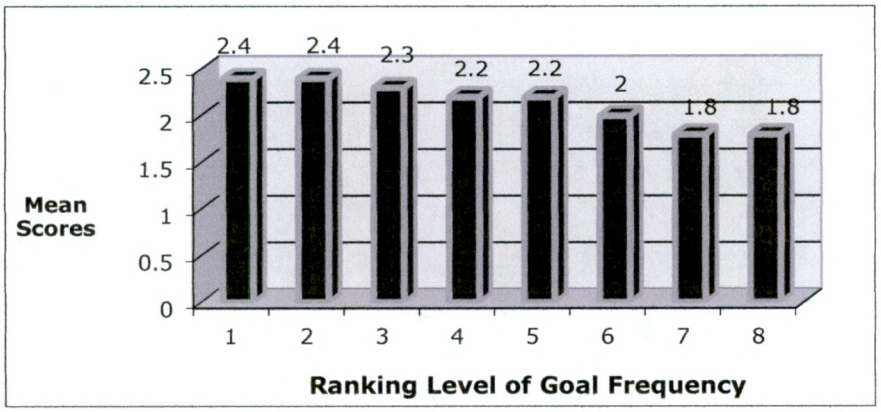

Figure 11.1. Bar graph showing goals of *Cognitive Integrity including Executive Functioning and Insight.* Study participants indicated that these **goals** are meaningful in terms of their content, weak or less meaningful in terms of their use for Bipolar Disorder.

Table 12

Music Therapy Survey-Section 1 Semantically Grouped Goals Semantic Sub-Group (Below) Entitled: "Environmental Integrity"

Ranking Level of Goal Frequency	Goals	Original Survey Placement #	Mean Score
1	"Adaptability/flexibility/resilience in response to environment"	5	2.0
2	"Capacity for reality-based judgment"	1	1.8
3	"Safety (self-harm, suicidality)"	7	1.8
4	"Self-care (rest, hydration, nutrition, etc.)"	8	1.7

Note. The range of the means is 2.0 to 1.7, a range size of 0.3

Figure 12.1 Music Therapy Survey: Section 1 Goals of Environmental Integrity

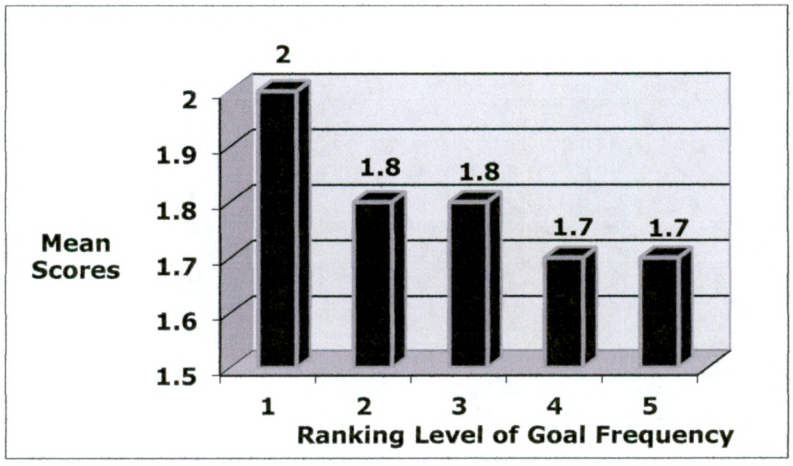

Figure 12.1. Bar graph showing goals of *Environmental Integrity.* Study participants indicted that these **goals** are very meaningful in terms of their content but not meaningful in terms of its use for Bipolar Disorder.

Survey section 2: Process. In survey section 2, 4 categories of semantic surface features were derived. For the content and means ranged, refer to Tables 13, 14, 15, and 16, and Figures 13.1, 14.1, 15.1, and 16.1 respectively.

Table 13

Music Therapy Survey-Section 2 Semantically Grouped Processes, Semantic Sub-Group (Below) Entitled: "The Experience of Self-Exploration and Insight"

Ranking Level of Goal Importance	Compositional Processes	Original Survey Placement #	Means Score
1	"Involves active self-reflection and insight, through composing, and guidance of the therapist"	25	4.0
2	"Allows the client to further examine their thought-processes around compositional decision-making, for greater self-insight"	34	2.8

Note. The range of the means is 4.0 to 2.8, a range size of 1.2.

Figure 13.1 Music Therapy Survey: Section 2 Compositional Processes of the Experience of Self-Exploration and Insight

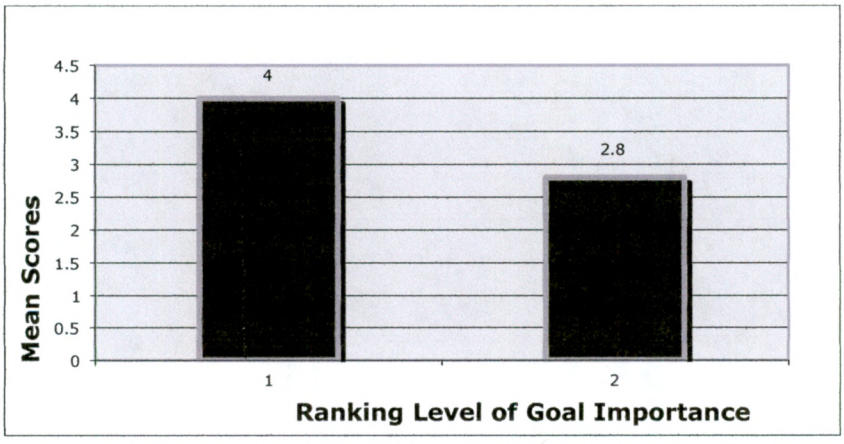

Figure 13.1. Bar graph showing music compositional processes of *The Experience of Self-Exploration and Insight.* Study participants indicated that this category of music compositional processes is very meaningful in terms of its content but is weaker or less meaningful in terms of its use for patients with Bipolar Disorder.

Table 14

Music Therapy Survey-Section 2 Semantically Grouped Processes, Semantic Sub-Group (Below) Entitled: "The Experience of Managing Emotional and Pragmatic Challenges"

Ranking Level of Goal Importance	Compositional Processes	Original Survey Placement #	Means Score
1	"Represents an opportunity for the client to express emotions freely through composing	30	3.4

	music"		
2	"Provides a resource for coping, via the therapeutic relationship surrounding the act of composing"	26	3.4
3	"Provides a resource for coping, via the ideas emerging from the act of composing"	27	3.1
4	"Challenges the client to utilize creative problem-solving skills that may assist them in working through emotional impasses, conflicts or other unresolved issues, and to do so at their own pace, outside of musical performance time"	32	3.0

Note. The range of the means is 3.4 to 3.0, a range size of 0.4.

Figure 14.1 Music Therapy Survey: Section 2 Compositional Processes of the Experience of Managing Emotional and Pragmatic Challenges

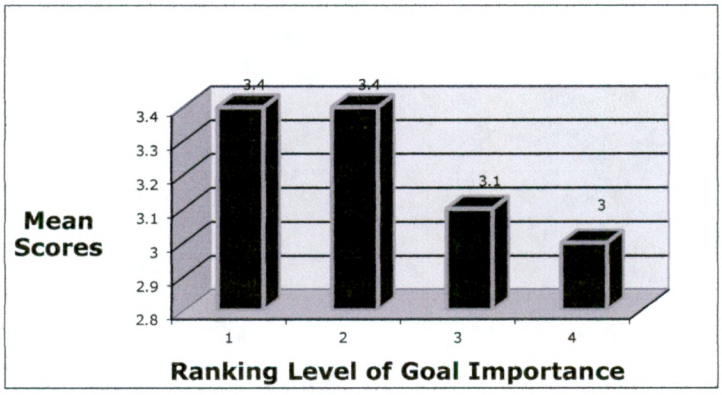

Figure 14.1. Bar graph showing music compositional processes of *The Experience of Managing Emotional and Pragmatic Challenges.* Study participants indicated that this category of music compositional processes is very meaningful in terms of its content and strong and very meaningful in terms of its use for patients with Bipolar Disorder.

Table 15

Music Therapy Survey-Section 2 Semantically Grouped Processes, Semantic Sub-Group (Below) Entitled: "The Experience of an Emotionally Supportive Interpersonal Space"

Ranking Level of Goal Importance	Compositional Processes	Original Survey Placement #	Means Score
1	"Represents and opportunity for the client to express emotions freely through composing music"	30	3.4
2	"Provides opportunities for the client to experience validation and empathy	28	3.3

	surrounding compositional work, within the therapeutic relationship"		
3	"Represents an opportunity for the client to find new ways of working and relating interpersonally (with the therapist or others through composition)"	31	3.1

Note. The range of the means is 3.4 to 3.1, a range size of 0.3.

Figure 15.1 Music Therapy Survey: Section 2 Compositional Processes of the Experience of an Emotionally Supportive Interpersonal Space

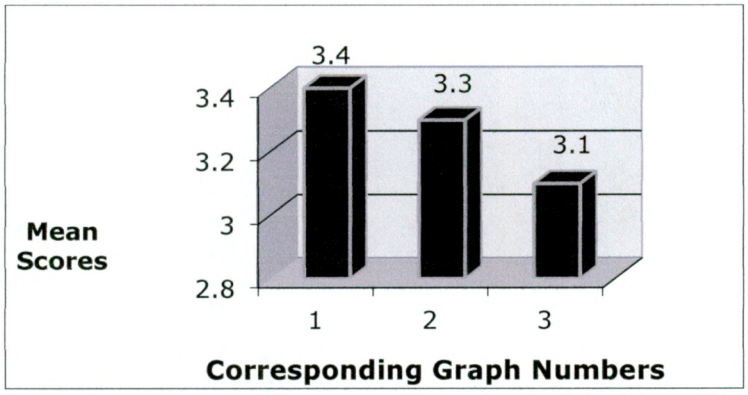

Figure 15.1. Bar graph showing music compositional processes of the *Experience of an Emotionally Supportive Interpersonal Space.* Study participants indicated that this category of music compositional processes is very meaningful in terms of its content and strongly very meaningful in terms of its use for patients with Bipolar Disorder.

Table 16

Music Therapy Survey-Section 2 Semantically Grouped Processes, Semantic Sub-Group (Below) Entitled: "The Experience of Organization and Structure Development"

Ranking Level of Goal Importance	Compositional Processes	Original Survey Placement #	Means Score
1	"Enables the client to acknowledge, consolidate, and integrate otherwise disconnected ideas in meaningful ways"	36	2.9
2	"Encourages the client to make valued-based decisions based upon priorities about what to keep and what to let go"	35	2.9
3	"Promotes sense of self-organization through the act of	29	2.9

	configuring musical structures"		
4	"Allows the client to further examine their thought-processes around compositional decision-making, for greater self-insight"	34	2.8
5	"Allows the client to engage in the construction of an ideal musical structure, through artistic decision-making, at their own pace, outside of musical performance time"	33	2.8

Note. The range of the means is 2.9 to 2.8, a range size of 0.1.

Figure 16.1 Music Therapy Survey: Section 2 Compositional Processes of the Experience of Organization and Structure Development

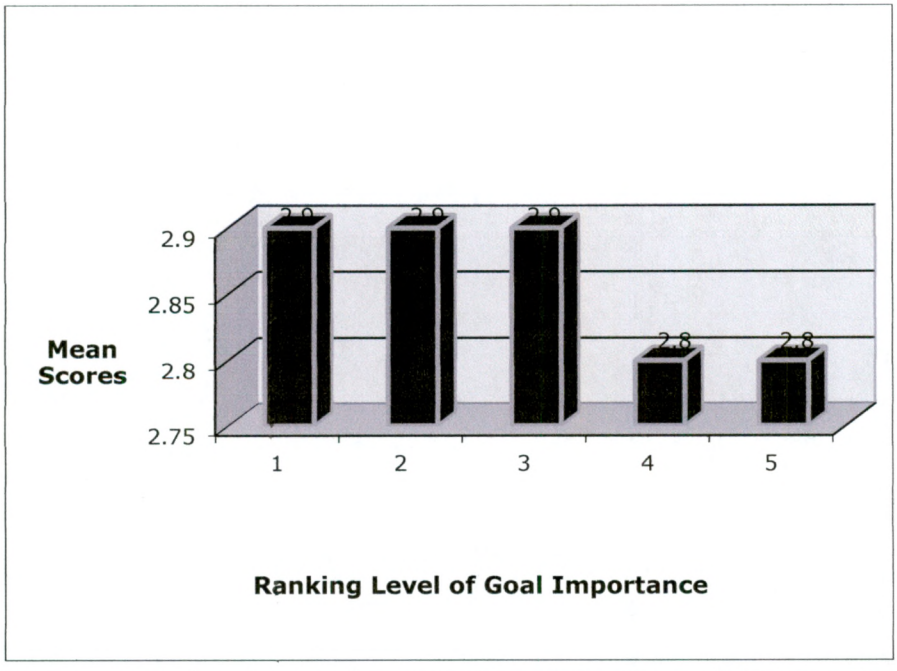

Figure 16.1. Bar graph showing music compositional processes of the *Experience of Organization and Structure Development*. Study participants indicated that this category of music compositional processes is very meaningful in terms of its content and is somewhat strong and meaningful to the participants in terms of its use for patients with Bipolar Disorder.

Survey section 3: Product. In survey section 3, 5 categories of semantic surface features were derived. For the content and means ranged, refer to Tables 17, 18, 19, 20, and 21 and Figures 17.1, 18.1, 19.1, 20.1, and 21.1 respectively.

Table 17

Music Therapy Survey-Section 3 Semantically Grouped Products, Semantic Sub-Group (Below) Entitled: "The Production of Musical Resources for Well-Being"

Ranking Level of Goal Importance	Compositional Products	Original Survey Placement #	Mean Scores:
1	"Can engender a sense of personal empowerment and achievement for the client"	43	3.5
2	"Serves as a coping mechanism, as something of significance and personal value upon which the client can reflect, with which the client can identify, and which the client can take with her/him"	39	3.3
3	"Can serve as a self-adaptive coping mechanism and/or emotional outlet, via the freedom to play (recreate) the music composition, at will (through a playback system, or through live music making, alone or with others)"	49	3.2
4	"Serves as a source of comfort, security/safety via the composition's recognizable form, for the client"	42	3.2
5	"Can help guide the client's future, independent work, via the model of the music composition as a self-adaptive coping mechanism"	48	3.0

Note. The range of the means is 3.5 to 3.0, a range size of 0.5

Figure 17.1 Music Therapy Survey: Section 3 Compositional Products of the Production of Musical Resources for Well-Being

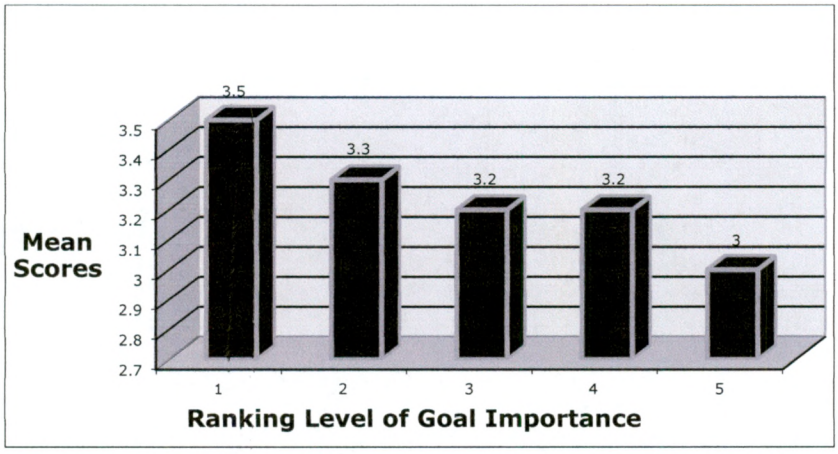

Figure 17.1. Bar graph showing music compositional products of the *Production of Musical Resources for Well-Being.* Study participants indicated that this category of music compositional products is meaningful in terms of its content and moderately strong and meaningful in terms of its use for patients with Bipolar Disorder.

Table 18

Music Therapy Survey-Section 3 Semantically Grouped Products, Semantic Sub-Group (Below) Entitled: "The Production of Music as a Record/Witness to the Client's Experience of the Illness and the Music Therapy"

Ranking Level of Goal Importance	Compositional Products	Original Survey Placement #	Mean Scores
1	"Serves as a witness to the client's journey in therapy"	40	3.2
2	"Serves as a self-transitional object relative to the therapeutic process and relationship"	50	3.0
3	"Can serve as a record of the client's mood state at the time of composing and recording the piece"	44	2.8
4	" Can serve as a record for self-assessment about the client's state of being at a given point in time along her/his overall trajectory of human development"	46	2.8

Note. The range of the means is 3.2 to 2.8, a range size of 0.4

Figure 18.1 Music Therapy Survey: Section 3 Compositional Products of the Production of Music as a Record/Witness to the Client's Experience of the Illness and the Music Therapy

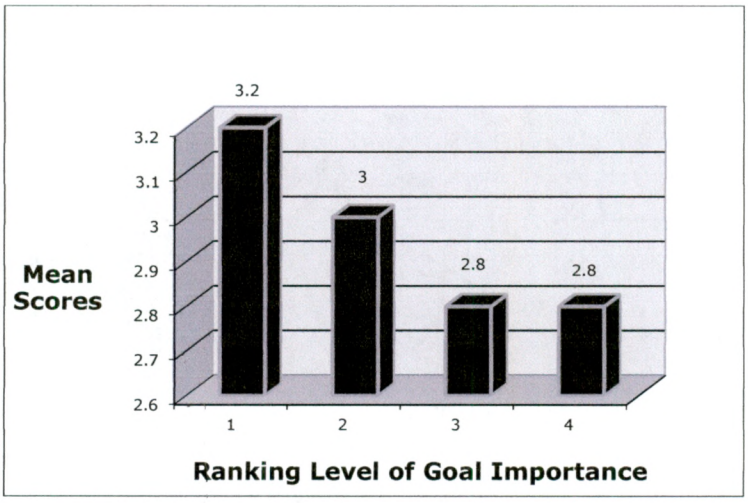

Figure 18.1. Bar graph showing music compositional products of *The Production of Music as a Record/Witness to the Client's Experience of the Illness and the Music Therapy.* Study participants indicated that this category of music compositional products is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder.

Table 19

Music Therapy Survey-Section 3 Semantically Grouped Products, Semantic Sub-Group (Below) Entitled: "The Production of Musical Products for Informational Processing"

Ranking Level of Goal Importance	Compositional Products	Original Survey Placement #	Mean Scores
1	"Can help to organize client's thought processing when listening back to the composition, with the therapist"	38	3.0
2	"May be arranged in certain forms (rhythmically, tonally, etc.) that enable the client to process and respond to information"	47	2.8

Note. The range of the means is 3.0 to 2.8, a range size of 0.2.

Figure 19.1 Music Therapy Survey Section 3 Compositional Products of the Production of Musical Products for Informational Processing

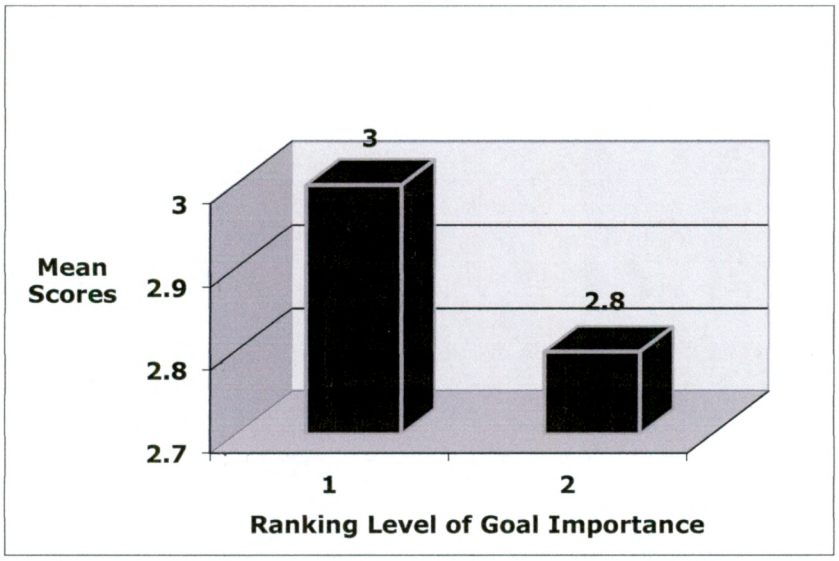

Figure 19.1. Bar graph showing music compositional products of *The Production of Musical Products for Informational Processing.* Study participants indicated that this category of music compositional products is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder.

Table 20

Music Therapy Survey-Section 3 Semantically Grouped Products, Semantic Sub-Group (Below) Entitled: "The Production of Musical Product as a Resource for Emotional Stability"

Ranking Level of Goal Importance	Compositional Products	Original Survey Placement #	Mean Scores
1	"Provides opportunities for applying metaphorical representations surrounding the client's music, in ways that embodies illness, all as part of gaining greater mood stability"	45	3.0
2	"Serves as a predictable structure during periods of distress or instability"	37	2.8

Note. The range of the means is 3.0 to 2.8, a range size of 0.2.

Figure 20.1 Music Therapy Survey: Section 3 Compositional Products of the Production of Musical Product as a Resource for Emotional Stability

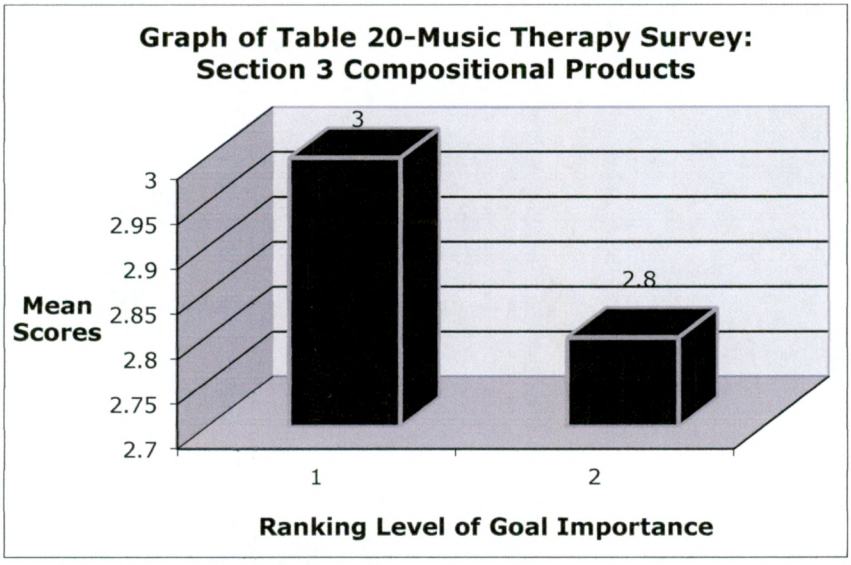

Figure 20.1. Bar graph showing music compositional products of *The Production of Musical Product as a Resource for Emotional Stability.* Study participants indicated that this category of music compositional products is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder.

Table 21

Music Therapy Survey-Section 3 Semantically Grouped Products, Semantic Sub-Group (Below) Entitled: "The Production of Musical Representations of Self and Life Experience"

Ranking Level of Goal Importance	Compositional Products	Original Survey Placement #	Mean Scores
1	"Allows the client to utilize the music composition as a way of sharing something meaningful about themselves with others"	41	3.2
2	"Represents a reproduction or reflection of important aspects of the client's self and life, to which they themselves can relate, as well as others, potentially"	52	3.2
3	"Allows others in community (within or outside of the clinical setting) to hear, understand, and/or empathize with the client, by hearing the composition"	51	3.2

Note. The range of the means is stationary at 3.2, a range size of zero.

Figure 21.1 Music Therapy Survey: Section 3 Compositional Products of the Production of Musical Representations of Self and Life Experience

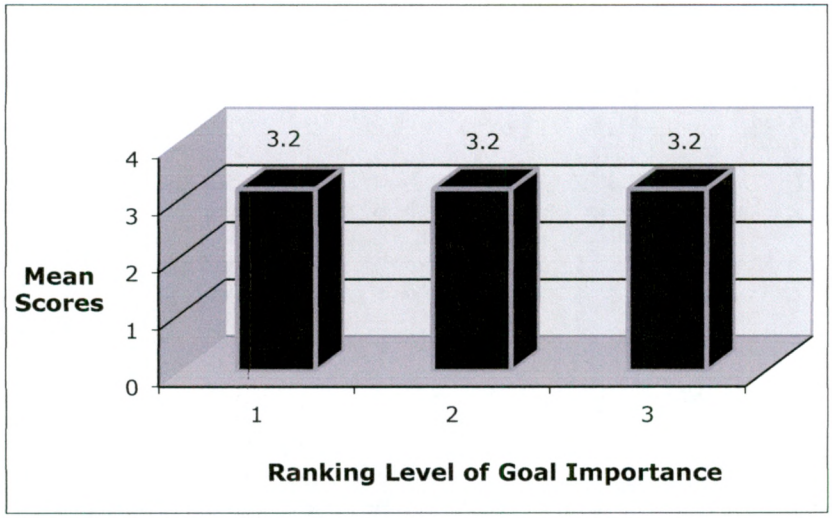

Figure 21.1. Bar graph showing music compositional products of *the Production of Musical Representations of Self and Life Experience.* Study participants indicated that this category of music compositional products is very important, and meaningful in terms of its content and use for patients with Bipolar Disorder.

Table 22

Summary of Consolidated Findings Analysis, Stage# 1

Means	Section 1 (Goals)	Section 2 (Process)	Section 3 (Outcomes)
(Relative)	Mood, affect, emotions, sense of self, and resources for coping with problematic aspects of each of these (2.3-2.6)	Act of composing music with the therapist's support, serves as a means for gaining the insight and self-knowledge necessary for utilizing musical and interpersonal resources for coping (3.1-4.0)	Permanent portable artifact, serving as a qualitative source of comfort, security, and empowerment in a way in which others can experience, live and empathize with the client's point of vie of their world and story within or outside the clinical setting (3.2-3.5)
(Relative)	Client's quality of interaction with the world as well as her or his cognitive capacities in relation to being in the world in order to interact, manage, appreciate, and adapt to variations in environment (2.0-2.2)		
(Relative)	Client's inner will and ability to communicate verbally as well as non-verbally while functioning and discovering more effective and safer ways of being in the world (1.2-1.8)	Encouraging the client to construct, integrate, and later develop greater structural organization of ideas in meaningful ways to enable significant self-insight (2.8-3.0)	Allowing the client to take the therapy to go as an artifact so that he or she can function behaviorally better. As an artifact, the music composition embodies the therapeutic relationship and process for the purpose of coping and functioning more effectively. The composition is an informational record that allows the client to self-assess about their mood and state of being at a given point in time (2.8-3.0)

Note. Table 22 demonstrates a summary of the findings from the music therapy survey according to participant responses as they ranked the clinical goals, compositional process, and compositional product or outcomes. The table displays the varying mean scores in categories from higher, medium, to lower means. Blank spaces indicate that the mean scores did not fall into that specific category). Consolidated Findings, Analysis Stage #1 is based on emergent themes from within each section of the survey and within relative ranges of the mean scores.

Table 23

Summary of Consolidated Findings Analysis, Stage# 2

Section 1 (Goals)	Section 2 (Processes)	Section 3 (Outcomes)
Social Integrity including interaction (1.2-2.3), a range size of 1.1	The Experience of Self-Exploration and Insight (2.8-4.0), a range size of 1.2	The Production of Musical Resources for Well-being (3.0-3.5), a range size of 0.5
Affective Integrity including mood, emotions, expression, control, identification, and validation of these (1.8-2.6), a range of 0.8	The Experience of Managing Emotional and Pragmatic Challenges (3.0-3.4), a range size of 0.4	The Production of Music as a Record/Witness to the Client's Experience of the Illness and the Music Therapy (2.8-3.2), a range size of 0.4
Experiential Integrity including investment in life, sense of self, and personal experience (1.7-2.5), a range size of 0.8	The Experience of an Emotionally Supportive Interpersonal Space (3.1-3.4), a range size of 0.3	The Production of Musical Products for Informational Processing (2.8-3.0), a range size of 0.2
Cognitive Integrity including executive functioning and insight (1.-2.4), a range size of 0.6	The Experience of Organization and Structure Development (2.8-2.9), a range size of 0.1	The Production of Musical Product as a Resource for Emotional Stability (2.8-3.0), a range size of 0.2
Environmental Integrity (1.7-2.0), a range size of 0.3		The Production of Musical Representations of Self and Life Experiences (3.2), a range size of zero.

Note. Table 23 demonstrates a summary of the findings from the music therapy survey according to participant responses based on how they ranked the clinical goals, compositional process, and compositional product or outcomes. The table displays the varying relative ranges of semantic mean scores in categories according to their range size from highest, to lowest range size). Consolidated Findings, Analysis Stage #2 is based on emergent themes from within each section of the survey and within the relative ranges of the semantic mean scores.

Discussion

The purpose of this thesis was to gain insight and knowledge about the applications and benefits of Compositional Music Therapy for persons with Bipolar Disorder. The subordinate questions were:

1. What are the basis and/or rationales for selecting composition as a method to address client goals for adult patients diagnosed with Bipolar Disorder (**Rationale for Music Compositional Goals**)?

2. How is the compositional music therapy *process* useful and/or helpful in addressing clinical goals of clients diagnosed with bipolar disorder (**Benefits of Music Compositional Process**)?
3. How is the compositional music therapy *product* useful and/or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder (**Benefits of Music Compositional Product**)?

Rationale For Goals of Compositional Music Therapy

Interpretation of results from analysis stage 1. According to responses in section 1, goals featuring a focus on mood, affect, emotions, sense of self, and resources for coping with problematic aspects of each of these were considered the most important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Although these goals do not appear in the music therapy literature specifically around music composition, the literature on Resource-Oriented Music Therapy (ROMT) generally supports the role of music in helping people with Bipolar Disorder cope with issues of mood, affect, emotions, and sense of self, by expressing emotions and developing interests, motivation, and sustained relationships with others (Gold, et, al., 2005). This may support the significance attributed to this goal area by study participants.

Study participants indicated that goals featuring a focus on the client's quality of interaction with the world as well as her or his cognitive capacities in relation to being in the world in order to interact, manage, appreciate, and adapt to variations in the environment, was considered a moderately important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Even though these goals have not been

identified in the music therapy literature under the realm of music composition, the literature supports the role of music and creativity as both important sources for coping. The role of music and creativity also serve as guiding principles that help promote and increase the level of adaptation, interaction with the environment and psychological health in patients with Bipolar Disorder (DiGiacomo, 2007). Such findings in the literature in turn roughly align with the participants' responses in relation to these goals.

Study participants indicated that the goals featuring a focus on the client's inner will and ability to communicate verbally as well as non-verbally while functioning and discovering more effective and safer ways of being in the world, was relatively a non-important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Although these goals have not been indicated anywhere in the literature for music composition, related findings identified these goals as representations of sub-syndromal symptoms that result from the depression phase of Bipolar Disorder, which can be mitigated by the skillful use of music by a music therapist (Njoora, 2007), and medication (National Collaborating Centre for Mental Health, 2006). Opportunities allotted by music during music therapy include the development of improved socialization, and reflection (Njoora, 2007). Sub-syndromal symptoms such as the development of speech problems over time was alleviated by the patient being switched to a mood stabilizer such as Lamatrogine, which helped in improving the mood and speech of the patient (National Collaborating Centre for Mental Health, 2006).

Interpretation of results from analysis stage 2. Study participants indicated that goals concerning *Social Integrity,* including Interaction are meaningful in terms of their content but very weak and tremendously less meaningful in terms of their use for Bipolar

Disorder. However, these goals were not identified anywhere in the literature for music composition. Related findings indicated that they represented creative approaches utilized by music therapists that serve both as important sources for coping (especially through music), and as guiding principles to help promote and increase the level of adaptation, interaction with the environment, and psychological health (DiGiacomo, 2007). These related findings in the literature partially contradict the participants' responses because they have been found to be some of the most vital sources for coping in patients with Bipolar Disorder (DiGiacomo, 2007).

Study participants indicated that goals concerning *Affective Integrity* including Mood, Emotions, Expression, Control, Identification, and Validation of these**,** are meaningful in terms of its content but are weaker or less meaningful in terms of their use for Bipolar Disorder. Even though these goals were not identified in the literature for music composition, some contradiction to the participants' responses exists. These goals have been identified as very beneficial and often applied in a variety of music therapy approaches and interventions (which also includes helping to enable these patients to develop and encourage motivation, emotional expression, and relatedness) (Mossler, et, al., 2012).

Study participants indicated that goals concerning *Experiential Integrity,* including Investment in Life, Sense of Self and Personal Experience are meaningful in terms of their content but weaker or less meaningful in terms of their use for Bipolar Disorder. These goals were not identified for music composition anywhere in the literature. However, related findings partially contradict the participants' responses because these goals were identified as a crucial part of Aesthetic Music Therapy (AeMT) (Lee 2003) in

terms of the creative process, and further as representations of the therapist's search for music while clinically, artistically, and internally reflecting that of their clients search (Aigen, 2005). These goals assisted the client in discovering their own place both in the world and in the musical interchange during music therapy (Lee, 2003).

Study participants indicated that goals concerning *Cognitive Integrity* including Executive Functioning and Insight are meaningful in terms of their content, but weak or less meaningful in terms of their use for Bipolar Disorder. Even though these goals were not identified anywhere in the literature under music composition, related goals such as *Higher-Order Thinking* skills are supported in the literature according to the beneficial role they play in a variety of music therapy interventions (Njoora, 2005). Since these goals are often applied in music therapy interventions as beneficial by music therapists according to the literature, such finding partially contradicts participants' responses.

Study participants indicted that goals concerning *Environmental Integrity* are very meaningful in terms of their content but not meaningful in terms of its use for Bipolar Disorder. Even though these goals were not identified under music composition in the literature, related findings noted these goals as very important in relation to pharmacological maintenance and continuous psychotherapy in avoiding or reducing the likelihood of breakthrough of episodes in these patients (Miklowitz, 2008). Self-care and safety represent the vital basis of care for patients with Bipolar Disorder, which involves adherence to a drug regiment as well as continuous psychotherapy (Miklowitz, 2008). Since these goals are readily built-in as part of a vital basis of treatment for patients with Bipolar Disorder partially contradicts the participants' responses.

Benefits of the Music Compositional Music Therapy Process

Interpretation of results from analysis stage 1. According to responses in section 2, study participants indicated that the category of music compositional processes featuring a focus on the act of composing music with the therapist's support, serves as a means for gaining the insight and self-knowledge necessary for utilizing musical and interpersonal resources for coping was a very important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Even though this category was not identified in the literature under music composition, related findings indicated that these processes served as a coping mechanism utilized by composer Ludwig Van Beethoven (1770-1827) (Mai 2008). The act and process of composing music for Beethoven not only served as a therapeutic median for free and personal expressions of his alternating moods/emotions, but also as a major source for coping (Mai, 2008), which is therapeutically beneficial and vital for patients with Bipolar Disorder.

Study participants noted that the category of music compositional processes featuring a focus on encouraging the client to construct, integrate, and later develop greater structural organization of ideas in meaningful ways to enable significant self-insight was a moderately important reason for utilizing compositional music therapy for patients with Bipolar Disorder. However, this category was not indicated in the literature under music composition, related findings noted that such processes were more directly a result of existing rhythmical aspects found in music and not necessarily the music therapist encouraging the client (Unkefer & Thaut, 2005). Since rhythmical aspects serve as a more crucial element and naturally built-in organizer of time and structure in

music (Unkefer & Thaut, 2005), may further explain the reasons for the participants' responses.

Interpretation of results from analysis stage 2. Study participants indicated that the category of music compositional processes concerning, the Experience of Self-Exploration and Insight is very meaningful in terms of its content but is weaker or less meaningful in terms of its use for patients with Bipolar Disorder. Although this category was not identified anywhere in the literature for music composition, related findings partially supports participants responses by way of Resource-Oriented Music Therapy (ROMT) (Rolvsjord, 2004). Empowerment in ROMT is based on both the patient building on their own personal life experiences (that represent who they are and what they are capable of doing) (Proctor, 2002) and an ideology that questions current practices in the field (while serving as a philosophy that remains a guiding principle of music therapeutic practical work) (Rolvsjord, 2004).

Study participants indicated that the category of music compositional processes concerning the Experience of Managing Emotional and Pragmatic Challenges is very meaningful in terms of its content and strong and very meaningful in terms of its use for patients with Bipolar Disorder. This category was not identified anywhere in the literature for music composition perhaps because of it being a major premise in Resource-Oriented Music Therapy (ROMT). General ROMT goals for these patients should include being able to express their emotions in order to develop interests, motivation, and sustained relationships with others (Gold, et, al., 2005).

Study participants indicated that this category of music compositional processes concerning, the Experience of an Emotionally Supportive Interpersonal Space is very

meaningful in terms of its content and strongly very meaningful in terms of its use for patients with Bipolar Disorder. Although this category was not identified anywhere in the literature for music composition, the literature aligns with and supports participants responses. This is because this category not only involves allowing the client to express their emotions freely through composing music, but also represents an opportunity for the client to find new ways of working and relating inter-personally with the therapists and others through the music as well as within the therapeutic relationship (Rolvsjord, 2004).

Study participants indicated that this category of music compositional processes concerning, the Experience of Organization and Structure Development is very meaningful in terms of its content and is somewhat strong and meaningful to the participants in terms of its use for patients with Bipolar Disorder. However, this category was not identified anywhere in the literature under music composition perhaps due to being indicated as very beneficial in general music therapy interventions in the treatment of Bipolar Disorder. It was also noted that music composition can draw upon "attention to modeling the human experience of music at all levels" (Collins, 2009, p. 112). Creative and original musical ideas, often developing into structured sounds from the mind of the composer aids these clients in developing a sense of self organization as they begin to construct ideal musical structures through the process of music composing (Njoora, 2010).

Benefits of the Music Compositional Music Therapy Product

Interpretation of results from analysis stage 1. According to responses in section 3, study participants indicated that this category of music compositional products featuring a focus as a permanent portable artifact, serving as a qualitative source of

comfort, security and empowerment in a way in which others can experience, live, and empathize with the client's point of view of their world and story within or outside the clinical setting, was a very important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Although this category was not identified anywhere in the literature for music composition, related findings align with and support participants responses. This is because it was indicated that music composition as both a form of one's personal expression and original product are often based on permeated thoughts and personal inspirations that are rooted from the cultural traditions and background of the composer (Njoora, 2010). Understanding such powerful connection between the compositional product and composer or patient by the music therapist is paramount in being able to empathize with the client's point of view of their world and story (Njoora, 2010).

Study participants indicated that this category of music compositional products featuring a focus on allowing the client to take the therapy to go as an artifact so that her or him can function behaviorally better. As an artifact, the music composition also embodies the therapeutic relationship and process for the purpose of coping and functioning more effectively. The composition is an informational record that allows the client to self-assess about their mood and state of being at a given point in time was a moderately important reason for utilizing compositional music therapy for patients with Bipolar Disorder. Even though this category was not identified anywhere in the literature for music composition, related findings supports participants responses. Music therapy in general attempts to bring about improved changes in patients health through the utilization of music and the therapist's self in order to influence modifications in behavior

(NAMT, 1960, as cited in Gfeller & Davis, 2008). Preliminary research also indicates that the basic elements found in music composition (melody, harmony, rhythm, including timbre and form) will significantly impact cognition and behavior in non-musical areas of the brain (Unkefer & Thaut, 2005).

Interpretation of results from analysis stage 2 (semantics). Study participants indicated that this category of music compositional products concerning the production of musical resources for wellbeing is meaningful in terms of its content and moderately strong and meaningful in terms of its use for patients with Bipolar Disorder. Even though this category was not identified anywhere in the literature under music composition, related findings align with and support participants responses since this category represents a concept in Resource-Oriented Music Therapy (ROMT), known as Affordance. The concept of Affordance represents the role music plays in people's lives, which involves resources that music and its materials are provided during situations of use (Rolvsjord, 2010). The concept of affordance (Rolvsjord, 2010) is applied in a variety of music therapeutic interventions and approaches by many music therapists.

Study participants indicated that this category of music compositional products concerning, the Production of Music as a Record/Witness to the Client's Experience of the Illness and the Music Therapy is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder. Although this category was not identified anywhere in the literature for music composition, related findings partially contradicted the participants responses. This is because for composer Ludwig Van Beethoven (1770-1827), some of his music compositions served as a record of his mood states at the time of composing and

transcribing his pieces (Mai, 2008). The act of composing music served as a therapeutic median for free and personal expressions of Beethoven's alternating moods/emotions, and also as a coping mechanism for his illness (Mai, 2008). As such, music composition, can further serve as a record of one's mood, as was the case with Beethoven (Mai, 2008).

Study participants indicated that this category of music compositional products concerning, the Production of Musical Products for Informational Processing is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder. Although this category was not identified anywhere in the literature for music composition, in partial contradiction to the participants responses, related findings indicated that music composition can tremendously benefit clients with Bipolar Disorder therapeutically (Graves, 2005). Such is due to the capacity of music composition to affect regulation and security (Graves, 2005). Since the composition is both a form of one's personal expression and original product, will enable the client to easily process and respond to their music composition (Njoora, 2010).

Study participants indicated that this category of music compositional products concerning, the Production of Musical Product as a Resource for Emotional Stability is relatively meaningful in terms of its content but is moderately weak and less meaningful in terms of its use for patients with Bipolar Disorder. Even though this category was not identified anywhere in the literature for music composition, related findings partially contradicted the participants responses. Composer Robert Schumann (1810-1856) skillfully applied a variety of fictional characters found in several literary works by transforming them into melodic representations of his mood states, which resulted in his

obtaining greater control over his mood swings (Graves, 2005). Composer Thelonious Monk (1917-1982) applied a natural distinctive musical approach to music composition by placing much emphasis on its form through free improvisation (Southern, 1971), which further aided in his coping with his illness. Such findings about these composers in the literature represent one of the main essences of utilizing music composition.

Study participants indicated that the category of music compositional products concerning the Production of Musical Representations of Self and Life Experience is very important, and meaningful in terms of its content and use for patients with Bipolar Disorder. Even though this category was not identified anywhere in the literature for music composition, related findings align with and support participants responses. This is because music composition is both a form of one's personal expression and original product, consisting of creative and original musical ideas that develop into structured sounds from the mind of the composer, often deriving from life experiences (Njoora, 2010).

Clinical implications. The findings in this study suggests that goals that focus on mood, affect, emotions, and sense of self, are the most recommended for use in music therapy by clinicians for patients with Bipolar Disorder. This is because these goals can aid this patient population in better coping with issues of mood, affect, emotions, and sense of self by allowing for free emotional expression.

Other important goals that help to promote greater adaptation and interaction with the environment for the client as long as the music therapist continues to utilize creative approaches with music throughout music therapy include goals that focus on the client's quality of interaction with the world. These goals as suggested in the findings can help to

improve the clients overall cognitive capacities and interaction in the world.

The findings suggest that music compositional processes which focus on the act of composing music with the therapist's support are recommended for use. This is perhaps because they can serve as a vital coping mechanism in this patient population. As a vital coping mechanism, the act of composing can help patients with Bipolar Disorder freely express their alternating moods/emotions within their composition. As such, the music may continue to affect her or his regulation, sense of security, and order through its basic elements, melody, harmony, rhythm, and form (Graves, 2005).

Findings also suggest that music compositional processes concerning both the experiences of managing emotional and pragmatic challenges and the experiences of an emotionally supportive interpersonal space, are recommended for use. This is perhaps because they can enable the management of their emotions by patients with Bipolar through emotional expression. This can allow the patients to not only successfully develop personal interests, motivation, and sustainable relationships with others (Gold et, al., 2005), but can also aid in discovering new ways of working and relating inter-personally with the therapists and others through music composition and within the therapeutic relationship (Rolvsjord, 2004).

In terms of music compositional products as permanent portable artifacts that serve as qualitative sources of comfort, security and empowerment, findings suggest that they are very important for use perhaps because the music compositional product represents personal expression, cultural background, and permeated thoughts of these patients (Njoora, 2010). The music therapist's understanding of such powerful connection between the compositional product and composer or patient remains paramount in being

able to empathize with the client's point of view of their world and story in successfully connecting with her or him therapeutically.

It has been suggested that music compositional products, which allow the client to take the therapy to go as an artifact so that her or him can function behaviorally better, are moderately important for use perhaps because general music therapy already has a similar impact on these patients. This is through the therapist's use of self in influencing modifications in the behavior of these patients. Both the music composition as a portable artifact to take with her or him and the patients experiences in music therapy along with the developing therapeutic relationship with the therapist already serve to further affect behavioral changes in these patients.

Reflections upon research process. The researcher, in consultation with her thesis sponsor, decided that use of descriptive statistics would be most appropriate because this was an initial exploration of both the research question and music therapy survey and not an attempt to validate the survey as in inferential statistics. Inferential statistics would have required a different study. This research was also based on gaining a general sense of what the music therapy clinicians felt about compositional music therapy for patients with Bipolar Disorder.

Limitations in this research involved how the scale was ranked in Section 2 of the Music Therapy Survey (see Appendix). The rankings could have been a larger range such as five to one as oppose to four to zero, which was very narrow resulting in the answer, "Strongly Disagree" being counted as zero. The results were not as distinct and fine as they could have been. The survey could have instead had a zero to 10 scale to keep from ending up with very tightly packed number results.

Another limitation in this research include not allowing extra space in the music therapy survey for participant comments or thoughts about the reason for their selections/responses in each of the ranking charts. Such may include a space for personal comments, and suggestions for improvement in terms of what could have been included in the survey to enable greater personal insight, reflection, and information. By not including the extra space for personal comments may have resulted in not only limited data, but data that may be biased.

In terms of organizing the semantic groupings, we chose to create these groupings following receipt of the mean scores from survey responses by the music therapist participants. However, we could have done the semantic groupings ahead of time prior to receiving the mean scores from the survey responses. Creating the semantic groupings before receiving the responses could have possibly biased how we semantically categorized each grouping.

Another major limitation is the minimal amount of current research available concerning the impact music as a compositional process and product has on both music therapist and their client with Bipolar Disorder. This includes the varying goals, as well as the available music therapy case studies on Bipolar Disorder. Such existing limitations in the research has resulted in limited findings, information, and a tremendous need for further investigation about compositional music therapy in the treatment of Bipolar Disorder.

The researcher, in consultation with her thesis sponsor, decided that doing survey research on the topic of Compositional Music Therapy and Bipolar Disorder would be extremely valuable in this study. This is due to the very limited information available on

music therapy in the treatment of Bipolar Disorder as a whole. However, future research as a possible derivative of the current research will hopefully further explore the following:

1. Examining Bipolar Disorder's effect on one's creative mental processing of music in composing and creating original music compositions
2. Exploring the possible maintenance of solid coherency that is based on some type of musical form the client with Bipolar Disorder developed in their original music as a reflection of their disease
3. Studying the type of original music that may develop during a compositional music therapy session from patients with Bipolar Disorder
4. Identifying the unique personal qualities that derive within each individual music compositions as both a process and final product.

Conclusion and future implications. I found this research to be very interesting and challenging because of the limited information on music therapy in the treatment of Bipolar Disorder. I had to rely on the varying medical information about Bipolar Disorder, the two music therapy case studies (Odell-Miller, 2007; Nolan, 1991), and music therapy for the general psychiatric patient population. I began researching articles not only on Bipolar Disorder but on music composition and how it can aide in organizing the mind, which led to my developing and exploring the topic of music composition as a possible therapeutic intervention for Bipolar Disorder. This study, however has offered only an initial finding that is ultimately a first step towards way more extensive investigations on the topic. It is important in the field of research on Bipolar Disorder to do more studies.

From this research I have developed a greater understanding about another way in which music therapy can be applied in the treatment of Bipolar Disorder that is very distinctive from that of patients with other serious mental illnesses like Schizophrenia. I realized from doing this study how important it is not to group all patients with mental illnesses in the same category especially when providing certain music therapy interventions because what may seem promising for one patient population may not be as much for the other (Bipolar Disorder vs. Schizophrenia).

I am very grateful for the challenge of doing this research because I was able to discover how much information about compositional music therapy, as a treatment for Bipolar Disorder is greatly needed and how important it is for our profession to further research and expand on this clinical topic. I am hopeful that this study will serve as a resource for future researchers in the field of music therapy and Bipolar Disorder.

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Appendix A-Sample Music Therapy Survey

College of the Arts
John J. Cali School of Music
Music Therapy Program
Voice: 973-655-3458
Fax: 973-655-5279

Study Title: *The Role of Compositional Music Therapy in the Treatment of Adults with Bipolar Disorder*

Description:
Compositional Music Therapy is defined here as a music therapy intervention and process similar to songwriting or creating an original song, in which the client and therapist work together to generate an original, permanent musical model. The music may be instrumental or vocal, of any genre, and may be musically notated as a score, handwritten/typed, or recorded (CD, Tape, MP3, etc.). It may incorporate the client's original song/rap lyrics, poetry (set to music), or be instrumental-only.

This survey will ask you for information about your personal perspective and experience of applying compositional music therapy as an intervention with an adult client(s) diagnosed with Bipolar Disorder, with whom you have worked.

The survey consists of three sections, each consisting of a set of ordinal scale questions for rating your experiences of working with these client(s)

Directions: Please complete the Demographic Information below before beginning survey:

Demographic Information:
1. Are you: ¡ Male ¡ Female

2. What is your age range? ¡ 20-34 ¡ 35-50 ¡ Over 50

Section 1-Rate Your Experience:

Directions: Please choose an adult client with Bipolar Disorder along with an original work of theirs that will be the focus of all your answers throughout this Survey. Using the scale below, please rate your overall experiences working with your adult client(s) in compositional music therapy answering the statement below by clicking in the column and circle ¤that best describes your experiences; ***"Always"*** through ***"N/A" (Not Applicable), etc.***

STATEMENT 1:
Part A: "I use compositional music therapy with my clients diagnosed with Bipolar Disorder when my client's goal(s) involve(s)…"

Questions: Part A	4 Always	3 Often	2 Sometimes	1 Rarely	0 Never	0 N/A
1. Cognitive well-being and/or organization	O	O	O	O	O	O
2. Higher-order thinking skills	O	O	O	O	O	O
3. Mood or affect	O	O	O	O	O	O
4. Control of emotions	O	O	O	O	O	O
5. Adaptability/flexibility/resilience in response to environment	O	O	O	O	O	O
6. Social functioning	O	O	O	O	O	O
7. Safety (self-harm, suicidality)	O	O	O	O	O	O
8. Self-care (rest, hydration, nutrition, etc.)	O	O	O	O	O	O
9. Capacity for reality-based judgment	O	O	O	O	O	O
10. Self-esteem	O	O	O	O	O	O
11. Emotional expression	O	O	O	O	O	O
12. Interpersonal support	O	O	O	O	O	O
13. Mitigation of pressured speech	O	O	O	O	O	O
14. Will (volition)	O	O	O	O	O	O
15. Enjoyment (hedonic responses)	O	O	O	O	O	O
16. Insight (about self and/or illness)	O	O	O	O	O	O
17. Non-verbal communication of clinically-relevant information	O	O	O	O	O	O
18. Identifying, confronting, and/or working through issues linked with episodes of mood disturbance	O	O	O	O	O	O
19. Focus and overall attention skills.	O	O	O	O	O	O
20. Identification of possible triggers leading to episodes of mood disturbance	O	O	O	O	O	O
1. Control of mood	O	O	O	O	O	O
2. Identification and validation of emotions	O	O	O	O	O	O
3. Interaction and communication skills	O	O	O	O	O	O
4. Active decision-making	O	O	O	O	O	O

STATEMENT 2:

Part B: "The compositional music therapy *PROCESS* is useful and/ or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder because it..."

Questions:	4 Strongly Agree	3 Agree	2 Not Sure	1 Disagree	0 Strongly Disagree
5. Involves active self-reflection and insight, through composing, and the guidance of the therapist	O	O	O	O	O
6. Provides a resource for coping, via the therapeutic relationship surrounding the act of composing	O	O	O	O	O
7. Provides a resource for coping, via the ideas emerging from the act of composing	O	O	O	O	O

8.	Provides opportunities for the client to experience validation and empathy surrounding compositional work, within the therapeutic relationship	O	O	O	O	O
9.	Promotes a sense of self-organization through the act of configuring musical structures	O	O	O	O	O
10.	Represents an opportunity for the client to express emotions freely through composing music	O	O	O	O	O
11.	Represents an opportunity for the client to find new ways of working and relating interpersonally (with the therapist or others) through composition	O	O	O	O	O
12.	Challenges the client to utilize creative problem-solving skills that may assist them in working through emotional impasses, conflicts, or other unresolved issues, and to do so at their own pace, outside of musical performance time	O	O	O	O	O
13.	Allows the client to engage in the construction of an ideal musical structure, through artistic decision making, at their own pace, outside of musical performance time	O	O	O	O	O
14.	Allows the client to further examine their thought-processes around compositional decision making, for greater self-insight	O	O	O	O	O
15.	Encourages the client to make valued-based decisions based upon priorities about what to keep and what to let go	O	O	O	O	O
16.	Enables the client to acknowledge, consolidate, and integrate otherwise disconnected ideas, in meaningful ways	O	O	O	O	O

STATEMENT 3:

Part C: "The compositional music therapy *PRODUCT* is useful and/ or helpful in addressing clinical goals of clients diagnosed with Bipolar Disorder because it..."

Questions:		4 Strongly Agree	3 Agree	2 Somewhat Agree	1 Disagree	0 Strongly Disagree	0 N/A
17.	Serves as a predictable structure during periods of distress or instability	O	O	O	O	O	O
18.	Can help to organize client's thought processing, when listening back to the composition, with the therapist	O	O	O	O	O	O

19.	Serves as a coping mechanism, as something of significance and personal value upon which the client can reflect, with which the client can identify, and which the client can take with her/him	O	O	O	O	O	O
20.	Serves as a witness to the client's journey in therapy	O	O	O	O	O	O
21.	Allows the client to utilize the music composition as a way of sharing something meaningful about themselves with others	O	O	O	O	O	O
22.	Serves as a source of comfort, security/safety, via the composition's recognizable form, for the client	O	O	O	O	O	O
23.	Can engender a sense of personal empowerment and achievement, for the client	O	O	O	O	O	O
24.	Can serve as a record of the client's mood state at the time of composing and recording the piece	O	O	O	O	O	O
25.	Provides opportunities for applying metaphorical representations surrounding the client's music, in ways that embodies illness, all as part of gaining greater mood stability	O	O	O	O	O	O
26.	Can serve as a record for self-assessment about the client's state of being at a given point in time, along her/his overall trajectory of human development	O	O	O	O	O	O
27.	May be arranged in certain forms (rhythmically, tonally, etc.) that enable the client to process and respond to information	O	O	O	O	O	O
28.	Can help guide the client's future, independent work, via the model of the music composition as a self-adaptive coping mechanism	O	O	O	O	O	O
29.	Can serve as a self-adaptive coping mechanism and/or emotional outlet, via the freedom to play (re-create) the music composition, at will (through a playback system,	O	O	O	O	O	O

or through live music-making, alone or with others)						
30. Serves as a self-transitional object relative to the therapeutic process and relationship	O	O	O	O	O	O
31. Allows others in community (within or outside of the clinical setting) to hear, understand, and/or empathize with the client, by hearing the composition.	O	O	O	O	O	O
32. Represents a reproduction or reflection of important aspects of the client's self and life, to which they themselves can relate, as well as others, potentially.	O	O	O	O	O	O

Thank you for taking time out of your busy schedule to fill-out this survey; it is very much appreciated. If at anytime, you would like to contact me about this study or its results, please feel free to do so: Tyese Brown-(973) 568-6462-Primary Investigator, or by email @: brownt5@mail.montclair.edu. You may also contact Dr. Brian Abrams at: (973) 655-3458 or by email @: Abramsb@mail.montclair.edu. Again, thank you ever so much for sharing your information with me with the intent of helping to make this study meaningful and possibly initiating much needed further research.

Appendix B-Sample Online Recruitment and Informed Consent

MONTCLAIR STATE UNIVERSITY

College of the Arts
John Cali School of Music
Music Therapy Program
Voice: 973-655-3458
Fax: 973-655-5279

Hi Music Therapist,

Welcome to my Research Link on www.survemonkey.com. I am a Montclair State University Music Therapy Major in the Graduate Program conducting a Survey Study entitled, "*The Role of Compositional Music Therapy in the Treatment of Adults With Bipolar Disorder*," as part of my thesis research. This survey study will examine the benefits of Compositional Music Therapy in the treatment of adult client(s) with Bipolar Disorder. The CBMT (Certification Board of Music Therapists) generated a contact list of music therapists who have employed composition as an intervention while working with adult psychiatric patient(s) with Bipolar Disorder. Based on your professional background, you have been selected to participate in this study. This study has been formally approved by the IRB at Montclair State University and will focus on the benefits and psychological aspects of compositional music therapy as an intervention for adult client(s) with Bipolar Disorder as described purely from your clinical and professional perspective as a Music Therapist.

Explanation and Directions:
Compositional Music Therapy is a process similar to songwriting by creating an original song, in which, the client and therapist work together to generate an original, permanent musical model. The arrangement may be instrumental, vocal or both and of any genre. The purpose of this survey is to help in gathering data on how Compositional Music Therapy has benefited your clients diagnosed with Bipolar Disorder.

The Music Therapy Survey is an Ordinal Scale for you to rate your experiences working with patients:

1. Part A, consists of 24 very short questions
2. Part B, consists of 12 short questions
3. Part C consists of 16 short questions

Eligibility: You may participate in this study only if all of the following are true:

1. You agree to all terms on the Informed Consent form.
2. You are 21 years of age or older.
3. You are a certified music therapist who is working or has worked with patient(s) diagnosed with Bipolar Disorder.

If you are qualified and interested in this research study, please scroll down to the "Informed Consent Form" section for your review. Please remember that your participation and any data you share are

voluntary but extremely important and highly valuable to this study.

Informed Consent Form:
Following receipt of the completed Music Therapy Survey on www.surveymonkey.com, all data will then be analyzed by the Principle Investigator under the guidance of the thesis Sponsor, a certified Music Therapist, to better understand your clinical and professional experience using compositional music therapy as a music therapy intervention for patients with Bipolar Disorder. All anonymous data integrated into the thesis as part of my research will not include any identifying information about you and your client(s) in order to protect and maintain confidentiality at all times throughout this study.

All computers and files will be password protected. A copy of your data will be generated back to you securely and anonymously based on the email you provided with Survey Monkey for your own records following your completion of the Survey. Outside of your email address as it appears on the requested CBMT list, the Primary Investigator and thesis Sponsor may not know your true identities. All IP addresses will also be disabled through Survey Monkey to ensure greater participant's anonymity.

The benefits of this study may include enabling you to more closely examine, reflect, explore, discuss/express your thoughts, feelings, experiences, gain insights about yourself as a healthcare worker in relation to the challenging aspects of your client(s) living with Bipolar Disorder and the impact you have in their daily lives as a therapist as you rate your experiences in the Music Therapy Survey on www.surveymonkey.com.
Even though all careful precautions will be taken in order to protect your information throughout all stages of this research, there may be a slim possibility of risks in terms of breach in confidentiality. It is strongly recommended that you do not use an employer's electronic device, laptop, or phone to respond to this survey. Disclosure of any personal information is purely voluntary and you can choose to skip/not answer any questions. You are also free to choose not to be apart of this study at any time.
I will be available by email or phone when you begin the Music Therapy Survey should you have any questions throughout this study. Again, please feel free to send me your questions as a private message via email or phone call and I will answer your questions to the best of my knowledge. You can reach me at: Brownt5@mail.montclair.edu, or by calling (973)568-6462 where you can leave your message. All messages will be erased following my contacting you by whichever medium you prefer. I wish to gratefully thank you for your time and consideration.

By clicking on "Link to Survey" below and proceeding to the Survey, I confirm that I have read this form and will participate in the project described. Its general purposes, the particulars of involvement, and possible risks and inconveniences have been explained to my satisfaction. I understand that I can discontinue participation at any time and my decision whether or not to participate will not in any way affect my relationships with my place of employment nor with the Certification Board for Music Therapists. My consent also indicates that I am 18 years of age.

I Agree to Participate, please take me directly to the Survey: I Wish to Proceed:
https://www.surveymonkey.com/s.aspx?sm=wyQgRyBTrvgWh_2fOI9eWYEw_3d_3d . The study has been approved by the Montclair State University Institutional Review Board as study on #001549 on: August 21st, 2014_.
Should you wish to "opt out of this study, please click the following link:
https://www.surveymonkey.com/optout.aspx?sm=wyQgRyBTrvgWh_2fOI9eWYEw_3d_3d
Please feel free to print a copy of this consent.

Any questions about your rights as a research participant may be directed to Dr. Katrina Bulkley, Chair of the Institutional Review Board at Montclair State University at: reviewboard@mail.montclair.edu or 973-655-5189. Thank you for your time.

Sincerely,

Tyese Brown, Principal Investigator (PI)
John Cali School of Music
Montclair State University
1 Normal Avenue Montclair, NJ. 07403
(973) 568-6462
Brownt5@mail.montclair.edu