

THE EXPERIENCE OF RECALLING CHRISTIAN SPIRITUAL SONGS ON AFFECT
DYSREGULATION IN THE MOOD AND ANXIETY DISORDERS

by

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Liberty University

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ABSTRACT

THE EXPERIENCE OF RECALLING CHRISTIAN SPIRITUAL SONGS ON AFFECT DYSREGULATION IN THE MOOD AND ANXIETY DISORDERS

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Although existing treatment methods for the mood and anxiety disorders have improved the lives of many who suffer from these conditions, there remains a significant portion of the population for whom these methods are only partially effective or are ineffective entirely. The purpose of the present study was to explore the experiences of a spiritually-integrated music therapy intervention with a nonclinical population during times of affect dysregulation. Ten participants used this intervention over the course of a two-week period and were interviewed regarding their experiences. The results indicated that the participants were impacted in their biological, spiritual, social and psychological processes and that the intervention was primarily used as a planned distractor and for cognitive reappraisal. The use of the intervention is discussed in terms of its usefulness as an adjunct to treatment for mental health and pastoral counselors.

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CHAPTER ONE: THE PROBLEM

Background of the Problem

Mood and anxiety disorders are currently the most common psychiatric diagnoses in the United States (National Institute of Mental Health [NIMH], 2013). Although there are treatment options that work for many, there are still a significant number of people who do not recover completely or who do not maintain treatment gains over time (Roemer, Orsillo, & Salters-Pedneault, 2008). Therefore, new treatments are needed.

A vast amount of information is emerging about the etiology and treatment of mood and anxiety disorders stemming from an abundance of research in these areas (see for example American Psychological Association [APA], 2013a; Barlow, Fairholme, Ellard, Boisseau, Allen, & Ehrenreich May, 2011; Cuijpers et al., 2013; NIMH, 2013). According to the NIMH, of the 18.1% of the population who suffer from some form of anxiety disorder, only 42.2% receive treatment, and of those treated only 33.8% receive minimally adequate treatment (NIMH, 2013a). For those with mood disorders, the 12-month prevalence rate for Americans is 9.5% of the adult population (NIMH, 2013b). Of those diagnosed with a mood disorder, it is estimated that only 56.4% receive treatment of any kind, and of those only 38.3% receive minimally adequate treatment (NIMH, 2013b).

These statistics paint only a partial picture of the toll that anxiety and mood disorders create in the lives of individuals who suffer from them. Anxiety disorders, which are exemplified by worry and/or fear (APA, 2013c) divert individuals' attention

away from the positive aspects of their lives, causing them to be enveloped in rumination and dread. Mood disorders, such as depression, cause individuals to turn inward where their worldview is filtered through a dark lens.

Negative work-related and financial consequences also occur as a result of anxiety and mood disorders. The World Health Organization (WHO) (2013) reported that depression is the leading cause of disability in the world. In Canada and the United States, neuropsychiatric disorders are the number one cause of what the NIMH (2013c) terms “disability-adjusted life years” (DALYs), which includes “years lost to illness, disability or premature death” (NIMH, 2013c). The DALYs’ rate for neuropsychiatric disorders is almost double the rate for people who are physically impaired due to cardiovascular diseases (NIMH, 2013c). Among the five most costly medical conditions in the United States in terms of DALYs in 2006, mental disorders ranked third along with cancer, following heart conditions and trauma-related disorders (NIMH, 2013c).

A study by Collins et al. (2005), surveying the effects of chronic medical conditions on employment, reported that those who suffer from anxiety and depression exhibit the most work impairment (presenteeism) of all chronic health conditions. These same individuals also pose the second highest risk for work absenteeism. Furthermore, individuals who report depression or anxiety or other mental disorders as their primary health condition generate the greatest economic costs of all chronic health conditions (economic costs in the Collins et al. study were calculated based upon medical care/pharmaceutical costs, absenteeism and financial loss due to work impairment).

In another study by Shih and Simon (2008), serious psychological illness (defined as having any *Diagnostic and Statistical Manual of Mental Disorders-IV* [DSM-IV] condition) was found to be associated with decreased health-related quality of life. Additionally, psychological disorders were associated with chronic health problems causing people to suffer more days of physical limitations than those without mental illness. Furthermore, these individuals were more often found to be unemployed than those without serious psychiatric illnesses.

Because of the widespread physical, monetary, and employment costs associated with these disorders, researchers are developing new treatments with the hope of reaching those who do not make sufficient progress in traditional psychotherapy. In a meta-analysis of research on available treatment methods for depression, Cuijpers et al. (2013) found that cognitive-behavioral therapy (CBT), interpersonal psychotherapy, behavioral activation therapy, psychodynamic therapy, problem solving therapy, and psychotropic medication all provide relief from depression in some patients. The American Psychological Association (2013) and the NIMH (2013a) reported that the treatment of choice for anxiety is CBT. The problem is that no one method works for every person, and for the treatments that do work, their impact is often only temporary (Durham, Higgins, Chambers, Swan & Dow, 2012; Ryan, Keitner, & Bishop, 2010; Simon & Perlis, 2010; Weersing, 2010; Wilamowska et al., 2010).

While attempting to find treatments that could aid a greater number of people, researchers discovered that comorbidity among the mood and anxiety disorders is widespread (Allen, McHugh, & Barlow, 2008; Barlow, et al., 2011; Brown, Antony, &

Barlow, 1995; Brown & Barlow, 1992; Brown, Campbell, Lehman, Grisham, & Mancill, 2001; Fehlinger, Stumpenhorst, Stenzel, & Rief, 2013; Kessler, 2005; Ruscio et al., 2008; Taubner, Kessler, Buchheim, Kächele, & Staun, 2011). They also found that when one psychological condition was targeted for treatment, considerable simultaneous improvement in comorbid conditions that were not the focus of treatment also occurred (Wilamowska, et al., 2010). As a result of these findings, researchers suspected that there was a common underlying factor in the mood and anxiety disorders. To date, many believe this unifying element is emotion dysregulation (Allen et al., 2008; Barlow et al., 2011; Glenn, & Klonsky, 2009; Green, Cahill, & Malhi, 2007; Hofman, Sawyer, Fang, & Asnaani, 2012; Kring, & Sloan, 2010; Mennin & Farach, 2007; Rusch, Westermann, & Lincoln, 2012; Salters-Pedneault, Roemer, Tull, Rucker, & Mennin, 2006; Tull, 2006; Turk, Heimberg, Luterek, Mennin, & Fresco, 2005).

Emotion regulation can be defined as “a process by which individuals influence the occurrence, intensity, expression, and experience of emotions” (Barlow et al., 2011, p. 4). Webb, Miles, and Sheeran (2012) defined emotion regulation as “the set of automatic and controlled processes involved in the initiation, maintenance, and modification of the occurrence, intensity, and duration of feeling states” (p. 775). Gross and Thompson (2007, as cited in Esbjørn, Bender, Reinholdt-Dunne, & Ollendick, 2012) viewed emotion regulation on a continuum ranging from unconscious control of affect to effortful redirection of emotional responses. Emotion dysregulation occurs when individuals use the wrong kind of emotional expression for a given context, or when the emotions are too strong or are not strong enough given the circumstance (Kring & Sloan,

2010). Emotion regulation is one of the targeted symptoms, for example, in empirically-supported, cognitive behavioral treatments for anxiety and mood disorders (see Barlow et al., 2011, for example). Although empirically-supported, CBT treatments such as these do not work well for everyone (Durham et al., 2012). Therefore, new treatments that can stand alone or can integrate with current evidence-based practices are encouraged in the research (Choi, Lee, & Lim, 2008; Seskevich, Crater, Lane, & Krucoff, 2004).

The focus on interventions that target emotion regulation is driving the development of new treatments that are yielding promising results and providing a more complete picture of the nature of these troubling, often chronic disorders (Kring & Sloan, 2010; Wilamowska et al., 2010). To this end, there is a growing appreciation in the field of psychotherapy for what are termed complementary and alternative methods (CAM) of treatment (Lipe, 2002). These methods tend to focus on a holistic view of the individual, on well-being, and on treatment techniques that are outside the realm of traditional Western healing practices (Lipe). The American Psychological Association identifies spirituality and music therapy as two of the most commonly used CAMs in psychotherapy today (Barnett & Shale, 2013). Furthermore, there is evidence that attests to the beneficial effects produced when these methods are incorporated into current empirically-supported counseling practices (Barnett & Shale).

Spirituality is a CAM used in the present study. Currently there is renewed interest in the area of spirituality in the field of psychology (Pargament, 2013). From an empirical perspective, there is mounting evidence that suggests that the integration of spirituality into counseling practices can contribute positively to mental health (Dein,

2013; Garzon, 2004; Garzon, 2005; Garzon, 2009; Propst, Ostrom, Watkins, Dean & Mashburn, 1992; Tan, 2007; van Dierendonck & Mohan, 2006). Some studies linked healthy spirituality to lower levels of depression and anxiety (Hill & Pargament, 2008; Brown, Carney, Parrish & Klem, 2013).

Music is the second CAM used in this study. Music as therapy is not a new intervention as it was used in the world for psychological and somatic conditions for centuries (see Nilsson, 2008). In ages past, musical interventions were applied using various methods, just as they are today. Not only does music therapy span the centuries, but the therapeutic value of music transcends culture:

Every people has, in the course of its development, developed a characteristic musical tradition. Music accompanies man even before he is born and beyond his death. And music has been implemented since time immemorial for stimulation or for therapeutic purposes. (Balzer, 2006, p. 26)

Empirical evidence attests to the effectiveness of music therapy for most of the psychological disorders (Brandes et al., 2010; Castillo-Pérez, Gómez-Pérez, Velasco, Pérez-Campos, & Mayoral, 2010; Choi et al., 2008; Gerdner, 1999; Guétin et al., 2009; Guétin, Soua, Voiriot, Picot, & Herisson, 2009; Sacks, 2006; Sherratt, Thornton, & Hatton, 2004; Wang, Wang, & Zhang, 2011). The present study sought to place itself in the midst of this body of literature of music therapy interventions. In previous studies (Brandes et al., 2010; Choi et al., 2008; Mok & Wong, 2003; Sacks, 2006; Silverman, 2003; Wang et al., 2011) the experiments required *listening* to or *playing* music for the purpose of calming, quieting, or uplifting participants. This study proposed *recalling* music that has been memorized to aid in emotion regulation.

Problem Statement

Emotion regulation has emerged in the research as a unifying, diagnostic principle underlying depressive and anxiety symptoms for many sufferers (Barlow et al., 2011), and excellent, empirically-based treatments have been developed to address this (Barlow et al., 2011). Although these methods are effective for many patients, some individuals remain unchanged or not fully recovered using current methods. For those individuals who do receive benefit from existing techniques, many do not maintain treatment gains over time (Bockting et al., 2011; Roemer et al., 2008). Albeit there are many reasons for this, the development of new and inventive methods has been encouraged in the research such as those offered using CAM or CAM in conjunction with current empirically-supported practices.

Purpose Statement

The present study purposed to explore additional resources for the emotion dysregulation associated with anxiety and mood disorders. In order to understand how individuals experience this music therapy intervention, nonclinical participants were given instructions about how to use the music intervention for a two-week period. These ten participants were interviewed and provided in-depth descriptions of their experiences with the intervention. The data was combined and analyzed using Phenomenological Analysis (Moustakas, 1994).

Research Question

The following research question frames this study: How do participants describe their experience using a spiritually-integrated music intervention for emotion dysregulation?

Research Participants

Participants were students from a southern Christian university. The students were offered course credit for their willingness to participate in this research.

Research Approach

After receiving approval from the university's Institutional Review Board (IRB), the researcher sought to understand the experiences of college students who used the music therapy intervention for mood dysregulation introduced in this study. The participants were undergraduate students enrolled in a counseling theories class.

The investigative method used in this study is Phenomenological Analysis (PA) as described by Moustakas (1994). When using this method, researchers conduct in-depth interviews with participants about their experiences with the phenomenon. This method of data collection allows the phenomenon to emerge from the participants' perspectives, without imposing the researcher's presuppositions on them (LeVasseur, 2003).

During this investigation, the researcher initially met individually with the participants to explain the research process, answer questions, obtain informed consent,

and provide instruction about how and when to utilize the spiritually-integrated music therapy intervention. The researcher gave the instructions in a group format orally to all of the participants, and afterward each participant was given written instructions and all materials related to the intervention (See Appendixes). Participants agreed to use the intervention daily over the course of a two-week period and to keep a written record of their experiences (see Chapter Three). Each participant was identified by a pseudonym to ensure anonymity (APA, 2013b).

Following the two-week intervention period, the researcher met individually with each participant to review and collect their written records and conduct in-depth interviews. All interviews were recorded and transcribed. The data and transcripts were reviewed repeatedly for emerging themes that were common among the participants and for differences that emanated from their descriptions of their experiences with the intervention.

Assumptions

The researcher entered this study with four assumptions. First, based upon the literature, there is a unified, transdiagnostic principle underlying many anxiety and mood disorders. Second, although there are effective psychotherapeutic treatments, new treatments need to be developed that will aid a greater number of people. Third, the intervention method will be easily taught and retained by the participants. Fourth, and finally, this study will be a helpful addition to the literature that delineates an additional effective method of treatment for emotion regulation.

The Researcher

This study is born out of the researcher's personal experiences over the years with the positive and beneficial effects of Christian music for emotion regulation. It is the researcher's experience that when in a state of mood dysregulation, Christian songs often come to mind spontaneously which redirect mental focus onto positive, quieting, encouraging, hopeful or uplifting thoughts. When the thoughts are redirected by this internal music there is a subsequent mood change, functioning much like a spiritually-integrated cognitive restructuring task.

Based on the researcher's personal experiences, as well as the reports of others, it was hypothesized that this intervention will provide a beneficial add-on to treatment for Christian clients suffering from emotion dysregulation. Since the Scriptures attest to the fact that music was created not just for the praise of the Creator but also for teaching and admonishing, the researcher envisioned that this intervention will provide Christian people with a tool to help more effectively face life in this "fallen" world (Genesis 3; McMinn & Campbell, 2007).

Rationale and Significance

In this study, music therapy and spirituality were incorporated into the treatment intervention. As explicated in this document, research indicates that both of these treatment methods are efficacious in the treatment of anxiety and mood disorders. This study sought to add depth to the field of psychotherapy by offering an additional

treatment tool that is easily taught and learned, is readily applied, and is financially feasible.

Definition of Key Terms

In this section the terms relevant to this study are defined including anxiety disorders, mood disorders, cognitive-behavioral therapy, emotion, feelings, affect, emotion regulation/dysregulation, spirituality, Christian spirituality, and music therapy.

Anxiety Disorders

In this study, the term anxiety disorders will be consistent with the diagnosis for generalized anxiety disorder (GAD) (APA, 2013c). According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.) (DSM-V) (APA, 2013c), GAD is uncontrollable and excessive worry lasting at least six months causing significant impairment in a person's social or occupational functioning. Furthermore, it is characterized by three or more of the following symptoms: restlessness, fatigability, difficulty concentrating or mind going blank, irritability, muscle tension, and sleep difficulties.

Mood Disorders

In the present study, the term mood disorder will pertain to unipolar depression without psychotic features. According to the DSM-V (APA, 2013c), the symptoms of depression include at least five of the following: sad or depressed feeling most of the day

nearly every day for at least two weeks, anhedonia, weight loss or weight gain, sleep difficulties, fatigue, feelings of worthlessness or guilt, diminished capacity to concentrate, and/or recurrent suicidal thoughts.

Cognitive-Behavioral Therapy

The treatment method utilized in this study will be a spiritually-integrated cognitive-behavioral music therapy intervention. The theoretical model of cognitive-behavioral therapy (CBT) is based upon the idea that psychological disturbances are created "...by a bias in the information-processing system... The goal of CBT, then, is to redress this bias in the information-processing system by damping down hypervalent negative or dysfunctional schemas ... and strengthening access to more constructive modes of thinking" (Clark, Hollifield, Leahy, & Beck, 2009, p. 167). The music intervention in this study was designed to address these cognitive biases by replacing the "hypervalent negative and dysfunctional schemas" with spiritual songs that are uplifting, encouraging, and/or hope-inducing (p. 167).

Emotion, Feelings, and Affect

Emotion is a term that is frequently used in everyday language and, therefore, it hardly seems that a definition should be necessary. However, defining the term precisely is not an easy matter as there does not appear to be a current definition that is used by all researchers (Izard, Stark, Trentacosta, & Schultz, 2008).

According to one definition proffered by Izard et al. (2008), there are two types of emotions: basic emotions and emotion schemas. A basic emotion is defined as “a set of neural, bodily/expressive, and feeling/motivational components generated rapidly, automatically, and nonconsciously when an ecologically meaningful stimulus is sensed or perceived. This sensation or perception is influenced by the individual’s ongoing affective-cognitive processes” (p. 157). Emotion schemas, on the other hand, are based upon previous learning experiences with emotions and events and are the most common cause of human motivation.

Expanding upon this conceptualization is the idea that emotions are generated in light of one’s goals (Kring & Sloan, 2010). For example, if a given circumstance or condition is in line with one’s goals, positive emotions such as happiness or contentment are generated. If, however, a situation is appraised as being contrary to one’s goals, the negative emotions such as anger, sadness, or fear occur.

Other researchers delineate differences between the term emotion and the term feelings. Cappas, Andres-Hyman, & Davidson (2005) defined emotions as the bodily responses produced by the limbic system in response to a stimulus. Feelings, on the other hand, are the thought side of emotions. According to these researchers, feelings and emotions are processed in different areas of the brain. In other words, feelings are the mind’s interpretation of the emotions produced by the limbic system (Cappas et al., 2005).

A similar term to feeling is affect, which is defined by *Merriam Webster* as “the conscious subjective aspect of an emotion considered apart from bodily changes” (2013).

Additionally, Cheetham, Allen, Yücel, & Lubman (2010) defined affect as:

The relatively brief feelings that are experienced in response to a particular stimulus or situation... However, it is important to note that affective experience can be considered in terms of trait as well as state; that is it also encompasses more stable and enduring patterns of affective responding. (p. 623)

For the purpose of the present study, the term emotion is based on Izard et al.’s (2008) definition that incorporates both concepts of basic emotions and emotion schemas.

Emotion Regulation/Dysregulation

As stated previously, emotion regulation refers to the ability to “influence the occurrence, intensity, expression, and experience of emotions” (Barlow et al., 2011, p. 4). Emotion dysregulation occurs when individuals respond inappropriately to circumstances based upon their inability to properly regulate their affective states. This can occur as a result of inadequate strategies for controlling emotions, biological hypersensitivity to emotional states, or an inability to properly recognize emotions.

Spirituality

Another term utilized in this study is spirituality. Spirituality is defined by many researchers in various ways with considerable overlap in many of the definitions (Bartoli, 2007; Brown, et al., 2013; Thoresen, 1999). According to Hill and Pargament (2008), spirituality is a search for the sacred, wherein sacred is defined as concepts of God or a

transcendent being. According to Shafranske & Sperry (as cited in Bartoli, 2007), spirituality “refers to a person’s individualized, internal and value-based connection to the transcendent” (p. 55). Van Dierendonck and Mohan (2006) defined spirituality as things having to do with the “ultimate goal in life, the experience of a transcendent dimension that gives meaning to existence, and the capacity to experience the sacred” (p. 229).

For the purpose of the present investigation, spirituality is delimited to being founded on the Christian faith. Christian spirituality is a worldview system that “focuses on cultivating an intimate relationship with Jesus Christ that progressively transforms one’s values, sense of purpose, beliefs, and lifestyle in the context of a faith community” (Garzon, 2011, p. 23).

Music Therapy

Another key concept in the present study is music therapy. Music therapy can be defined as any intervention used to promote the health of clients using music and arising from a therapeutic relationship (Gold et al., 2011). The definition utilized in the present study is that music therapy is “a controlled method of listening to music, making use of its physiological, psychological and emotional impact on the individual during treatment for an illness or trauma” (Guétin et al., 2009, p. 37).

Chapter Summary

This introduction reviewed the health problems that mood and anxiety disorders create and the treatment methods that are currently in use and which are recommended by the NIMH and the APA. The research outlining the theoretical model of emotion dysregulation was covered briefly. The two complementary and alternative methods of spirituality and music therapy that were part of this study were also covered. The purpose of this study was articulated as was the method employed to address the problem of unremitting mood and anxiety disorders. Additionally, the researcher's personal experiences and assumptions about the intervention were discussed. Finally, definitions for key terms were provided.

In the upcoming chapter, a detailed description of the theoretical underpinnings of emotion regulation is provided. Additionally, the research to date on the treatment methods for the anxiety and mood disorders in the areas of emotion regulation, spirituality and music therapy are reviewed.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this study was to explore an additional resource for the emotion dysregulation associated with anxiety and mood disorders. This study's research question was: How do participants describe their experience using a spiritually-integrated music intervention for emotion dysregulation? The purpose of this literature review is to highlight the importance of this study in light of the related empirical research already completed on this subject. As a result of this literature review, the researcher sought to properly situate the current study and emphasize its importance in addressing the research gap in this area.

In order to empirically ground this study, a critical analysis and synthesis of the following research literature took place: the cycle of emotion, factors contributing to emotion dysregulation that relate to anxiety and mood disorders, adaptive and maladaptive emotion regulation strategies, empirically-based treatments for emotion regulation, and complementary and alternative methods for emotion regulation. The cycle of emotion was critically analyzed in order to demonstrate where in the emotion cycle the intervention explored in this study may be utilized. The literature regarding adaptive and maladaptive emotion regulation strategies was analyzed in order to provide a framework within which to categorize the current intervention. The two complementary and alternative methods of emotion regulation that were reviewed were

music and spirituality because they are the two additional treatment methods used in the present investigation.

The following key terms were used to access relevant empirical studies related to the current study (including truncated forms of the words): emotion cycle, emotion regulation, emotion, affect, regulation, dysregulation, mood, anxiety, depression, mindfulness, music, music therapy, spirituality, Christian, Negro spirituals, and recall. The following databases were used to elicit relevant empirical studies: Academic Search Complete, Google Scholar, and Ebsco Host. In addition, reference sections of related journal articles, journal titles, and books were used.

This chapter is organized into four major sections. First, empirical studies related to the concept of emotion regulation and the importance it plays in the initiation and maintenance of mood and anxiety disorders are presented including: The Case for a Transdiagnostic Nosology for Mood and Anxiety Disorders, Phases of the Emotion Regulation Cycle, Factors Contributing to Emotion Dysregulation, Adaptive and Maladaptive Emotion Regulation Strategies. Second, studies related to empirically-based treatment methods for emotion regulation are presented including: Transdiagnostic Cognitive-behavior Therapy, Acceptance and Commitment Therapy, Cognitive-based Behavior Therapy, and the Unified Protocol for Emotion Regulation. Third, the literature pertaining to two complementary and alternative methods of treatment for emotion regulation are presented which include music and spirituality. The chapter concludes with a clear justification of the need for this study as a means of addressing the gap in the

literature on recalling spiritually-integrated songs for emotion regulation, for which only one case study was found related to its use in a clinical population.

Emotion Regulation

In this section the empirical literature pertaining to emotion regulation is covered. It begins with a review of research that links comorbidity among psychiatric disorders to problems in emotion regulation, supporting a case for a transdiagnostic nosology. The phases of the emotion regulation cycle are then articulated with an eye toward understanding the placement and implementation of therapeutic interventions. Factors that contribute to the onset of emotion dysregulation are reviewed. A description of adaptive and maladaptive emotion regulation strategies is also provided.

The Case for a Transdiagnostic Nosology for Mood and Anxiety Disorders

Over the past 30 years, the research on mood and anxiety disorders has yielded valuable information regarding their etiology and treatment. From this research, many now believe that emotion dysregulation is the underlying factor in these disorders (Barlow et al., 2011; Beck, Wenzel, Riskind, Brown, & Steer, 2006; Brockmeyer et al., 2012; Green et al., 2007; Kring & Sloan, 2010; Linehan, Bohus, & Lynch, 2007; Tull, 2006; Turk et al., 2005). Underscoring the significance of this conclusion, Kring & Sloan (2010) stated that conceptualizing psychiatric disorders based upon target mechanisms of action instead of upon diagnostic labels is a more effective method for treating these conditions.

Emotions are a normal part of everyday life that influence all domains of human experience: cognition, behavior, and physiology (Koole, 2009; Sheppes et al., 2014). They contribute to a well-balanced life by playing an important role in decision-making, learning, preparations for and implementation of behaviors, goal acquisition, and in the management of social responses that produce and sustain healthy relationships (Gross, 1999). Emotions are an important and necessary part of living healthy, productive lives (Mennin & Farach, 2007). They provide information about how to act and respond to a myriad of situations countless times every day. Emotions also provide direction for relationships, jobs, beliefs and values. They are powerful enough to change one's thoughts and behaviors in any given circumstance. When utilized appropriately, emotions contribute to a well-balanced life.

At times, people regulate their emotions consciously in order to bring about emotional enhancement, reduction, or maintenance (known as explicit emotion regulation). At other times, these processes occur automatically without conscious effort or will (known as implicit emotion regulation: Gyurak et al., 2011; Gross, 1998; Koole, 2009; Koole & Rothermund, 2011). Research over the past 20 years reveals that adaptively regulating one's emotions is tantamount to good mental health and is associated with positive relationships, good physical health, academic success and work performance (for a review see Aldao, Nolen-Hoeksema, & Schweitzer, 2010).

Phases of the Emotion Regulation Cycle

Emotions do not occur at one point in time as isolated events; instead, there are phases through which emotions pass that have been conceived of as a cycle. The following section depicts a theory of emotion processing that has been described by Gross and Thompson (2007). Because of its relation to the present study, this model is explained in detail.

Gross and Thompson's (2007) Process Model of Emotion portrays emotions as beginning either with external events, situations or persons, or with internal experiences such as thoughts and physiological processes. Furthermore, the emotional responses elicited by these cues can be defined as primary (the initial emotional response to a circumstance) or secondary (emotional reactions to emotions) (Kring & Sloan, 2010).

Gross and Thompson's (2007) model contains five phases: 1) situation selection, 2) situation modification, 3) attentional deployment, 4) cognitive change, and 5) response modulation. The phases of the emotion regulation cycle function on a timeline, the first four of which are considered antecedent-focused and the last category is response-focused. Antecedent responses operate at the input phase of the emotional cycle before an emotion is in full effect whereas response-focused operate on the output phase after responses to the emotion have been initiated.

The most effective way to alter emotional responding is at the input or antecedent phase, before an emotion has reached its full form (Aldao, 2013). Gross and Thompson (2007) hypothesized that antecedent-focused strategies are effective because they do not require shutting down emotional processes that are already under way which have produced emotional and physiological changes.

In the first phase of situation selection, the choice is made whether or not to enter into a particular situation. Situation selection refers primarily to behavioral strategies that involve choosing to avoid or approach situations, people, activities or places known to give rise to certain emotions (Werner, Goldin, Ball, Heimberg, & Gross, 2011). An example of this phase of the emotion cycle is a mother who has to make the decision whether or not to walk into her teenager's room, which she knows from experience has not been kept up. The mother can choose to stay away from the room, which has been a source of consternation for her, or she can choose to investigate its current state, and the behavior she chooses will determine what happens next in the emotion cycle.

The second phase of the emotion cycle is situation modification wherein individuals can choose to change/modify situations in which they find themselves (Gross & Thompson, 2007). In the previous example of the mother deciding whether or not to enter her teenager's room, if upon seeing from the doorway that the bed is left unmade, she can choose whether or not to enter the room to fully inspect it or just keep walking past the room. If she chooses to enter the room, she knows that it is possible she will become angry; therefore, she may decide that walking past it at this time would be the best strategy for her. On the other hand, she may choose to enter the room and allow her

feelings of anger or frustration to surface and then deal directly with her teenager to correct the problem. Both of the first two phases of the emotion cycle are behavioral.

In the third phase of the cycle, attentional deployment, the emphasis is upon how one directs one's attention (Gross & Thompson, 2007). Attentional deployment is a form of internal situation selection (Gross & Thompson). During this phase of the cycle, two major options are possible: distraction or concentration. Distraction is choosing to focus on different elements of a situation or by shifting one's attention away from a stimulus altogether. Concentration, on the other hand, is focused attention on the emotional features of a situation, event, or person. Using the previous example of the mother and her child's messy bedroom, if the mother chooses to enter the room (situation selection), she must then choose which aspects of the room to focus on (attentional deployment) or not to focus on the unkempt room at all (distraction).

In the fourth phase of the cycle, cognitive change, emotions are regulated by the appraisal and reappraisal of information. In other words, how a person conceives of a situation is what determines his/her emotional reaction. In this stage of the cycle, a crucial element is the relevance of the event, situation or person to the individual. Continuing with the same example, once the mother focuses on the untidy room, her emotional responses are contingent upon many factors that are specific to her such as her own upbringing, her personal rules about the value of cleanliness, how recently she has addressed this issue with her teen, whether or not company is coming over that evening, whether the mother is in graduate school learning the importance of moderating her emotions, etc. How an individual appraises a situation, person or event, forms the basis

for their emotions. Situations can be imbued with meaning based upon internal cues, as well. For example, if the mother feels her heart racing and face turning red when she walks toward the disorderly room, her body's physiological symptoms also impact her cognitions, thereby further influencing her emotional responses.

In the final phase of the emotion regulation cycle of response modulation, emotional expression that has already begun is modified (Gross & Thompson, 2007). Interventions that occur here are termed response-focused.” During this phase, individuals can influence their emotions behaviorally, physiologically or cognitively. Behaviorally, emotions can be modulated by choosing not to express them or how much of an emotion is to be expressed and in what manner an emotion is expressed. In the ongoing example, after the mother has entered the child's room (situation selection), noticed its state of uncleanness (attentional deployment), found herself thinking thoughts leading to anger (appraisal), she can choose to what degree and how she will experience and express her emotion(s) (response modulation).

As described, the process of the emotion cycle appears to be a linear one, but in fact it is more complex than that. As a person attends to one situation, person or event, other stimuli are simultaneously occurring. For example, after a person has an emotional reaction to something, his/her emotional reaction can in itself be a precipitant that creates a new emotional event. Additionally, there may be more than one person, event or situation that an individual is responding to at any given time. In the example of the mother with the teenager, perhaps while looking into the untidy room her toddler spills a bowl of Cheerios, which is a new situation to which she must respond. This

simultaneous occurrence may also influence how she responds to the situation with her teenager. The mother may then have an emotional response to *how* she responds to her teenager and to her toddler (e.g., shame for “blowing up” over spilled cereal, dejection because she feels like a failure as the parent of a teenager who keeps a messy room, etc.). If other people witness the emotional responses, this, too, can create a new emotion cycle with its own features and outcomes.

Overall, the emotion cycle is a five step process that has two categories where interventions can be employed: antecedent-focused, which occurs during the first four phases of the cycle or response-focused, which occurs in the last phase (Gross & Thompson, 2007). In the current investigation, the emotion regulation intervention can be used as either an antecedent-focused strategy or a response-focused strategy. When individuals have been trained to recall music in their mind before their thoughts have given rise to the full effect of their emotions, the intervention is antecedent-focused. When individuals are in the fifth stage of the emotion cycle and already experiencing an emotion with all of its features, they can recall the spiritual music in order to modulate their emotions, thus entailing a response-focused intervention.

This section covered the emotion regulation cycle and how it pertained to the present investigation. In the upcoming section, various factors that contribute to emotion dysregulation are reviewed. These factors include: a predisposition to responding negatively to one’s internal experiences, hypersensitivity to internal physiological sensations, lack of clarity about emotions, lack of awareness about emotions, judgmental/criticalness of one’s emotions, and inadequate strategies for dealing

effectively with one's emotions. It is the last category that is particularly salient to the present investigation as the intervention utilized herein is an emotion regulation strategy. Therefore, the adaptive and maladaptive emotion regulation strategies are described in detail.

Factors Contributing to Emotion Dysregulation

Within the previously described emotion cycle, emotion dysregulation occurs when individuals use the wrong kind of emotional expression for a given context, or when the emotions expressed are too strong or are not strong enough given the circumstance (Kring & Sloan, 2010). Although all people at times find themselves handling their emotions improperly, when emotion dysregulation occurs frequently, it can result in the creation and maintenance of anxiety and mood disorders (Aldao et al., 2010; Barlow et al., 2011; Beck et al., 2006; Green et al., 2007; Kring & Sloan, 2010; Linehan et al., 2007; Roemer et al., 2009; Salters-Pedneault et al., 2006; Tsypes, Aldao, & Mennin, 2013; Tull, 2006; Turk et al., 2005).

There are several factors that contribute to the etiology and maintenance of emotion dysregulation. One of the factors identified in previous research is that some individuals with psychiatric disorders have a predisposing negative reaction to their own internal responses; in other words, they have a fear of their own emotions (Linehan et al., 2007; Olatunji, Moretz, & Zlomke, 2010; Turk et al., 2005). For example, in a study by Turk et al. (2005), 766 undergraduate college students participated in a study in which they were given several psychometric tests to identify those who had generalized anxiety

disorder (GAD) or social anxiety disorder (SAD). Those who did not have a diagnosable mental disorder served as control subjects. Of those tested, 68 met the criteria for GAD and 105 met the criteria for SAD (43 individuals met the criteria for both disorders and were excluded from the study). The remaining 550 participants served as normal controls. The subjects were also tested on three measures pertaining to emotion regulation which assessed heightened emotional sensitivity, lack of clarity about emotions, negative reactions to the internal sensation of emotions, and maladaptive emotional responses. Results indicated that individuals with GAD and SAD reported having more fear of depression, anxiety, anger, and positive emotions than did controls.

Another potential factor contributing to emotion dysregulation is that some people appear to possess a biological sensitivity to their internal experiences that makes them hypersensitive to the physiological sensations that accompany their emotions (Barlow et al., 2011; Decker, Turk, Hess & Murray, 2008; Linehan et al., 2007; Tull, 2006). In the aforementioned study by Turk et al. (2005), the individuals with GAD reported experiencing their emotions more intensely than those with SAD or the control group. Similarly, in a study by Decker et al. (2008), wherein subjects were asked to complete a diary of each day's most intense emotional experience, subjects who had been diagnosed with GAD reported more intensely experiencing their emotions than those who did not have a psychiatric diagnosis.

An additional cause contributing to emotion dysregulation may be that some people lack clarity about their emotions (Linehan et al., 2007; Pandey, Saxena, & Dubey, 2011; Salters-Pedneault et al., 2006; Saxena, Dubey & Pandey, 2011). For example, in a

study by Saxena et al. (2011), 288 participants were evaluated using five measurements pertaining to alexithymia, general well-being, difficulties in emotion regulation, and overall mental health. The results indicated that difficulties in regulating emotions and in communicating about one's emotions have an inverse relationship to health and well-being. Individuals who had difficulty identifying their feelings, who had a lack of emotional clarity and insufficient emotion regulation strategies, evidenced significantly lower levels of health and well-being. In the previously cited study by Turk et al., (2005), individuals with GAD and those with SAD also had less clarity about their emotions than did the control subjects, and those with GAD had more difficulty describing their emotions than did the control subjects. The following studies also provide evidence for the robust link between mood and anxiety disorders and emotion regulation problems.

In a study by Pandey et al. (2011), the authors tested 27 individuals diagnosed with alexithymia and 26 without alexithymia on self-report measures pertaining to their mental health and their ability to regulate their emotions. The results indicated that those with alexithymia had significantly greater problems regulating their emotions than did those who did not have alexithymia.

In a study by Mennin, Heimberg, Turk, and Fresco (2005), the authors found that individuals with GAD had a poorer understanding of emotions than did controls. However, contrary to these results is the study reported by Decker et al. (2008) in which the participants diagnosed with GAD did not show a significant difference from control subjects in their ability to clearly identify their emotions. Because this study was

contrary to previous studies, the authors speculated that those “with GAD may think about their ability to differentiate emotions in a biased manner and give poorer self-reports than their capabilities actually suggest” (p. 491).

A study by Salters-Pednesault et al. (2006) similarly found that those with GAD did not have difficulty with emotional awareness. They hypothesized that while those with GAD may have emotional *awareness*, they may not have emotional *clarity* and that their awareness may or may not be beneficial. However, this hypothesis is contraindicated in Decker et al.’s (2008) study. These differences have been elucidated by Roemer et al., (2009) when they speculated that *quality* of emotional awareness may be more relevant to clinical manifestations of anxiety and depression than awareness or clarity. Individuals who are judgmental and/or critical of their emotions may engage in maladaptive emotion regulation strategies such as rumination and avoidance which contribute to pathology (Roemer et al., 2009). This important difference in emotional awareness will be expanded upon in the section on therapeutic interventions that utilize mindfulness-based treatment regimens.

Another aspect that contributes to difficulties in emotion regulation may be that some people have not developed adequate strategies for coping with their emotions (Aldao et al., 2010; Borkovec, Hazlett, & Diaz, 1999; Brockmeyer et al., 2012; Linehan et al., 2007; Salters-Pedneault et al., 2006). All individuals possess conscious and unconscious strategies that they employ to up-regulate, down-regulate, extinguish or maintain their emotions (Koole & Rothermund, 2011). Since emotions are a part of everyday life and occur frequently throughout each day, the strategies utilized to regulate

emotions make a significant contribution to mental health. To date, six categories of emotion regulation strategies have been identified. Three of these strategies are generally considered adaptive (cognitive reappraisal, problem-solving and acceptance), and three are generally considered maladaptive (suppression, rumination and avoidance) (Aldao et al. 2010). Overall, these adaptive strategies are associated with positive outcomes such as reduced negative affect, decreased pain, positive interpersonal relations, and lower levels of adverse cardiac reactivity (Aldao & Nolen-Hoeksema, 2012). The following section describes the six emotion regulation strategies that people use to regulate their emotions.

Adaptive Emotion Regulation Strategies

Cognitive reappraisal. The adaptive emotion regulation strategy of cognitive reappraisal is defined as changing one's thoughts about a stressful situation from a negative viewpoint to a benign or positive interpretation (Aldao & Nolen-Hoeksema, 2010). Research indicates that this method of emotion regulation is correlated with the experience of more positive emotions, greater interpersonal functioning, and overall well-being (Gross & John, 2003). Furthermore, the use of cognitive reappraisal as an emotion regulation strategy has been found to distinguish between clinical and non-clinical populations (Garnefski et al., 2002). Cognitive reappraisal is an example of the philosophical viewpoint that states "It is not the events themselves that matter, but rather

our interpretation of those events” (Epictetus, circa 400 A.D.) and is in keeping with the tenets of cognitive behavioral therapy (Beck, Rush, Shaw, & Emery, 1979).

Problem solving. Another adaptive strategy identified for regulating negative emotions is problem solving. Problem solving can include any strategy that proactively seeks to address a problematic/stressful situation (Aldao et al. 2010). Strategies in this category tend to be behavioral.

Acceptance. In recent years there has been increased interest in Eastern religious practices and their application to the treatment of psychological disorders. Most notably, the Buddhist practice of nonjudgmental acceptance of one’s internal experiences has been identified as an adaptive emotion regulation strategy (Chambers, Gullone, & Allen, 2009). The practice of acceptance is the voluntary attention to one’s internal processes (cognitive, emotional, and sensory) without judgment or attempts to control those experiences (Farb, Anderson, & Segal, 2012). This mindful awareness and acceptance of one’s thoughts and feelings creates an opportunity for individuals to dispense with the use of maladaptive strategies such as avoidance and suppression, and instead allow their emotions and thoughts to enter and pass through consciousness without being impulsively reacted to or controlled. This Eastern philosophical viewpoint presupposes that thoughts and feelings are merely transient occurrences that may or may not be accurate representations of reality (Sipe & Eisendrath, 2012).

This section described the three positive emotion regulation strategies of cognitive reappraisal, problem solving and acceptance. The next section describes the maladaptive emotion regulation strategies of suppression, rumination and avoidance.

Maladaptive Emotion Regulation Strategies

On the opposite side of the spectrum of adaptive emotion regulation strategies are the maladaptive strategies of suppression, rumination/worry, and avoidance. This section describes each of these strategies and some of the research that has illuminated these methods for regulating emotions.

Suppression. Suppression occurs when individuals hide their internal experience of emotion (Arndt, Hoglund, & Fujiwara, 2013, p. 147). Research has found that expressive suppression is correlated with higher stress-related symptoms (Moore, Zoellner, & Mollenholt, 2008) and increased heart rate in response to an emotion-eliciting stimulus (Campbell-Sills, Barlow, Brown, & Hoffman, 2006). Furthermore, expressive suppression has not been found to actually attenuate the internal experience of emotions (Gross & Levenson, 1997; Koole, 2009).

Rumination. Rumination “is the tendency to repetitively focus on the experience of negative emotion and its cause and consequences” (Aldao & Nolen-Hoeksema, 2010, p. 975). Rumination has been linked to decreased social support, interference with effective problem-solving and behavioral strategies, and negative mood (Aldao & Nolen-

Hoeksema, 2010) and is related to the occurrence of anxiety and depression (Ehring, Fischer, Schnülle, Bosterling, & Tuschen-Caffier, 2008).

Avoidance. The third maladaptive emotion regulation strategy is avoidance wherein individuals try not to think about troubling stimuli. Those suffering from some of the anxiety disorders (particularly GAD) focus their worry content on verbal thought activity and not on images associated with the worry, whereas non-anxious individuals incorporate images into their worrying (Borkovec, Ray & Stober, 1998). It is hypothesized that verbal thought activity is used as a distraction that inhibits physiological activation so as to make the individual feel comfortable in the moment. Due to this verbal-thought activity and lack of imaginal exposure, the stimulus provoking the worry is never emotionally processed completely with images, and, therefore, the worry content remains unresolved. The anxious individual revisits the worry content again and again using the same verbal thought activity and the worry is never extinguished (Borkovec & Ray, 1998; see also Behar, Vescio, and Borkovec, 1999).

It has also been hypothesized that the internal verbal dialogue in those who use avoidance is less concrete than for those whose worry is accompanied by its attendant images which helps maintain anxious meanings and interpretations (Behar et al., 1999). When anxious individuals rely on verbal thought activity to process their worrisome stimuli, they do so in order to avoid negative feelings and increased physiological activation. The problem is that although this yields temporary relief, in the long run, there is increased sympathetic activation, a rebound in negative emotions, memory

difficulties (Aldao & Nolen-Hoeksema, 2012), decreased social support (Aldao & Nolen-Hoeksema, 2012), and increased symptoms of anxiety, depression and discomfort (Aldao & Nolen-Hoeksema, 2010; Ball et al., 2013). Purposeful avoidance (including behavioral, emotional, and cognitive) and suppression are *generally* counterproductive and may be a significant factor in the etiology and maintenance of various disorders (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). A study conducted by Wegner, Schneider, Carter, and White (1987) clarifies this.

Wegner et al. (1987) arranged two experimental conditions in which subjects were assigned either to an initial suppression group or an initial expression group. In the initial suppression group, participants were told not to think of a white bear. They were then told to speak into a recorder continuously for 5 minutes about every thought that came to mind. In the initial expression group, the participants were told the phrase white bear and were told to speak into a recorder continually about all of their thoughts with no limitations in place. In the second half of the experiment the subjects in the initial suppression group were told they could think of anything and to record their thoughts as they came to mind. Those in the initial expression group were then instructed not to think of a white bear and to record their thoughts. The results indicated that those individuals who were in the initial suppression group in the first condition had more thoughts of the white bear when they were placed in the expression group secondly than did those subjects who initially were allowed to think of anything but only subsequently were told they could not think of a white bear. This experiment gave rise to what is termed the rebound effect.

The rebound effect refers to the idea that if thoughts are suppressed, those thoughts will later come back with a greater potency and number than if they were not suppressed (Wegner et al., 1987). A study by Campbell-Sills et al., (2006) provides support for this. The authors placed research participants who were currently diagnosed with a mood or anxiety disorder in either a suppression group or an acceptance group and gave instructions to either suppress their emotions or accept them as they watched an emotion-invoking film. Several physiological measures were taken to measure cardiac, respiratory and electrodermal domains. Results indicated that those who were told to suppress their emotions showed an increase in heart rate and negative affect following the showing of the film in comparison to the acceptance group. There were no significant differences between the groups in skin conductance or respiratory sinus arrhythmia.

Apparently, the mechanism behind the rebound effect is that “simultaneously, following the onset of the intention to suppress, an ironic monitoring process is initiated that scans the contents of consciousness for any trace of the unwanted thought” (Macrae, Bodenhausen, Milne, & Jetten, 1994, p. 809). When suppression is used, the unplanned distracting thoughts (such as “think of shoes, socks, walls, ceiling tiles,” etc.) tend to multiply, and then they become paired with the initial worrisome thought. These environmental cues later draw the person back into thinking about those things when they come into contact with them. “The context turns from distracter to a powerful reminder of the unwanted thought” (Wegner, Schneider, Knutson, & McMahon, 1991, p. 150). One can readily see how quickly many associations would be paired with the initial unwanted thought, making its reemergence even more certain in a variety of situations.

Another study by Wegner et al. (1991) supported this conclusion. Forty-seven undergraduate students were randomly assigned to an initial suppression condition or an initial expression condition and, as in the previous Wegner et al. (1987) experiment, were told initially to either suppress the thought of a white bear or express any thoughts that came to mind, including thoughts of white bears. After the initial session, the conditions were switched and subjects were told to either suppress or express their thoughts, including those pertaining to white bears. This occurred for two 5-minute sessions. During the experimental conditions, a series of color slides played on the wall directly in front of each subject. The subjects were told that the slides were intended to help with any boredom they felt while participating in the experiment. The slides contained pictures of either classroom scenes, such as desks, students in a lab, etc., or of household items such as coffee pots, refrigerators, etc. For all subjects the slides were shown in the alternate condition and the slides were counterbalanced across conditions. The experimental design was an A-B-A design. The experimenters kept track of all white bear mentions in all conditions as well as mentions of the slide pictures and if they occurred before or after the mention of a white bear in order to determine if the white bear served as a cuing index. As in the previous Wegner et al. (1987) study, the results indicated that there was a significant rebound effect for those individuals who were initially placed in the thought suppression group but not for those who were initially placed in the thought expression group. Furthermore, the cuing index indicated that those in the initial suppression group paid more attention to their environment (i.e., the pictures

in the slides) than did those in the expression group and the environment served as strong reminders (cues) of a white bear.

In the study by Wegner et al. (1987), the researchers also tested the hypothesis that having a planned distractor (instead of latching onto anything in the environment) would alter the pattern of the rebound effect. In the second half of the 1987 experiment, the subjects were told not to think about a white bear and instead to think about a red Volkswagen. The rebound effect was noted only for those who were not given a particular distractor upon which to focus, but for those who had a distractor, no rebound effect was observed. In fact, those who were given a planned distractor showed thought patterns similar to those in the group that were told they could think about whatever they wanted (expression group). Based on these findings, it may be concluded that a single distractor may attenuate the rebound effect which is a relevant conclusion in terms of the present study.

To summarize, emotion regulation strategies can generally be described as either adaptive or maladaptive. There are caveats, however, to labeling emotion regulation strategies as strictly adaptive or maladaptive. For example, a study by Aldao and Nolen-Hoeksema (2012) found that of the two categories of strategies for handling emotions, maladaptive strategies were more predictive of psychopathology (including depression, anxiety, and substance misuse) than were adaptive strategies predictive of a negative correlation to psychopathology. However, the researchers also found that there was an interaction effect in that when the use of maladaptive strategies was at low levels, adaptive strategies were unrelated to psychopathology. However, when high levels of

maladaptive strategies were used, greater levels of adaptive strategies were related to lower levels of pathology. The researchers concluded that the use of maladaptive and adaptive emotion regulation strategies is not always a black-and-white issue; rather, flexibility and context must also be considered (see also Aldao & Nolen-Hoeksema, 2010).

The importance of flexibility and context is emphasized in the empirical literature related to emotion regulation (i.e., Aldao, 2013; Gratz & Roemer, 2004; Sheppes, Scheibe, Suri, & Gross, 2011). For example, at times it would not be a healthy choice to use the adaptive strategy of cognitive reappraisal when the situation calls for problem solving. For instance, if a wife finds substantial evidence that her husband is having an affair, it would not be in her best interest to reframe or reappraise the information, but would instead be more beneficial if she used the strategy of problem-solving in order to decide what steps to take in response to the situation (Aldao, 2013). In short, the ability to use flexibility when choosing which strategy to use is an important component of mental health (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004).

The empirical literature also reflects that it is a function of good mental health to have a variety of emotion regulation strategies at one's disposal in order to successfully adapt to the changing demands of one's environment and also to maintain behaviors that are congruent with one's long-term goals (Sheppes et al., 2014). For example, at times it is healthy to confront slights and provocations in one's most intimate relationships, but doing so every time would likely eventually have a deleterious effect upon those

relationships. Therefore, context is key and “successful adaptation is linked to the ability to flexibly enhance or suppress emotional expression” (Bonanno et al., 2004, p. 485).

Research by Turk et al., (2005) and Mennin et al. (2005) found that individuals who were diagnosed with GAD reported less ability to repair their negative moods than did controls (i.e., they did not have emotion regulation strategies that were able to meet the challenges of their environmental demands). Research by Salters-Pedneault et al. (2006) found that deficits in emotion regulation strategies were significantly higher in those with GAD symptoms than those without. Although Decker et al. (2008) found that those with GAD did not differ from controls in their self-reported use of emotion regulation strategies or the frequency with which they used them, the strategies that were used were done so in a maladaptive manner and may not have been appropriate for the context (see also Aldao & Nolen-Hoeksema, 2010).

This concludes the section presenting a case for a transdiagnostic nosology for mood and anxiety disorders. Overall, the aforementioned discussion provided support for the idea that the mood and anxiety disorders have a common link: emotion dysregulation. Whether the emotion dysregulation occurs in the form of hypersensitivity to emotions, lack of clarity about or awareness of emotions, judgmental/critical view of emotions, fear of emotions, or ineffective strategies of emotion regulation, difficulties with emotion are common to all. Table 2.1 provides a summary of the themes explicated in this section and the empirical research supporting them.

Table 2.1

Findings of Emotion Regulation Studies

Type of Emotion Regulation Dysfunction	Authors, Year of Study
Heightened emotional intensity	Decker, Turk, Hess, & Murray, 2008; Turk, Heimberg, Luterek, Mennin, & Fresco, 2005
Lack of clarity about emotions	Turk et al., 2005; Saxena, Dubey, & Pandey, 2011; Pandey, Saxena, & Dubey, 2011; Mennin, Heimberg, Turk, & Fresco, 2005
Inability to describe emotions	Turk et al., 2005
Fear of emotions	Turk et al., 2005
Inability to repair negative emotions	Turk et al., 2005; Pandey, Saxena, & Dubey, 2011; Salters-Pedneault, Roemer, Tull, Rucker, & Mennin, 2006; Mennin et al., 2005
No difference between control subjects and those with GAD in emotional awareness	Decker et al., 2008; Salters-Pedneault et al., 2006

Section Summary

This concludes the first section of the literature review covering emotion regulation. It began with a review of research linking comorbidity among psychiatric disorders to problems in emotion regulation, supporting a case for a transdiagnostic nosology. The phases of the emotion regulation cycle were discussed. A description of emotion regulation strategies was provided as well as their effects upon psychological and physiological functioning and the factors that may predispose the use of these

strategies. The importance of planned distractors as a counter to avoidance or emotion suppression in the regulation of emotion was also provided.

In the second section of the literature review, the current empirically-based treatment methods for emotion regulation are described. The current study's adaptation within these methods will be developed at the end of the review.

Empirically-Based Treatment Methods for Emotion Regulation

In this section, the empirically-based treatment methods for emotion regulation are reviewed, and the research supporting these methods is discussed. Additionally, the current study's intervention is explored in terms of its compatibility with current therapeutic regimens.

The goal for most treatments that target emotion regulation is not the elimination of negative emotions but is to develop the ability to influence emotions so that they can adaptively meet environmental demands (Aldao, 2013). Treatments that target emotion regulation can focus on any or all of the following dimensions of emotion: awareness, understanding, acceptance, and learning to respond in line with personal goals. Effective emotion regulation strategies also teach individuals to take into account context and to be flexible in their use of these strategies (Pandey et al., 2011). What proceeds is an examination of the empirically-based treatment methods for emotion regulation including transdiagnostic cognitive-behavioral therapy, acceptance and commitment therapy, acceptance based behavioral therapy, and the unified protocol for emotion regulation.

Transdiagnostic Cognitive-Behavioral Therapy

Traditional cognitive-behavioral treatment (CBT) delivered for specific diagnoses has demonstrated effectiveness for the indirect reduction of symptoms for comorbid anxiety and depressive diagnoses; although, such effects have been fairly modest with only approximately 41.4% of individuals demonstrating remittance of their comorbid condition post-treatment (Norton, 2012b). Some authors have proposed that Transdiagnostic CBT (TCBT) may hold an advantage over diagnosis-specific CBT in reducing comorbidity because the patients' underlying pathological mechanism (emotion dysregulation) is targeted and not just the symptoms of the primary diagnosis.

TCBT includes psychoeducation pertaining to the physiological, behavioral and cognitive aspects of anxiety and mood disorders, cognitive restructuring, exposure (including interoception), homework, and plans for posttreatment success. The following is a presentation and analysis of selected research related to the effectiveness of TCBT for mood and anxiety disorders.

In a study for anxiety disorders conducted by Norton (2004), 23 participants who had a primary diagnosis of an anxiety disorder were placed in either a TCBT group or a waitlist control condition. Of the 23, eight had a comorbid depressive diagnosis. Those who participated in the 12-session TCBT group evidenced significant reduction of anxiety symptoms compared with the waitlist control group. Also, there was a significant reduction in depression symptoms for those in the TCBT condition compared with those in the control group.

In a follow-up study, Norton and Hope (2008) recruited 52 subjects to participate in the same type of TCBT as in the previous study but this time without a control group. Results were consistent with the previous study as subjects who completed treatment indicated significant reductions in anxiety to the point of falling outside the range of clinical severity by the end of treatment. The authors also found that, regardless of the type of anxiety disorder being treated, all diagnoses evidenced significant reductions in anxiety symptoms post-treatment.

In a randomized clinical trial by Norton (2012b), 87 participants were placed in either a TCBT condition or a comprehensive relaxation-training (RLX) group. Results indicated that both groups showed significant reduction in symptoms of anxiety. Furthermore, those in the TCBT condition showed comparable reduction in symptoms to those in studies on traditional CBT and showed equally significant effects across primary and secondary diagnoses. The authors stated that “the current study was not designed to compare outcomes in RLX by diagnosis, and therefore not powered to evaluate the differential efficacy of RLX” (p. 515).

In another study conducted by Norton (2012a), 87 participants with a principal diagnosis of an anxiety disorder were randomly assigned either to a TCBT group or an applied relaxation training group. Findings indicated that both treatment groups were equally effective in reducing anxiety disorders. Furthermore, there was no difference between the kinds of anxiety disorders that responded well, indicating the transdiagnostic nature of the disorders.

In a subsequent study, Norton and Barrera (2012) compared the efficacy of a group TCBT with diagnosis-specific group CBT using 46 participants with anxiety disorders. Results indicated significant improvement of symptoms in both groups and across diagnoses, again supplying evidence of a transdiagnostic principle at work.

In 2013, Norton et al. examined data from three previous trials of TCBT. The authors studied the effectiveness of TCBT on comorbid diagnoses and found that following treatment 66.7% “no longer met criteria for a clinically severe comorbid diagnosis at posttreatment, a rate higher than that associated with most trials of diagnosis-specific CBT for anxiety disorders used as benchmarks” (p. 168).

Another research study that supported TCBT was conducted by Berking, Ebert, Cuijpers, and Hoffman (2013), which included 423 inpatients who were diagnosed with major depressive disorder. The participants were randomly assigned to either a standard CBT treatment regime or enhanced CBT, which added emotion regulation skills training to traditional CBT (CBT-ERT). Results indicated that those in the CBT-ERT condition had significantly greater symptom reduction and negative affect reduction and showed an increase in general well-being compared to traditional CBT.

The Internet is becoming a fast-growing forum for the delivery of psychotherapy and studies on the effectiveness of CBT in this realm are emerging. Internet-based treatments can include lessons that are read online, group forums for discussion, homework assignments, reminder emails, etc. Additionally, participants in these studies may be given weekly phone or email consultations with clinicians (Dear et al., 2011). In an open trial of an Internet-based CBT (iCBT) conducted by Dear et al. (2011), 26

individuals who demonstrated significant anxiety and depressive symptoms on several psychometric testing measures participated. Results revealed statistically significant reductions in symptoms in their primary and comorbid conditions.

The aforementioned studies provide support that TCBT is as effective and, in some cases, more effective than traditional CBT. When TCBT is used to treat anxiety disorders in general, it is able to effectively diminish a variety of symptoms.

Furthermore, when this treatment method is utilized to treat a primary disorder, it often produces clinically significant changes in any comorbid conditions, as well.

Mindfulness-Based Therapy

Mindfulness-based practices have an opposing underlying theoretical viewpoint to CBT that delineates their methodology. In CBT it is assumed that all thoughts have some kind of existence and that existence requires action (Chambers et al., 2009). CBT encourages the challenging of certain distressing thoughts that cause emotional turmoil in order to determine the thoughts' factual merit. Mindfulness-based interventions, on the other hand, presuppose that thoughts are merely fleeting occurrences that pass through the mind that do not always necessitate action (Hayes, Strosahl, & Wilson, 2003). In other words, "thoughts and behaviors deemed useful are given energy, and those deemed unhelpful are simply not identified with, which is distinctive from cognitive reappraisal" (Chambers et al., 2009, p. 567).

As described previously, a critical distinction was made by Roemer et al. (2009) regarding how mindfulness-based treatments work to alleviate anxious and depressive

symptoms. They stated that mere awareness of emotions is not enough if not joined with acceptance of those emotions so that there is not a critical judgment of emotional states. Mindfulness-based treatments focus on the present moment in a nonjudgmental manner with an openness and curiosity about one's internal experiences (Brewer, Bowen, Smith, Marlatt, & Potenza, 2010). The following is a presentation and analysis of selected research related to the effectiveness of mindfulness-based therapies for mood and anxiety disorders.

In one of two studies designed to test this distinction, Roemer et al. (2009) gave 395 college students several testing measures designed to assess level of emotional acceptance and emotion regulation difficulties and measurements designed to measure mood and anxiety disorders. Results supported their hypothesis that GAD symptom severity was significantly correlated with difficulties in emotion regulation, and negatively correlated with acceptance and awareness of emotions.

In the second study, Roemer et al. (2009) tested a clinical population who were seeking treatment for anxiety with a principal diagnosis of GAD. A nonclinical control group was included in the research. All participants were given various measures to test their acceptance and awareness of emotions and difficulties in emotion regulation as in the previous nonclinical population study. As hypothesized, results indicated that the clinical group had lower levels of mindfulness of emotions and emotional acceptance as well as more difficulty with emotion regulation. The authors indicated that mindfulness-based treatments are thought to increase the ability to regulate emotion by decreasing

rumination, avoidance, and fusion with emotional states and by increasing healthy emotional responsiveness.

In a study by Britton, Shahar, Szepeswol, and Jacobs (2012), 52 participants in full or partial remission from recurrent depression were randomly assigned to a Mindfulness-Based Cognitive Therapy (MBCT) group or a waitlist control group for a period of eight weeks. Those in the MBCT group showed significant decreases in anxiety scores across several measures in comparison to the control group. Furthermore, it was found that changes in anxiety mediated the effects of decreased depressive symptoms significantly. The authors concluded that “improvements in anxiety regulation reliably (although partially) mediated the effects of MBCT on depressive symptoms” (Britton et al., 2012, p. 374).

Authors Arch and Ayers (2013) delineated some important distinctions between CBT and mindfulness-based therapies. First, CBT focuses on thought content whereas mindfulness- and acceptance-based interventions focus on the internal experience of emotions and thoughts. In addition, while CBT focuses on mastery and control, mindfulness focuses on acceptance of internal states. These authors concluded that these differences in treatment focus may account for the effectiveness of one therapy over another in different individuals.

To test this idea, Arch and Ayers (2013) used a sample population of 105 veterans who met the criteria for the diagnosis of any anxiety disorder. Of the initial group, 71 completed at least one post-treatment follow up and were included in the analysis. Subjects were randomly assigned to a mindfulness-based stress reduction (MBSR) group

or a CBT group for 10 sessions. Results indicated that both treatment methods provided statistically significant relief of anxiety symptoms. As hypothesized by the authors, those individuals with absent or low-level depressive symptoms benefited more greatly from CBT than MBSR. MBSR outperformed CBT at follow-up but not for those who had more severe depressive symptoms. The results from this study supported earlier research by the same authors (Worlitzky-Taylor, Arch, Rosenfield, & Craske, 2012, as cited in Arch & Ayers, 2013) that ACT alleviated more symptoms for individuals who did not have a comorbid mood disorder than did CBT. The authors speculated that the difference in outcome could be due to the fact that ACT and MBSR caused individuals to focus more on entire internal experiences while CBT targeted anxiety only in these research trials. Also, the authors hypothesized that MBSR may be more effective for those with comorbid diagnoses because of its focus on teaching individuals to distance themselves from their thoughts, which may be a central feature responsible for treating depression.

Acceptance-Based Behavior Therapy

Emotion regulation treatments for anxiety disorders (and in particular GAD) are based upon theoretical hypotheses about their etiology. Acceptance-based behavior therapy (ABBT) is based upon Borkovec's Avoidance Model of Worry which, as discussed earlier, presupposes that rumination is caused by the avoidance of mental images of worry content. ABBT focuses on psychoeducation, exposure, self-monitoring, cognitive restructuring, relaxation, present-moment focus, acceptance and expectancy-free living (Behar, DiMarco, Hekler, Mohlman, & Staples, 2009; Borkovec, Hazlett-

Stevens, & Diaz, 1999). The following is a presentation and analysis of selected research related to the effectiveness of ABBT for mood and anxiety disorders.

In a study by Treanor, Erisman, Salters-Pedneault, Roemer, and Orsillo (2011), individuals with GAD who were treated with ABBT reported significantly fewer difficulties in emotion regulation than did those in a waitlist control condition. These effects were maintained at three and six months follow-up assessments.

In an open trial by Roemer and Orsillo (2007), the authors tested 16 individuals with a principal diagnosis of GAD. All participants were given measures assessing level of emotional acceptance and difficulties with emotion regulation. The participants were treated using ABBT. Results of the treatment indicated statistical significance with large effect sizes in all of the following: decreased GAD symptoms and severity, decreased depressive symptoms, decreased experiential avoidance and decreased fear of emotions and overall increased quality of life.

In a study by Hayes-Skelton, Roemer and Orsillo (2013), 81 participants with a principle diagnosis of GAD were assigned to either an ABBT group or an Applied Relaxation group. Both groups showed significant reduction in GAD symptoms and maintained improvement at follow-up.

A study by Wolgast, Lundh, and Viborg (2011) tested 94 subjects using two emotion regulation strategies. The subjects were randomly assigned to one of three experimental conditions in which negative emotion-eliciting film clips were shown. In the Acceptance group, subjects were told to let their feelings emerge without trying to control them in any way. In the Reappraisal group, the subjects were instructed to think

about the film clips in a way that minimized their emotional reactions to them. In the third condition (the control group), subjects were merely told to watch the film clips and no instructions were given about their emotional reactions. Results revealed that those in the Reappraisal and the Acceptance conditions evidenced “significant reductions of subjective distress, physiological reactions associated with aversive emotions and behavioral avoidance” (p. 858) in comparison to the control condition.

This section covered research on ABBT for mood and anxiety disorders. As indicated, symptoms from both classes of disorders are improved when treated with this kind of therapy.

Unified Protocol for Emotion Dysregulation

The Unified Protocol (UP) for emotion dysregulation was developed in 2011 by Barlow et al. Like TCBT, the UP is based upon the premises that individuals who have one diagnosis often have a comorbid diagnosis, and that when the primary diagnosis is the target of treatment, symptoms across comorbid conditions often decrease substantially, as well (See, for example, Wilamowska et al, 2010). The UP is a treatment that teaches individuals how to adaptively use both positive and negative emotions. The treatment regimen of the UP consists of psychoeducation, training in mindful, nonjudgmental awareness of emotions, cognitive restructuring, education about the maladaptive use of avoidance, tolerance of physical sensations of emotions (including interoceptive exposure), and maintenance/relapse education. The following is a presentation and analysis of selected research on the effectiveness of the UP.

In a 2012 randomized controlled trial, Farchione et al. compared UP to a waitlist control group. Thirty-seven participants who had a principal diagnosis of an anxiety disorder were placed in one of the two groups. Three of the participants had a co-occurring anxiety diagnosis of equal severity to the principal anxiety diagnosis while 12 of the patients had a comorbid depressive disorder. Results indicated that those in the UP treatment condition evidenced significant decreases in their primary diagnosis symptoms as well as a reduction in their comorbid diagnostic conditions, compared to those in the waitlist control condition who did not evidence significant decreased symptoms. Those in the UP condition also demonstrated reductions in functional impairment.

In a study by Ellard, Deckersbach, Sylvia, Nierenberg, and Barlow (2012), three individuals were given the UP for treatment of bipolar disorder with a comorbid diagnosis of an anxiety disorder. Two of the three patients treated with the UP evidenced significant improvement on all affective testing measurements post-treatment. The third patient, while describing a positive benefit from treatment, suffered two severe losses near the end of treatment that caused a return of his depressive symptoms.

In another UP treatment study, an open trial of patients with a primary diagnosis of anxiety disorders with a comorbid secondary diagnosis was conducted. The authors found that 73% responded positively to the treatment and 60% achieved high end-state functioning. Participants continued to maintain treatment gains in the follow-up periods (Ellard, Fairholme, Boisseau, Farchione & Barlow, as cited in Barlow, et al., 2011).

This section reviewed several research studies on the effectiveness of the UP for emotion regulation. The current research on UP demonstrates that it is an effective form

of treatment for anxiety and mood disorders which has as its primary target emotion regulation.

Section Summary

This section covered the empirically-supported treatments for anxiety and mood disorders that target emotion regulation. The methods surveyed were transdiagnostic cognitive-behavioral therapy, acceptance and commitment therapy, acceptance-based behavioral therapy, and the Unified Protocol for Emotion Regulation. Although the treatments are different in terms of their delivery, all have demonstrated effectiveness in the treatment of depression and anxiety. This literature was presented to place the intervention explored in this study in its proper context as an adjunct, not a replacement, for effective treatments.

The underlying theoretical formulation for this study's spiritually-integrated music intervention is that it can be utilized at any point in the emotion cycle and can be implemented as either an antecedent-focused or response-focused strategy. The intervention can be used for cognitive reappraisal, as a planned distractor, and/or for acceptance of emotions. These adaptive strategies will serve to up-regulate, down-regulate or maintain emotions in order to bring about healthy emotional functioning. As stated previously, the healthy use of emotion regulation strategies is context-dependent; therefore, when, how and why the participants choose to implement the intervention will also be dependent upon the stimulus and the context.

The next section provides a presentation and analysis of selected research on music therapy as a method of emotion regulation for anxiety and mood disorders. It begins with a definition of music therapy and a brief history of some of the conditions it has been successful in treating. Next, several hypotheses are discussed as to why music therapy is effective. Following this, several studies that tested affect regulation using music therapy in clinical and nonclinical populations are reviewed. Finally, a case is made as to the need for more research into music therapy interventions for emotion dysregulation and why the present investigation is warranted.

Music Therapy

In recent years there has been renewed interest in holistic medicine which emphasizes treating patients in their entirety: mind, body and spirit (Barnes, Bloom, & Nahin, 2008). Holistic medicine falls under the taxonomy of noetic treatments, which are noninvasive methods of intervention and include complementary and alternative medicines (CAMS) (Lipe, 2002). Included in the category of CAMS is music therapy (Barnett & Shale, 2013).

Music therapy can be defined as “the controlled use of the influence of music on the human being to aid in physiological, psychological, and emotional integration of the individual during the treatment of an illness or disease” (Choi et al., 2008, p. 567). From this definition it can be deduced that the “controlled use of the influence of music” implies a wide array of intervention techniques emanating from various schools of psychological theory (e.g., psychodynamic, emotion regulation, cognitive-behavioral).

Music therapy can be further delineated into two categories: passive interventions (in which the participants listen to music) or active interventions (in which the participants play musical instruments) (Choi et al., 2008; Shale, Elkins, & Fisher, 2014). Music therapy in its various forms has been used for decades to treat a host of psychological conditions (Brandes et al., 2010; Choi et al., 2008; Mok & Wong, 2003; Pelletier, 2004; Sacks, 2006; Silverman, 2003; Wang et al., 2011). The following is a selection of research that supports this finding.

Sacks (2006) found that some individuals suffering from ticks and jerking motions related to Tourette's syndrome became composed and calm, free of ticks or spasms, when music was played. Mok and Wong (2003) found that patient anxiety was reduced prior to surgical procedures when a passive music therapy intervention was introduced. Brandes et al. (2010) reported that depressed patients had a significant reduction in depression symptoms after participating in a music therapy treatment program. Likewise, in a pilot study by Choi et al. (2008), participants experienced a reduction in their depression and anxiety symptoms after participating in a course of active music therapy. A study by Wang et al. (2011) demonstrated significantly improved depression scores for college students who participated in a group therapy music intervention. Finally, a meta-analysis conducted by Silverman (2003) on the effects of both passive and active music interventions for patients with psychosis found that both kinds of intervention were significantly effective in reducing psychotic symptoms.

The fact that music works to bring about improved psychological/physical health is not disputed, but how it works is. Some researchers contend that music is an effective intervention because it offers a distraction from painful emotional or physical stimuli (Mok & Wong, 2003; Nilsson, 2008; Sacks, 2003). Still, others believe that music causes pleasant memories to be activated when a person is distressed. These memories are said to soothe the individual and to override negative environmental stimuli (Gerdner, 1999; Gerdner, 2012). Others have pointed to the types of chemicals that are released in the brain and the brain structures that are affected by musical interventions as being the cause of treatment success (Blood & Zatorre, 2001; Blood, Zatorre, Bermudez, & Evans, 1999; Castillo-Perez et al., 2010; Gangrade, 2011; Koelsch, 2005; Mitterschiffthaler, Fu, Dalton, Andrew, & Williams, 2007). A meta-analysis of 52 articles pertaining to music, spirituality and health from 1973-2000 by Lipe (2002) offered several additional theories as to why music is therapeutic. Lipe found that some authors concluded that music is therapeutic because of its ability to “embody meaning and provide a mirror to our inner world” (p. 217), while others thought it was due to personal transformation or because it provides an opportunity for personal and spiritual growth. Still, other authors contended that music promotes healing by creating hope or because it allows for the creation of new identities. Some authors postulated that music is beneficial because it has “the power to open up our capacity for improvisation, and for developing new solutions to the challenges posed by chronic illness” (p. 218). For all the theories proposed, most concur that the power of music goes far beyond its aesthetic beauty (Smeijsters, 2008; Zatorre & McGill, 2005).

Music Therapy as a Treatment Intervention for Emotion Regulation

With the emphasis in recent years on the importance of affect regulation for depression and anxiety, some music therapy interventions have been designed to work directly in this domain. Investigators have noted that there is a paucity of research exploring this area (Uhlir, Jaschke, & Scherder, 2013). What follows is a presentation and analysis of a selection of these studies.

In a study by Thayer, Newman, and McClain (1994), the authors distributed open-ended questionnaires to 308 respondents soliciting information as to how the respondents changed their emotions when they felt nervous, tense or in a bad mood. The top three responses were in order of frequency: call, talk or be with someone (54%), control thoughts (51%), and listen to music (47%).

In a study by Thoma, Ryf, Mohiyeddini, Ehlert, and Nater (2012), 89 participants were asked to indicate how likely it would be that they would listen to certain types of music that were known to elicit specific emotional states such as anger, happiness, tranquility, etc., given an emotionally-laden situation. The authors found that not only did participants tend to select music that matched the emotion of a situation, but that their inherent styles of emotion regulation only impacted selection to a small degree (13.91% of the variance).

In 2010, Saarikallio conducted a qualitative study wherein 21 participants were interviewed about their experiences of self-regulation through the use of music. The researcher indicated that the participants used music to (a) maintain or up-regulate

positive emotions, (b) relax or feel revived/reenergized, (c) get in touch with their deepest emotions, and (d) change their mood by allowing them to forget their worries or unwanted thoughts (i.e., as a diversion/distraction strategy). A caveat to this was that some respondents indicated that when they had to listen to happy music when they were in a bad mood, it would serve as an irritant instead of as a mood lifter. The author hypothesized that “this may reflect the fact that it is not enough for the distracting music to simply sound happy but it needs also to be able to induce positive feelings” (p. 313). Some of the respondents indicated that changing their current mood was not usually their intention, but rather they chose music congruent with their current mood. Others chose music specifically to change their mood. This latter conclusion is particularly relevant to the method employed in the current study as the lyrics were Scriptural messages used to encourage, uplift, convey hope, and soothe during times of affect dysregulation.

In research conducted by Juslin and Laukka (2004), the authors asked respondents why they listened to music. The highest response rate was to “express, release, and influence emotions” and the second highest was to “relax and settle down” (p. 233). The authors found that their subjects used music both to change their mood and to match their mood.

In a qualitative study by Skånland (2013), in-depth interviews were conducted with 12 non-clinical participants regarding how they used their MP3 players to regulate their affect. The investigator found that music was used to alter or maintain current mood states, but that the participants did not always have a particular mood state that they were trying to achieve when listening to music. In fact, Skånland found that participants chose

music according to what felt right at the time, and then only after listening to a music selection were they clear about what it was they were initially feeling. Skånland concluded that music can be used in the service of healthy affect regulation by helping individuals get in touch with their emotions and then to move forward. As other authors have indicated (e.g., Aldao, 2013), when it comes to affect regulation, context matters and whether individuals use music to change their current mood or listen to music that is congruent with their current mood depends on the individual and the situation. Table 2.2 provides a summary of the aforementioned research findings.

Table 2.2

Summary of Studies on the Effects of Music on Mood

Effects of Music on Mood	Authors, Year of Study
Music was used to change mood (e.g., uplift, calm, distract, relax, reenergize)	Juslin & Laukka, 2004; Saarikallio, 2010; Thayer, Newman, & McClain, 1994
Music was chosen that matched the participants' current mood	Juslin & Laukka, 2004; Saarikallio, 2010; Thoma, Ryf, Mohiyeddini, Ehlert, and Nater, 2012
Music was used to help clarify or get in touch with emotions	Saarikallio, 2010; Skånland, 2013
Music was used to up-regulate positive emotions	Saarikallio, 2010

Section Summary

This section presented a definition of music therapy and provided support for it as a CAM for emotion regulation. Several studies were reviewed that tested affect regulation via music as their primary target. These studies provided support for music as an affect and mood regulator.

The following section describes spirituality as a second CAM for use in the treatment of affect regulation. Literature describing the effectiveness of spirituality in the treatment of mental health conditions is discussed and a case study is described supporting the intervention to be used in the present study.

Spirituality

A second CAM proposed in the present study was the use of a spiritual component for the treatment of emotion regulation. In recent years, there has been a renewed interest in the area of spirituality by secular psychology (Pargament, 2013). From an empirical perspective, there is mounting evidence suggesting that the integration of spirituality into counseling practice can contribute positively to the mental health of individuals who desire to integrate their faith and spirituality into treatment (Armento, McNulty, & Hopko, 2012; Brown et al., 2013; Kirkland & McIlveen, 1999; Koenig, 2004; Propst et al., 1992; Stanley et al., 2011; Tan, 2007; van Dierendonck & Mohan, 2006; Wade, Worthington, & Vogel, 2007).

Evidence that spiritual integration in psychotherapy is a valuable and important element of treatment for many people is evident in the number of scientific journals that focus on spiritually-related issues (e.g., *Journal of Spirituality, Psychology of Religion and Spirituality, Journal of Spirituality in Mental Health, Journal of Psychology and Christianity*). The following is a presentation and analysis of the extant empirical literature.

Spirituality as a Treatment Intervention

In a meta-analysis by Hook et al. (2010), 24 studies were reviewed that compared several types of spiritual treatment methods. Of the 24 studies, 10 were methods using Christian principles. The first three studies analyzed utilized Christian Accommodative Cognitive Therapy (CACT), which is cognitive therapy integrated with biblical teaching

and religious imagery. These studies compared CACT to a control condition for participants who were diagnosed with depression. The findings indicated that those in the CACT condition showed improvement in their depression over those in the control conditions. Hook et al. then reviewed five studies which compared (CACT) with Cognitive Therapy (CT). Neither therapy outperformed the other, and both types of treatment showed improvement in depression scores post-treatment. Finally, Hook et al. focused on determining if subjects with depression demonstrated clinically significant improvement post-treatment using Christian Cognitive Therapy (CCT) as compared to a non-treatment control group or CT. Two of the studies they reviewed found that subjects in the CCT condition ended treatment in the non-depressed range of scores on the Beck Depression at post-treatment; whereas, the control conditions did not. In one of the studies, both the CCT and CT groups evidenced clinically significant improvement.

In a meta-analysis of spiritually-oriented treatments for a variety of disorders, Richards & Worthington (2010) found that therapies utilizing spiritual principles were efficacious, having effect sizes ranging from .27 to .75 which is on par with secular therapies. However, the authors concluded that there was a paucity of studies involving spirituality and some of the existing studies are methodologically weak.

In order to address the research question in the present study, nonclinical participants described their experiences using spiritual songs to explicitly regulate emotion. According to Danny Akin, theologian and president of Southeastern Baptist Theological Seminary, singing spiritual songs not only causes an emotional reaction, but also edifies the mind and impacts the heart and soul of a person (personal

communication, 2014). Akin stated that the benefit of such music may be twofold in that it (1) aids in Scripture memorization (as was done in ages past when people did not have paper to write and record Scripture) and (2) is soothing. This view is grounded in several biblical passages including Ephesians 5:19, “Do not get drunk on wine which leads to debauchery. Instead be filled with the Spirit, speaking to one another with psalms, hymns, and songs from the Spirit” (New International Version [NIV]), and Colossians 3:16, “Let the message of Christ dwell among you richly as you teach and admonish one another with all wisdom through psalms, hymns, and songs from the Spirit, singing to God with gratitude in your hearts” (NIV). Also, I Samuel 16:14-23 describes David playing his harp for King Saul whenever he was tormented by an evil spirit which quieted and comforted the king each time David played. Therefore, from a biblical perspective, music is seen not only as artistically pleasing but also as instructional and medicinal.

In the present study, participants will use Christian songs to regulate affect during times of emotion dysregulation. A review of the literature unearthed only one study that combined these CAMS for treating emotion dysregulation. This case study is presented next.

Case Study

A case study reported by Khouzam, Ghafoori, and Nichols (2005), described a man (“Mr. A”) who suffered from severe social anxiety disorder. Previous attempts at social skills training, CBT, and exposure therapy met with limited, short-term success. While continuing to suffer from his disorder, Mr. A accompanied his sister to church where he heard a song entitled “Be Still, My Soul.” Mr. A was surprised at the profound

effect this song had on him. He looked up the words to the song when he returned home and began to memorize them. Mr. A reported that singing the song in his mind helped relieve his anxiety symptoms and awakened his previously-held religious beliefs. Whenever he felt the symptoms of anxiety coming upon him, he mentally recalled the song and found that he would “instantly experience remission of heart palpitations, gastrointestinal discomfort, muscle tension, and mental confusion” (p. 416).

Mr. A’s doctor performed a psychiatric evaluation and found that his anxiety was significantly decreased to a level considered “less than mild anxiety” (Khouzam et al., 2005, p. 416). Mr. A’s symptoms continued in remission and he was able to rejoin the army and to marry. Mr. A reported that, unlike cognitive-restructuring which caused him to have to rely on his own thoughts to deal with his fears, the hymn made him rely upon God, thus causing a quietness in his mind and a quelling of his anxiety.

This case provided preliminary information about how spiritual songs may be used to support affect regulation; however, more research is needed on this subject. The present study, described in the next chapter, will address this research gap by adding to the empirical literature on this important topic.

Section Summary

This section provided a context for the use of spiritual interventions in the treatment of mood and anxiety disorders. Additionally, support for the use of Christian therapy, when appropriate and desired by a counselee, was also presented. Included in this section was theological backing for the Scriptural texts utilized to support the

premises of this study. Finally, the one study found in the literature exploring this intervention, a case study, was detailed and the need for the present study was emphasized.

Chapter Summary

This literature review provides justification for the present research that explored the experience of using music/spiritual songs to support emotion regulation. The first section of the review presented empirical studies related to emotion regulation for mood and anxiety disorders. This section made a case for a transdiagnostic nosology for mood and anxiety disorders. It also covered research related to phases of the emotion regulation cycle, factors contributing to emotion dysregulation, adaptive and maladaptive emotion regulation strategies.

In the second section of the literature review, research-based literature on empirically-established treatment methods for emotion regulation were presented. This literature was covered to emphasize that the intervention used in this study does not stand alone but is explored as an adjunct to treatments that have already been empirically-validated. This section included the following treatments: Transdiagnostic Cognitive-behavior Therapy, Acceptance and Commitment Therapy, Cognitive-Based Behavior Therapy, and the Unified Protocol for Emotion Regulation. All of these treatments are effective, but, as indicated in chapter one, additional interventions are needed to supplement them.

The literature pertaining to two complementary and alternative methods of treatment (CAMS) for emotion regulation were covered in section three of the literature review. These CAMS included music and spirituality as they are the principal components of the intervention introduced in this study. Although there is research supporting the use of these CAMS, only one study was found that combined both of these to address dystonic affect.

This chapter provided justification for the present study. In the upcoming chapter, the methods used in this study are articulated. In particular, the study employed a qualitative method of inquiry to gain in-depth understanding of participants' experiences of recalling spiritual music during times of affect dysregulation as an explicit means of emotion regulation.

CHAPTER THREE: METHODS

Overview

The purpose of this study was to address the following research question: How did a select sample of individuals describe their experiences using a spiritually-integrated music intervention for emotion dysregulation? In order to provide an in-depth exploration of the mechanisms by which this intervention may work to regulate affect, qualitative analysis provided a well-suited method of investigation. The qualitative research method used in this study was Phenomenological Analysis (PA), as described by Moustakas (1994). This chapter presents the following: Research Design, IRB approval and Informed Consent, Research Participants, Procedure, Data Collection, Establishing Rigor, Limitations and Delimitations, and Analysis of Data.

Research Design

Phenomenological Analysis is concerned with the in-depth exploration of participants' perceptions of objects or events (Moustakas, 1994). This type of analysis originates from the philosophical standpoint of social constructivism where it is assumed that reality is based upon subjective interpretation; and it is, therefore, incumbent upon the researcher to understand each participant's perspective of an experience or phenomenon (Bloomberg & Volpe, 2012; Giorgi, 2012). Unlike scientific empiricism, qualitative analyses are not concerned with providing an explanation of causal factors, but instead the focus is on understanding the essence of a phenomenon.

Phenomenological research investigations are designed to study a small number of subjects on a particular issue in an exhaustive manner, usually through the use of personal interviews (Moustakas, 1994; Smith & Osborn, 2008). In the present study, the participants were interviewed using a semi-structured format in order to generate as much uncontrolled communication about this issue as possible. To this end, the questions posed were generally open-ended, allowing for the participants to comment fully on their lived experience with the phenomenon. The researcher was open to the natural flow and movement of the participants during the interview, thereby allowing each participant and the researcher to act together to provide clear descriptions of the phenomenon. In this form of inquiry, the participants are considered the experts on their own experiences and should, therefore, be given autonomy to “tell their own story” (Smith & Osborn, 2007, p. 59).

The philosophy of Husserl (1962) also shapes and defines this method of inquiry. Husserl contended that in order to understand the characteristics of a phenomenon, one must suspend assumptions about the issue in what is known as eidetic variation in order to get at the “universal” essence of a phenomenon (as cited in Larkin, Eatough, & Osborn, 2011, p. 323). However, later philosophers such as Heidegger and Merleau-Ponty posited that one is never free of personal perceptions and the best that can be done is to manage one’s interpretation of a phenomenon (i.e., hermeneutics) (Larkin et al., 2011). In the present investigation, the stance of “epoche” (Moustakas, 1994) was utilized so researcher biases and preconceived ideas about the music intervention would

be set aside in order to derive new knowledge, a fresh perspective as it were, of the phenomenon from the viewpoints of the participants.

IRB Approval and Informed Consent

An application to the International Review Board (IRB) was made and permission granted before any part of the study was undertaken. All of the participants were asked to sign an Informed Consent (see Appendix A) and were advised of any potential risks involved in participating in this intervention (e.g., analyzing their thoughts when they are dysregulated might cause them to experience painful emotions). Since the participants were audio-recorded during the interviews, informed consent was included about recorded data as indicated in section 8.03 of the Ethical Principles of Psychologists and Code of Conduct (APA, 2013b). All of the audio recordings and transcriptions were kept on a password-protected computer.

In order to protect identities, participants were asked to pick a pseudonym for themselves. The pseudonyms and actual names of participants were kept in a code book in a secure location in accordance with the Code of Conduct sections 6.02 (a) and (b) (APA, 2013b). All of the transcriptions contained the pseudonym in order to separate participants from their true identities. When the data was being transported, appropriate measures were taken to protect it. The raw data of this study will be maintained for seven years according to the Code of Conduct sections 6.01 (2), (3), and (5).5 (APA, 2013b).

The researcher notified the university professor from where the participants came of the nature of the intervention being employed and answered questions. The professor

was advised to refer any students with questions to the principal investigator and not to discuss the intervention with the participants during the three-week investigation.

Research Participants

Purposive sampling was used to intentionally select 10 research participants. In purposive sampling the research question that was being investigated was the basis upon which the sample is selected (Tongco, 2007). Purposive sampling involves intentionally selecting a portion of the population known to possess the characteristics of interest (Guarte & Barrios, 2006). In the present investigation, since the intervention was designed to explore how participants experience Christian music to regulate affect, the only criteria for inclusion were that the potential participants self-identify as being Christian and that they liked music. At the time of the investigation, the participants were students in an undergraduate counseling theories class at a Christian university who agreed to participate in the study in order to receive course credit. They were referred to the study by the professor of the class who was familiar with the research being conducted.

Procedure

This section describes the methodological procedures used in this study. Included in this section are: the Initial Consultation, Music Selection Process, Participant Record Keeping during the Study, Data Collection, Establishing Rigor, Trustworthiness, Transferability, Dependability, Limitations and Delimitations, and Analysis of Data.

Initial Consultation

After IRB approval was granted, participants were informed in a group setting of the nature and purpose of the study (see Appendix F for a detailed oration of instructions given to participants) according to section 8.01 of the Ethical Principles of Psychologists and Code of Conduct (APA, 2013b). At that time, Informed Consent was obtained (see Appendix A).

The participants were asked to take the DSM-V (APA, 2013c) Anxiety and Depression tests (see Appendixes C and D) in order to determine if they had pre-existing anxiety and/or depression conditions. All of the participants also completed a demographic survey (see Appendix E) to establish transferability.

The research participants were given the following instructions:

1. Select three Christian songs that are uplifting, encouraging, comforting, hope-inducing, or that cause attention to be focused on God.
2. Listen to the songs and memorize the lyrics over the course of one week. The participants were asked if they preferred to be called/emailed/texted in order to contact them to ensure they were progressing in memorizing their songs' lyrics.

At the end of the week, the researcher met with the class again and ascertained whether or not they had memorized the songs. Two of the participants indicated that they had memorized almost all of their songs' lyrics, and the eight others reported full memorization. The researcher decided that they had memorized enough of the lyrics to proceed.

After memorization, participants were given the following instructions:

1. Spend two days (in the morning and the evening) practicing the intervention when in non-stressful situations. They were also told to fill out the questionnaire entitled “Two Day Trial Period with the Musical Intervention” (see Appendix H).
2. For the next two weeks, during times of affect dysregulation, they were told to recall one or more of the Christian songs they had memorized and to play the song(s) through in their mind.
3. They were told to record on the “Music Record Keeping Log” (see Appendix B) how they felt before and after replaying the song(s) in their mind and their experiences with the intervention.

Participants were advised to recall one or more of their memorized songs at least one time per day, no matter how minor or major the affect dysregulation. One participant asked what to do if they did not experience any negative affect on any given day, and the participants were advised that they were to use the music intervention anyway and to record their experiences with it. The dates of each phase of the experiment were provided to the participants (see Appendix K).

The researcher called/texted/emailed each participant (according to their preferred method) after the first week to ask if they had any questions about how to do the intervention and to ensure that they were using it daily and recording their experiences.

Music Selection Process

The participants were asked to identify three Christian songs that they liked and considered to be one or any combination of the following: hope-inspiring, soothing, calming, comforting, encouraging, peace-giving, focused on God, and/or uplifting. The participants were explicitly told to choose songs of their liking as the research has demonstrated the importance of subject music preference (Bernatzky, Presch, Anderson, & Panksepp, 2011; Gerdner, 2012; Smeijsters, 2008; Blood & Zatorre, 2001).

Each participant was given a \$10 iTunes gift card and were asked to purchase the songs in the researcher's presence on their computer/phone. There were three participants who chose to have a copy of their three chosen songs on a CD. The researcher made the CD for the participants and delivered it to them the next day. Those participants were also given \$10 iTunes gift cards.

The participants were instructed to listen to the three recorded songs for the following week with the intent of memorizing the song lyrics. There were no parameters set upon the location or time of day in which the songs were listened to as long as they were able to focus their attention on memorizing the lyrics.

Participant Recording Keeping During the Study

At the time of the initial meeting, the participants were given the Music Record Keeping Log (Sosin, 2013, personal communication) (see Appendix B) and taught how to complete it. They were told that after the week in which they spent memorizing the lyrics to the three songs, they were to spend the next two weeks recalling those songs in

their minds whenever they become emotionally dysregulated. Each time after they recalled a song, they were asked to record their experience using the Music Record Keeping Log.

Data Collection

After the two-week period of using Christian songs to regulate emotion and using the Music Record Keeping Log, the researcher met individually with each of the participants and conducted in-depth interviews. These interviews lasted approximately 60 minutes each for the purpose of obtaining descriptive data on their experiences with the music intervention and to obtain the record logs.

A semi-structured interview protocol was used to guide rather than dictate the actual interview process (Smith & Osborn, 2007). This method is designed to allow each individual's perspective to unfold freely with little prompting. When using a semi-structured interview, although the questions are prepared in advance, there is freedom to follow the lead of the participants in order to glean the essence of the experience from each person. This format also allows the participants to bring up subject matter that the researcher had not considered (Smith & Osborn, 2007). The in-depth interviews were conducted utilizing open-ended questions which allowed for unrestricted exploration of the phenomenon. Key terms used in the questions were "how," "perceive," "describe," and "experience" (Moustakas, 1994, p. 107). The questions are provided in Appendix J.

Data Analysis

In the present investigation, the data analysis began with the transcription of the interviews. All of the interviews were transcribed within two weeks of conducting them. This process of transcribing the data soon after the interviews was vital as it allowed for the capturing of significant facial expressions, pregnant pauses, body posture, etc., and a deep and intimate familiarity with the participants' descriptions.

After the interviews were transcribed, each one was read through one at a time to get a sense of them in their entirety. A process of "horizontalizing" was employed in which all of the statements of the participants were initially treated with equal value (Moustakas, 1994). The research question guided the entire process, ensuring that the analysis adequately, correctly and clearly interpreted the data, a process known as bracketing (Larkin, 2013; Moustakas, 1994).

In several subsequent readings, a process known as "reflective commentary" (Shenton, 2004, p. 68) was utilized. This process entails writing reflections on the transcripts and referring to the Music Record Keeping Logs in order to gain a deeper understanding of particular incidences the participants referred to in their interviews. Notes were also made in the margins of the transcripts where specific questions were asked in order to identify similarities and differences among responses. Tables were constructed that represented these similarities and differences; quotations, and references to quotations were recorded to support the emerging findings. This type of analysis was done with each participant's transcript and logs. As analysis continued, remarks that were irrelevant to the phenomenon were discarded. Themes began to emerge and were

noted and psychological categories were then constructed to frame these themes in order to help clarify and interpret the raw data using a process known as “native variation” (Giorgi, 2012, p. 6).

Establishing Rigor

This section explains the methods used to establish rigor in this study. In qualitative inquiry, trustworthiness refers to the credibility and dependability of the research methods and findings (Bloomberg & Volpe, 2012) and is substantiated through rigor. The methods used to institute rigor and trustworthiness included: credibility, transferability, and dependability.

Credibility

The credibility of a qualitative study is similar to internal validity in quantitative inquiry and seeks to address the question, “Did the study measure what it intended to measure?” (Shenton, 2004). There are several ways to ensure the credibility of a qualitative study and many of these methods were employed in the present investigation. One aspect of ensuring credibility was applying correct operational measures for key terms. In the present study, this was accomplished in chapter one (see pages 11-15).

Credibility was also established by the use of triangulation of data, which is the use of several sources to enrich and enhance exploration of the phenomenon (Bloomberg & Volpe, 2012). For the present investigation, triangulation of data methods included: a demographic survey (see Appendix E), pre-intervention measures for anxiety and

depression (APA, 2013c; see Appendixes C and D), in-depth interviews with participants using an interview guide (see Appendix J), and the use of a recording log (see Appendix B).

Credibility was further established as the researcher engaged in *Epoche* (Moustakas, 1994). During the interviews the researcher allowed participants' answers to dictate the subsequent questions, followed their leads and, as much as possible, tried not to steer the participants in any particular direction. Further explication of this process is provided in Chapter Five.

Credibility was also strengthened by the use of "frequent debriefing sessions" (Shenton, 2004, p. 67) between the researcher and her chairperson which allowed for further analysis of the data. The debriefings also served to alert the researcher to any biases held regarding the intervention.

In addition to these methods of establishing credibility, member checks were used to confirm the findings. This entailed sending the written narrative of the data to the participants for review to ensure that their perceptions of the phenomenon were accurately represented in the analysis.

Credibility was also established by involving only participants who were willing to participate and who were given the opportunity to withdraw at any point in the study (Shenton, 2004). The credibility of the study was strengthened by the use of volunteers who were not obligated to report anything other than their actual experiences of the intervention (Shenton, 2004). Finally, credibility was established through the rigorous process of data analysis which was described in this chapter.

Transferability

The concept of transferability in qualitative research is similar to generalizability in quantitative research. Transferability provides information about the population studied and the methods employed in order to determine if the results of the investigation can be transferred into other situations or onto a larger population than the one that was sampled (Volpe & Bloomberg, 2008). Because qualitative research uses small sample sizes and non-random sampling, it is not possible to state with certainty whether or not the results would be equally applicable in different contexts or with an alternative sample. Therefore, in qualitative research some have suggested that sufficient information should be provided about the population being studied in order for others to determine its applicability to different situations (Shenton, 2004). In the current study, the effort was made to increase transferability by providing relevant demographic information about the research participants.

Dependability

Another dimension of trustworthiness is dependability. Dependability refers to the ability of future researchers to have enough detail about the research process that they could replicate it (Shenton, 2004). In the present study, the order and manner in which the data was collected, reviewed, and how themes were categorized was systematically documented and reported in this section. These detailed descriptions of the research process also allow the readership to determine if appropriate methods were used.

Delimitations and Limitations

A delimitation of the present study was that the music employed was Christian music used with a population of Christian participants. This delimitation is purposeful as the study is designed specifically to explore how spiritual music affects emotion regulation for participants of this faith.

Researcher bias is a possible limitation of this study's findings. Protocols to establish rigor, including those outlined previously, were carefully applied to address this concern.

Data Components

This section describes the measures that were used to analyze the data in this study. Included in this section are the: Demographic survey, DSM measures, and the Music Record Keeping Logs.

Demographic Survey

The demographic survey (see Appendix E) was used to obtain information about each participant allowing the readership to understand the differences and similarities between each person. Also, demographic data provides information to future researchers should they choose to replicate this study.

DSM Measures of Anxiety and Depression

Two brief anxiety and depression tests (see Appendixes C and D) were given to each participant for the purpose of understanding if any of the nonclinical participants met criteria for a mood and/or anxiety disorder.

Music Record Keeping Logs

The daily record logs (see Appendix B) provided another source of data as well as a source of triangulation of interview data. Each participant recorded their daily experiences with the intervention, which served to enhance the understanding of participants' experiences. Additionally, since it would be highly improbable that anyone could remember the detailed experiences they had with the intervention over a two-week period, written records provided an accurate source of information about the particularities of each person's daily experiences.

Interviews

The interviews were audio-recorded on a cassette tape and on an application on an iPhone. Double recordings ensured that recordings were audible in one or both formats and were available in case one recording was damaged. After the interviews were transcribed, the recordings on the iPhone were deleted. The cassette tape recordings were securely stored and will be maintained for seven years, as prescribed by the Texas Department of State Health Services Retention Schedule for Medical Records (2012).

Written Narrative

The final stage of the analysis involved writing up the themes into a narrative analysis. The themes that emerged were written in terms of psychological taxonomies and compared and contrasted with previous research in the field of emotion regulation. Finally, the findings were synthesized and applied to answering the research question.

Chapter Summary

This chapter presented the methods used to address the research question: How did participants describe their experience using a spiritually-integrated music intervention for emotion dysregulation? The selection of participants was described, and inclusion criteria was articulated. The reason for using a qualitative method of inquiry was also explained as to its relevance to the current phenomena. The methods that were used to understand the phenomena were discussed, as was the process of data analysis. The ethical guidelines that were utilized to protect the participants were described. Methodological rigor was discussed in terms of trustworthiness, credibility, dependability, and transferability. The limitations and delimitations were presented and the methods used for data analysis were articulated. In the upcoming chapter, the findings of the research are presented in light of how they answer the research question.

CHAPTER FOUR: RESULTS

Overview

In the upcoming chapter the research findings are presented. First demographic information about the participants is described. Following the presentation of the demographic information is an in-depth review of participants' reported experiences of utilizing the spiritually-integrated music therapy intervention for affect dysregulation. These experiences are described in terms of four taxonomies: the impact of the intervention on biological processes, the impact of the intervention on social processes, the impact of the intervention on spiritual processes and the impact of the intervention on psychological processes. The psychological theme is further explicated in terms of the Process Model of Emotion Regulation (Gross & Thompson, 2007).

Demographics

There were 23 individuals who participated in this study. While all of the participants were given the same experimental instructions, preliminary anxiety and depression tests, and recording logs, only 10 individuals provided an audio-recorded interview of their experiences with the phenomenon. The remaining 13 participants were emailed the questions outlined in the Methods section and asked to provide written answers to each of the questions. Because this study was primarily concerned with an in-depth exploration of this phenomenon, only the 10 individuals who gave in-person, audio-recorded interviews are analyzed in this report. The remaining 13 participants'

data will be used for future research. The 10 participants who provided the audio-recorded interviews were chosen by randomly drawing their names from among the 23 participants.

The demographic variables are as follows. The ages of the participants ranged from 19 to 61 with a mode of 23 and an average age of 34.9 years. Participants included seven females and three males, nine who were Caucasian and one who was African American. Table 4.1 provides information about the sample.

Table 4.1

Demographic Information for Interview Participants

Pseudonym	Gender	Number of Years Christian	Frequency of Church Attendance	Currently in Psychotherapy	DSM-V Anxiety Test Result	DSM-V Depression Test Result
Caitlyn	F	34	1x/week	No	None	None
Mike	M	14	1x/week	Yes	Moderate	None
Michelle	F	22	1x/week	No	None	None
Gracie	F	24	1x/week	Yes	None	None
Rita	F	35	1x/week	No	None	None
Cindy	F	19	1x/week	Yes	Moderate	Moderate
Stephanie	F	16	Multiple times/week	No	None	None
Samantha	F	15	2x/week	No	Mild	None
Steven	M	21	1x/week	No	None	None
Greg	M	33	Multiple times/week	No	None	None

The average church attendance for the sample was at least one time per week with several participants indicating they went to church multiple times per week. Since this population was drawn from a Christian university, it was not surprising to see such regular and consistent church attendance in the sample. Many of the participants indicated that they had been a Christian for at least 10 years, with several of them reporting being Christian for more than three decades. Of the 10 participants, three

indicated that they were currently in treatment with a counselor, and some of the other participants reported that they had been in counseling previously. Two of the participants who were currently in treatment also evidenced moderate levels of anxiety, and one of them had comorbid moderate depression as measured by the DSM-V test administered prior to the study. None of the participants were separated or divorced, and 50% of the sample was married.

Summary

This section established transferability by providing demographic data on the 10 individuals who participated in this study. In the upcoming sections the data analysis is presented using four taxonomies.

The Impact of the Intervention on Biological/Physical Processes

In this section the biological/physical impact of the intervention is explicated using examples provided by the participants. All of the participants (n=10) experienced some form of biological down-regulation from the intervention. The manner in which they described their experiences ranged from physically slowing down and taking a breath to the eradication of a panic attack. What follows are several vignettes which illuminate the biological impact of the music intervention and will serve to illustrate it as a primary theme that emerged from the data.

Cindy described throughout her interview how she experienced the intervention as a powerful tool for regulating her negative emotions. On a couple occasions, she

described the effect that recalling the spiritual music had on her in physical terms. [Note: When participants reference SUDS numbers in their descriptions, they are referring to the Significant Units of Disturbance levels that were used to rate emotional intensity prior to and after using the intervention. SUDS are measured on a scale of 1-10 (1 being barely noticeable and 10 being overwhelmed with the emotion). Rating SUDS was done on the Music Record Keeping Log (see Appendix B).]

It almost seems so simple, but it's so big. I can be up here (holding her hand above her head) and be so hyper and then I hear the music in my head and it's almost like a baby starts crying and then the mom comes in and comforts it, and then the baby stops crying. To me it's that kind of feeling. Because at first I wondered how you go from a (SUDS) of 10 down to a 5 or a (SUDS) of 8 down to a 2 – because it happened all of a sudden. But it's because the love of God is so powerful and it's coming through this music. Oh my gosh! How anointed is that! ... It's like going to the chiropractor. I got "readjusted" and it was like warm honey all over my body. When this happens it was like I was getting realigned.

In this description Cindy portrays the sensation of a physical change that encompassed her whole body, calming her, and readjusting her. Later in her interview she described how recalling the spiritual songs in her mind brought about a physical change which was different than what she has experienced in the past when she recalled verses of Scripture:

Listening to the words and singing in my head really brought a center and a calm for me, where before I think I would try in my own way to ignore it, thinking it was not a big deal, or sometimes I would quote a Scripture. But I found that singing the songs and staying focused on the words of the songs made a difference. I think physiologically there's a difference. I was just more relaxed... I could feel it in my whole being.

In this instance, Cindy spoke again about the music's ability to relax her in a holistic way. She indicated how the spiritual music impacted her in physical ways, which she describes

as being different than how she had previously experienced memorizing and recalling Scripture.

Rita described the impact of the intervention in physical terms in the following way:

I would say I probably experienced a bit of relaxation anytime the anger went down or the stress went down. Stress is normally here for me with my shoulders up (showing her shoulders raised) and I was just able to drop them. It's called a 'breathe moment' where you go (takes a breath and her shoulders and posture drop) and that feeling after you breathe out. That is probably what I noticed the most... instead of the jittery, rushing, stress reaction. Even when I was overwhelmed it was that I had slowed my pace so I didn't feel like I was trying to hurry to make more happen.

In this vignette, Rita gave the sense that the music allowed her to stop for a moment, even in the midst of her many activities, and to experience a sense of relaxation in her muscles. As she stopped and took a breath, she became calmer which also caused her movements to slow down.

On Thanksgiving Day while visiting some relatives, Rita said two dogs attack each other in front of her causing her to feel panicked. She said she had been bitten by a dog in the past, so for her, the fear was magnified. After the dogs were separated, she said her adrenaline dropped, and then she recalled one of her songs. She said the song caused her body to shift gears because it changed the content of her thoughts:

[After using the intervention], it did bring my fear and my panic down... my insides calmed down. Before the song I felt scared at a [level of] 10 and panic was at an 8, and I brought them down to a 4 and a 1 just by stopping and saying, "Wait a minute. This is over, it's in the past. God's brought me into this place, He brought me through it. He didn't fail me before, He's not going to fail me now."

Rita was able to quiet her racing heart through using the tool. The music worked in the same way it did in her previous illustration in that it caused her to stop and reevaluate her situation. In the next example, Gracie, like Rita, experienced feelings of panic and was able to find relief from those sensations when she recalled one of her memorized songs.

Gracie described a panic attack she had one day during the experimental period. She said she had labored breathing and anxiety at a SUDS level of 7. After utilizing the intervention she wrote:

Right after I recalled that song my labored breathing had reduced to about a 5 and my anxiety was down to a 4. But within 20 -30 minutes after playing the song in my head it was gone completely [SUDS level of 0].

When asked how this compared to the way she normally coped with her panic attacks, she recounted:

I normally just deal with it. I hit my inhaler to see if that works to clear up some of the labored breathing. I try to figure out what's bringing it on. I try to control the breathing myself. The day this panic attack happened I was working so I didn't take a Xanax. If I was at home or someplace where I didn't have to drive afterwards, I might have taken one, but most of the time I would just suffer and/or pray.

In this example, Gracie compared and contrasted the time it took to regulate physically and emotionally before learning and using the intervention with what occurred after using the music intervention.

Stephanie described the physical regulation that resulted from using the intervention on an evening she was out dancing with her friends. She received a text message from an old boyfriend which caught her off guard and made her physically ill:

As soon as I got the text I immediately felt like I wanted to vomit. The emotions that I wrote down were angry at a [SUDS level of] 9, hurt at an 8, confused at a

10, and sick at a 10. So I was intensely alerted that I was not in a good place. I started singing “Closer” and “Beautiful Exchange” in my mind after I left the dance floor (I had to leave and escape and go to the bathroom because I thought I was literally going to vomit)... But then after I started singing the song I realized that it’s good that I’m having that emotion and it’s good that I’m recognizing that that emotion is happening. I realized that God was telling me that if I was having this kind of an emotion over a text message from my ex-boyfriend, I need to grow more before I start dating again...The songs helped me calm down so that I didn’t feel nauseous anymore.

Stephanie’s strong emotional reaction caused her to feel sick to her stomach. After she played the song in her mind, her internal dialogue changed, and the physical symptoms went away.

This section described the impact that recalling the spiritually-integrated music had on the participants’ biological/physical processes. All participants reported decreases in physical symptoms after utilizing the intervention. The physical effects of the intervention varied according to participant and are summarized in Table 4.2. In the next section, the impact of the intervention on the social process of the participants is explicated through examples provided by the participants.

Table 4.2

The Impact of the Intervention on Biological Processes

Participant	Down-Regulation of Adverse Physical Processes
Gracie	Returned breathing rate to normal during a panic attack
Stephanie	Alleviated nausea
Cindy	Decreased muscle tension
Rita	Slowed physical pace, decreased heart rate, decreased muscle tension
Greg	Diminished autonomic arousal
Steven	Diminished fatigue
Samantha	Decreased muscle tension
Mike	Diminished illness symptom
Michelle	Decreased muscle tension, decreased breathing rate
Caitlyn	Decreased heaviness in chest, diminished muscle restlessness

The Impact of the Intervention on Social Processes

A theme that emerged from the analysis of the interviews was that the intervention impacted the participants in their relationships with the people in their lives. Nine of the participants (n=9) indicated that, in one way or another, recalling the songs in their mind impacted one or more of their relationships in a positive way. This section describes several of the participants' experiences that illustrate this theme.

Gracie referred to an incident she had with her mother while the experiment was underway which demonstrated how recalling the songs impacted their relationship. She said she and her mother have had a difficult relationship for years, therefore, when her mother sent her a text message, Gracie felt it was just a ploy to “fish” for information from her. She said that she felt anxiety at a SUDS level of 3 and annoyance at a 6 prior to recalling the song “Create in Me.” After she played the song in her mind, her anxiety went away completely and her annoyance dropped to a 2. She explained the process of how the song helped her:

The words to “Create in Me” are “Create in me a clean, clean heart, create in me a work of art, create in me a miracle, something real, something beautiful.” I know I need to change my views of my mom and not be so hyper-reactive whenever I hear from her. That song helped me know that I needed a new set of eyes to see her...I can’t change her, she’s the only one who’s going to be able to do that, but I can change my view on her and that is definitely what the song lyrics are about.

In this vignette, Gracie described how the music she recalled gave her a different perspective of her mother which changed her emotions. Instead of focusing on the negative feelings she had towards her mother, she was able to shift her attention to things that she might change in herself.

Several of the participants in this study work full time, go to school, have families to take care of, and have ministries in which they play a part. Their very full lives sometimes create opportunities for stress and anxiety to arise. The experimental portion of this research occurred before and after the Thanksgiving holiday, which is a time that is often filled with multiple stressors from various sources. Rita experienced significant stress during this time and described what it was like for her to try to get ready for the

holidays, work, take care of her family, and complete her end-of-the-semester

assignments. She said the intervention impacted her relationships in the following way:

Usually when I am stressed I can be snitty or short-tempered and less long-suffering. Often times when I study for tests I have this fear of failure that typically makes me close off to people: I go off into my room and study because I need that quiet place. But during this time I allowed myself to come out and reconnect with people. If I heard someone come home I came out of my room when they talked to me. I spent time talking to my two 23 year olds and just let them tell me about their day. I was interrupted quite a bit but I thought, “This is part of being a mom. I’m glad they’re sharing with me what’s going on. I can stay up a little later and study.” I was able to do that because I remembered that “I am all He says I am” (lyrics to one of her songs) and since God has called me to school, He is going to get me through it.

Rita referenced how recalling the songs in her mind gave her a sense of security in her ability to do all she had to do which resulted in her then being able to connect with her family. This is in sharp contrast to the past where her insecurity would have kept her isolated from them.

Steven described an incident with his wife that illustrated the positive impact recalling the songs had on his most significant relationship:

One day while I was doing this experiment, my wife snapped at me and so I wrote down confused at [SUDS level of] 9 and mistreated at an 8 because it was really off-putting. So that was how I felt in the moment. We separated for a few minutes because there was some real friction there. Then I went through the words of “Blessed Assurance” and “Great is Thy Faithfulness” and I noted that both of the feelings were pronouncedly (emphasis) better: confused went from 9 to 4 and mistreated went from 8 to 4. It really had a calming effect on me. And then I went back and asked her if we could talk about what happened and then it was a source of discussion – not anger – for several days. I wanted to lovingly continue to process that together as a couple.

Steven's illustration is a vivid example of how the music tool moved him from a negative affective state to a more peaceful state of mind. This in turn positively impacted his relationship with his wife.

Steven had another incident during the course of the experiment with someone at his work, which also illustrates the social theme that emerged from the data. He said that during a conversation with a friend he became upset at what the person was saying. While the conversation was ongoing he was able to recall the song in his mind, and he described the following result:

I was frustrated at a [SUDS] level 7 and disillusioned at an 8. I love and respect the man, I've known him for many years but I was really bothered by what he was saying. So I zoned him out and I just started going through the words of "Great is Thy Faithfulness" and it had a pronounced (emphasis) effect. I wrote down that my frustration went from a 7 to a 2 and my disillusionment went from 8 to 6 (because I was still disillusioned with what was going on). But I wasn't as frustrated and I was a lot more understanding and patient with the situation... The song "Great is Thy Faithfulness" gets me thinking about God and all He's done for me and all He's going to do for me, and "Blessed Assurance" reminds me of the fact that I know where I'm going to end up so nothing in this life matters nearly as much if you have that blessed assurance. It shifts my focus to God.

By using the tool, Steven was able to refocus his attention away from the negative content of the conversation, which resulted in lessened animosity toward his friend.

Cindy expressed that the music intervention's greatest impact upon her was in how it affected her relationships and, in particular, how it affected her relationship with her family. She said that since her work life was very stressful, she was frequently unable to shake off the frustration she has when she arrives home from the office. After using the tool at the end of her workday, she described how it helped her change her attitude so that she was in a better state of mind to be with her family:

I think the tool was most impactful at the end of the day because it helped bring me back to a centered place, which then impacted my family. When I would be leaving work I would have these issues in my mind, but when I focused on the music it helped calm me so that when I got into my home environment, I wasn't a nut (laughs). I was more balanced with my kids and my husband.

Cindy's vignette provides a picture of how the quality of her relationships was improved by using the music tool. Because her thoughts had been changed through recalling the songs in her mind before she got home from work, she was prepared to be with and receive her family in a healthier way.

This section portrayed several events from the lives of the participants during the two-week experimental period in which they referenced the music intervention's impact on their relationships with others. Nine participants indicated that their relationships had been positively impacted in some way by the intervention. Table 4.3 provides a brief summary of how the intervention impacted these relationships. In the upcoming section, the impact of the intervention on the participants' spirituality is described.

Table 4.3

The Impact of the Intervention on Social Processes

Participant	Social Effects
Gracie	Changed perspective from focusing on the negative attributes of another to letting go of control of the person
Stephanie	Changed perspective from being hurt by another and wanting to end the relationship to acceptance of the person and the ability to remain friends
Cindy	Changed focus from stressful work situations to a calm state of mind ready to be with family
Rita	Changed focus from personal inadequacies to security which created emotional energy to engage with family
Greg	Changed focus from reluctant engagement with family to positive acceptance of family activities
Steven	Changed focus from personal affront to willingness to reengage in conversation
Samantha	Created a positive attitude which provided opportunity for engaging with family
Michelle	Created a gracious, accepting attitude toward others
Caitlyn	Changed focus from wanting to isolate to a willingness to be with family

The Impact of the Intervention on Spiritual Processes

As described in the Method section and in the demographic information, all of the participants self-identified as Christian. Everyone (n=10) in this study referenced God or their relationship to God multiple times during their interviews. All of the respondents

(n=10) indicated that, at the very least, the intervention caused them to take their mind off of their temporary circumstances and to put their attention on God. Half of the respondents (n=5) said that the intervention had a positive impact on their relationship with God.

An example of how the intervention turned a participant's attention away from troubling circumstances onto spiritual matters was described by Samantha:

(Recalling the songs) shifted my attitude. The comparison between what I was going through compared to God made the issue seem so small. It made it not worth it to focus on that issue. It just opened my eyes to how good He is, how we need to be more grateful and thank Him for all the things He gives us and how He provides for us and blesses us.

Samantha evidenced the spiritual theme as she described how the songs caused her to refocus from daily life events to thinking about God. This change of focus resulted in decreased negative affect and an increase in positive emotion (gratitude). She further stated that even on days when she was not experiencing any negative emotions, the intervention had a positive impact on her spirituality:

I think on those days it just lifted me up more and I just felt closer to God. Because on those days I would be thinking that it was a good day and then the songs caused me to worship and draw closer to Him. I was just thankful to Him and would say, "Thank You that today is a good day. Nothing bad has happened. You're so good, Lord. Thank You for all the things You have given me."

Again in this vignette Samantha described an increase in gratitude. She also indicated that her spiritual life was strengthened because the songs motivated her to engage in moments of worship and to draw closer to God.

Many of the participants reflected sentiments such as the following expressed by Greg, "It was a daily reminder that God is bigger than your problems and that it's not

about what you have to do. You have to remember where your Source comes from.”

Steven said that the intervention impacted him in a similar way. He said that his relationship with God overall had not changed, but he was impacted spiritually because his attention was drawn regularly to God:

In the moment it caused me to dwell on Him as opposed to dwell on me (laughs). Often when negative emotions happen I start thinking about myself, but the songs took my eyes off of me and put them on Him... In the big picture, I don't know if it caused me to have any significant change in my walk with God, but it's always good on a minute to minute basis to be in touch with Him and how good He is and what He has done, and all He is doing and will do for me.

Steven indicated in this example that his change of focus from present circumstances onto God helped to regulate his emotions, even though the overall quality of his relationship with God had not changed. He also expressed how his gratitude toward God increased, much like Samantha expressed previously.

The theme of spirituality emerged when some participants described that the intervention served to bring a central truth of Christianity to light in a deeper, more personal way. Stephanie provided a powerful description of this process:

I didn't realize this when I picked the songs but all three of them had a message of how much God loves me and I realized that I didn't have a very broad concept of that. I knew that God loves me because “Jesus loves me this is know, na-na-na-na” (she begins singing the song “Jesus Loves Me”) from childhood and you learn that from that song. It gets ingrained that God loves you: Jesus loves you with a big rainbow and a smiley face. But that's a little kids' message and you don't realize how much Jesus loves you until you really experience it. In my personal life I have been learning to stop trying to find my self-worth in other people and instead finding it in God. And I'm learning not to focus on falling in love with humans because they are imperfect and will let me down. Instead I'm falling in love with God, my Creator, and my Father and letting Him be what I need, not people. I've had a lot of really good days because I was realizing those things through this first week of recalling the songs. Singing them over and over again caused me to realize that.

Stephanie's *experience* of the love of God increased as she recalled the songs. While previous to the experiment she had intellectual knowledge of the spiritual truth of God's love for her, recalling the songs in her mind gave her a more personal understanding of that concept which then positively impacted her spiritually.

Cindy echoed similar thoughts to Stephanie's when she described how the songs brought her to a place where she could comprehend the love of God in a more meaningful way. She recounted:

The journey for me has been about getting the Scripture out of my head and into my heart, and the music for me brings it into my heart. It's like having knowledge but you don't have the relationship, but the music creates the relationship. The music makes it more real even than reading words off of a page sometimes. So I don't know what it is ... I know there's energy in our cells and I just think there's something to all of that where everything is vibrating and working together and then your body gets in alignment with the truth verses just your head. I think the song triggers it and it makes it so much more real. You're feeling it and I think there's so much in our feelings.

Like Stephanie, Cindy had a spiritual *experience* that caused her intellectual knowledge to move into an embodied sense of understanding.

Caitlyn also provided a poignant description of how using the intervention over the two-week experimental period affected her relationship with God:

The Lord has placed a huge emphasis in my life this year on His love for me. I don't know why but I feel teary just talking about it. (Caitlyn begins to cry) All through my life I was raised in a very legalistic Christian home that was very much about rules and regulations and I think that's where a lot of my depression and anxiety came from. I have had to work on a lot (emphasis) of different beliefs, throwing out all of my parents' beliefs and learning what I believe and taking it to the Word of God and saying, "Is this Biblical?" It's been about a 10 year work in progress. But this last year has been all about a revelation of His love. I think that even though I've come so far, I still have so much to go. So I think using these particular songs I kept getting comfort from them because it was

God's empathy, His grace, and His love. It had nothing to do with "try harder, be more" – those two statements almost killed me (crying). Those kind of statements drove me to suicide and cutting. So for the Lord to come in and love on me that way is huge.

This vignette provided a vivid demonstration of how the songs were able to move Caitlyn into a deeper relationship with God. Instead of being focused on her productivity, she began to be released of that burden into a sense of spiritual peace as she *experienced* an aspect of God that she had not previously known.

This section described the spiritual impact the intervention had on the participants. Some of the respondents felt that the intervention had made a significant impact upon their relationship with God, whereas others felt that, although their overall relationship with God had not been altered, they had experienced temporary emotional relief when they shifted their attention off of their problems onto spiritual matters (see Table 4.4 for a summary of this theme). In the upcoming section the impact of the intervention on psychological processes is described.

Table 4.4

The Impact of the Intervention on Spiritual Processes

Participant	Spiritual Impact
Gracie	Temporary focus from circumstances onto spiritual issues
Stephanie	Increased intimacy with God
Cindy	Increased intimacy with God
Rita	Increased intimacy with God
Greg	Temporary focus from circumstances onto spiritual issues
Steven	Temporary focus from circumstances onto spiritual issues
Samantha	Temporary focus from circumstances onto spiritual issues
Mike	Temporary focus from circumstances onto spiritual issues
Michelle	Increased intimacy with God
Caitlyn	Increased intimacy with God

The Impact of the Intervention on Psychological Processes

The theme that emerged more than any other was that the intervention had a positive impact on the participants' cognitions. All of the participants (n=10) indicated that in many ways they were able to shift their focus off troubling situations and/or they were able to have a change in perspective, which produced emotional relief when they recalled their chosen songs. In the following pages, several vignettes are provided which will illuminate the psychological impact of the music intervention and will serve to

illustrate it as a primary theme that emerged from the data. The psychological impact of the intervention will then be described in terms of its relationship to Gross and Thompson's (2007) Process Model of Emotion Regulation that was covered in Chapter Two.

An illustration of the psychological theme that emerged from the data was provided by Cindy when she described some ongoing problems at her workplace. In this excerpt from her interview, she commented about how the people at her job were treating her poorly. She said she was left feeling bewilderment at a SUDS level of 10 and anger at a 7. After she played the song "Cornerstone" through in her mind the following occurred:

My bewilderment went down to a 5 because I still couldn't understand completely why they had been that way, but the anger went away because I thought, "Whatever. Jesus is the Cornerstone." That song just made me realize that He is the focus and I should not be trying to please man but I should be focused on pleasing Jesus Christ – and He took those feelings away. But I really had to get myself in that place of focusing on Jesus, not on those people.

From this excerpt, Cindy provided insight into how the song she recalled resulted in a change of focus, which in turn improved her emotional well-being. Instead of ruminating about what her co-workers were doing, she thought about the lyrics to the song.

Later in the interview, Cindy gave another example about how the intervention impacted her thoughts when she shared how she and her husband had been having some financial difficulties. Her husband had been out of work for several months, and the stress was getting to her. She recounted the following:

I wrote down that I had fear at a [SUDS level of] 10 in my logs because I was just really stressed out about it. But then I played and I sang "Stay Amazed." The

words are: “When I stay amazed, You are more than words can ever say, O Holy God.” The song just makes God so much bigger than anything we ever deal with. It made me think, “He’s going to take care of me. I don’t know how He’s going to work this out, but He is going to take care of me.” Then I also recalled the song “How He loves Me” and that made me feel calm and my fear subsided to a 7. I no longer had that anxiety (emphasis). So I wrote in my logs, “The fear started to subside but I know that I have to continue to focus on the fact that God’s bigger than this, He’s a holy God, and He is going to take care of it.” So it helped me pattern my thoughts... There is a calm that comes and it takes my focus off of the stuff and back to the truth – which I love. The songs help me to take every thought captive and bring them under Him, the magnifying glass of His truth, His Word and His light.

Once again Cindy’s illustration demonstrated how recalling the songs in her mind shifted her focus off her problem (which was making her fearful) onto God (which gave her a sense of security).

Michelle echoed this concept of how the songs helped her turn her attention away from fear-based thoughts. In the following scenario, she described what it was like for her when she was asked to lead worship at her church. While on the one hand she felt honored to be asked, on the other hand she said that initially she felt more fear than anything. The thought even crossed her mind not to do it at all because her fear was so intense. She described what her emotions were like after she had agreed to lead the worship event:

I felt pretty heavy anxiety, fear, and worry, and I guess a little mistrust sometimes, too, because I think the root of some of the anxiety was based in mistrust. When I would listen to a song it would get me focusing on God and then I was not so worried about what other people were thinking. I would think, “I’m doing this for You” and then suddenly the mistrust would leave because I was trusting Him with the situation and the fact that His blood is going to cover this situation (referring to the song she had chosen of “Oh The Blood”). And then my other song was “Our Father in Heaven, Hallowed Be Thy Name” and that one would help me get perspective. Because I realized that there is so much more that we’re doing here

than any little fear, and why would I let this little fear keep me from doing this. There is such a bigger picture.

This example demonstrated the theme's psychological impact upon Michelle. She began with a state of immobilizing fear, but after recalling a song in her mind, her redirected attention assuaged her fears causing her to move forward with her plans to lead worship. She also said that when she was able to focus on the "bigger picture" her negative emotions would give way to positive emotions:

Peace and security would come and sometimes even a little bit of joy – even though I didn't really want to feel joy when I was fearful (laughs). I had excitement because I was thinking that this is a good passion to have and that the Lord is going to help me through it. I would still be a little fearful but I knew I was going to keep walking through that fear because I knew that something good was going to come out of this because He's telling me to do it.

Michelle's description portrayed a sharp psychological change that caused her emotions to move from fear to joy.

On another occasion during the experimental period, Michelle said she was facing end-of-the-term school assignments. She recalled how she was able to use the songs to create a psychological shift from temporary events to an eternal perspective, which, in turn, regulated her negative emotions. She commented:

After recalling the song and spending time with God, He would speak to me about school and how it is important to have that as a priority and to do my very best, but that I should not allow it to dictate my emotions. So when I would go to Him it usually brought me peace about the situation, but it also brought contentment because it made me know that I'm doing my part and I know I'm going to pass. Literally I would think, "His kingdom come, His will be done" and then I would think, "Out of all things, is this test grade so important?" When I would get perspective I would think that it's obviously important, but it won't matter in Heaven what test grade I got in biology or something.

In this scenario Michelle described a psychological reframing of the events that she was facing. Using the music tool caused the content of her thoughts to change from an emphasis on her present circumstances to a more global evaluation of her situation. This re-evaluation then down-regulated her negative emotions.

Mike had a similar experience in that he was able to take his eyes off of a difficult situation and put his focus on God instead which changed his perspective. He described an incident in which his car broke down. While he was waiting in the mechanic's shop to find out what was wrong with his car and how much it would cost, he used the music intervention. He described the situation as follows:

I actually sat there quietly and did the exercise. After that point I thought, "This isn't that big of a deal." It just made the problem seem a little bit smaller. At the end of the day, if my car breaking down is the worst thing that happens, it's still a pretty good day. It really just gave me a bigger perspective on that situation.

In this scenario, Mike described the intervention's psychological impact in terms similar to Michelle's description, and this was a theme that was common among the participants. Instead of being caught up in the transitory experiences that came and went during the two-week experimental period, the music tool often helped them realize that their present issues were fleeting occurrences that did not warrant catastrophic thinking.

The participants also described how the tool helped them release their need to feel in control, which in turn reduced their negative affect. An example of this was provided by Greg when he talked about some land he was trying to purchase to build a house. There had been one delay after another, and he said he was feeling impatient at a SUDS level of 6 until he recalled the song "Great I Am."

My impatience was at zero by the time I was done with that. It just made me realize that I don't have (emphasis) to move so I'm not in any big hurry. Two months isn't going to effect the house we are getting in the end. The song is about the Sovereignty of God and how everything is under His control. So when I think about that it makes me realize that, if there is a delay, it's because His hand is on it and He wants it to happen and I don't need to be impatient.

In this situation, the psychological theme is demonstrated where Greg was able to release his mental control over an issue he was facing which resulted in emotional improvement.

Greg encountered another situation where he found that he experienced relief of his negative emotions due to the intervention's impact on his thought processes. He said he had forgotten to turn in an assignment for school by the due date, missing the deadline by 5 minutes. He thought that he would not be able to turn in his paper at all which would result in him failing the class. He was understandably upset about the situation until he recalled one of his memorized songs. He said initially his dread and anxiety were at a SUDS level of 10, but after he recalled the song the dread dropped to a 6 and his anxiety dropped to a 3. He said it took about 30 minutes to calm down, and he described the psychological impact of the intervention as follows:

I was sitting there thinking that I'm here on a GI bill and all that I would have to do with the VA if I fail a class. Then I went through the song "Great I Am" which is about the sovereignty of God and I thought, "Ok, He's in charge. If something is going to happen, it's going to be ok." I tend to overreact and make things a lot worse than they need to be, but once I remember Who's in charge, then I can take a breath because I know it's going to be ok. The song was a reminder that even in the storm, God is still solid and stable and it's not about my ability to weather it, it's about His ability.

From this description, the song's impact upon Greg's thought processes was demonstrated. Originally he was worried about the outcome of his actions, but the songs

caused his attention to focus on God. This shift in thoughts significantly reduced his negative affect.

This section provided several descriptions that demonstrated the intervention's impact upon the participants' psychological processes. These cognitive changes then served to reduce the participants' levels of negative emotions. This psychological theme is further elaborated in the upcoming section in terms of Gross and Thompson's (2007) Process Model of Emotion Regulation which was elaborated on in Chapter Two.

The Process Model of Emotion Regulation

This section focuses on the psychological theme that emerged from the data in light of the emotion regulation cycle. As described in Chapter Two, Gross and Thompson's (2007) Process Model of Emotion Regulation depicts emotions as occurring along five points: situation selection, situation modification, attentional deployment (either as distraction or concentration), cognitive change and response modulation. The data analysis in this study revealed that the participants regulated their emotions at all points in the cycle using the intervention. The most common points in the cycle were attentional deployment (usually in the form of distraction) and also during cognitive change. Each phase of the cycle is described below with illustrations from the participants' interviews.

Situation Selection

According to Gross and Thompson (2007), during the situation selection phase a decision is made whether or not to enter a situation known to give rise to emotions. Situation selection could also be considered the positive emotion regulation strategy of *problem solving* (as described earlier) because it is in this phase that a person can choose whether or not to enter a situation in an attempt to regulate his/her affect. As mentioned previously, problem solving strategies are considered healthy methods of regulating emotions and can include any strategy that proactively seeks to address a problematic/stressful situation (Aldao et al., 2010).

An example of how using the music intervention aided the participants in situation selection was described in the previous section when Michelle was asked to lead worship at her church. As mentioned, because her fear was so intense, she considered not accepting the invitation. However, she said that one of the songs she had chosen for the research caused her to calm down enough that she accepted the opportunity. She stated the songs made her think, “It would be selfish of me to hold my tongue. It would be wrong for me to hold this passion in that He’s given me and not share it when that’s what He’s told me to do.” This illustration from Michelle is an example of situation selection in that she was able to regulate her emotions of fear and anxiety by using the music tool, which resulted in a change in her cognitions. This shift in her thoughts allowed her to enter the situation of leading worship.

Greg also provided an example of how using the music intervention worked in the situation selection phase of the emotion response cycle. He said he was trying to prepare

for an evening out with his wife to celebrate her birthday and he needed someone to watch their daughter. He asked his sister-in-law if she would babysit for them, but she declined. He said that made him feel angry at a SUDS level of 6 because he felt it was a very small favor he was asking. He said he then recalled a song in his mind, which caused his anger to drop to 3. He reported the following process that took place in his mind:

The old me wanted to be very controlling and call her sister and say, "You can't just come for one night so I can take your sister out for her birthday?" But I knew I was not going to change her mind because I've had that battle before. So I thought, "I'll just rise above it and I'll just figure something else out."

This situation demonstrated that Greg had an initial response of anger, which then triggered a thought of engaging his sister-in-law in an argument to try to persuade her.

When Greg recalled the song, it caused him to change his mind so that he did not take that course of action (situation selection), which in turn decreased his negative emotion of anger by 50%.

Situation selection worked in the opposite direction for Samantha. Instead of steering her away from an event, Samantha described how the songs actually empowered and motivated her to enter a situation that she was dreading:

(In the morning) it gave me strength and empowered me. I thought, "Ok let's go. What's the first thing I need to do today?" The times I was mad and annoyed (the music tool) helped, but I think in the morning, since I'm not a morning person, it really helped me to go. And those times when I was tired or dreading something or just feeling drained, recalling those songs helped me hear from the Lord. He would say, "I've got you. You can do this" and that gave me strength these two weeks. Especially with finals and turning final papers and assignments in.

In this illustration, Samantha described how her focus on the songs allowed her to face uncomfortable situations which is a demonstration of affect regulation at the situation selection phase of the emotion cycle.

It should be pointed out that in this example, as with many of the examples of the participants, the emotion cycle was not operating in a linear fashion. Emotions do not move across a straight line from one point to the next, but can be initiated, extinguished, maintained, up- or down-regulated at any point in this cycle (Gross & Thompson, 2007). In the preceding example, Samantha indicated that when she woke up in the morning, she was thinking that she did not want to face the day, which caused her to feel dread. She then made the decision to recall the song in her mind, which occurred in the attentional deployment phase of the emotion cycle. She chose to use distraction by focusing on the lyrics to the song she played in her mind. Using this strategy made her feel empowered to tackle her day, which placed her back at the beginning of the cycle at situation selection. Because her emotional tone had changed from dread to motivated and confident, she moved forward with her day with a new attitude.

Steven had a similar experience to Samantha's in that he was able to forge ahead and do what he had to do when he was faced with a busy schedule:

I wrote down in my record logs, "Too much work and not enough time." This is a very busy time of year in my department at the church and I identified my feeling as self-pity at a [SUDS love of] 5. Then I went through the words to "Battle Hymn of the Republic" and it really inspired me and my self-pity dropped to 3.

Steven's description illustrated how the songs enabled him to be motivated to move ahead with his work, which is an example of situation selection.

Stephanie also described how the music intervention helped her handle an emotional situation better than she normally would have if she had not used the music tool. She said that she was interested in dating a man but had learned that he had decided to remain friends for the time being. She said one of her songs helped her get through the experience in a healthy way:

It helped me to remember that I don't need to be in a relationship with someone all the time because I can love God and let Him be enough for me. We are just remaining friends at this point, which is a good thing for me because in the past I would have been angry and done with him and would have wanted to almost cut him off and never be friends with him. I realized that he was not doing this to hurt me...the song was "the big, blinking arrow" (that pointed me in the right direction).

In this example, Stephanie was experiencing sadness about the fact that her feelings had not been reciprocated. She then chose to focus on the song, which put her in the attentional deployment phase of the emotion cycle. Instead of concentrating on her negative emotions, she chose to focus her attention toward the meaning of the lyrics of the song (distraction). The lyrics caused her to think about the truth she knew in her heart to be true (e.g., to focus on loving God). This then changed her thoughts about whether or not to be his friend anymore or just to avoid him from then on (situation selection).

Another example of the complexities involved in the nonlinear nature of the emotion cycle was provided in the previous section when Cindy was describing how the music tool helped her in her relationship with her family. In that vignette, Cindy described how she used the music tool to help her process her day at work *and* to prepare her to be with her family:

I think the tool was most impactful at the end of the day because it helped bring me back to a centered place, which then impacted my family. When I would be leaving I would have these issues in my mind about work, but when I focused on the music it helped calm me so that when I got into my home environment, I wasn't a nut (laughs). I was more balanced with my kids and my husband.

In this example, Cindy stated that she was already in a negative emotional state ("I have these issues"), which indicated that she was in the response modulation phase of the cycle. When she focused on the music instead of staying focused on her work problems (attentional deployment using distraction) it helped calm her so that she was not frustrated or filled with anxiety as she entered her home environment (a new situation with emotional features all its own). Gross and Thompson (2007) describe the emotion cycle as complex and multifaceted, just as these examples illustrate.

Situation Modification

The second phase of Gross and Thompson's (2007) model is situation modification. During this portion of the emotion cycle individuals can choose to change/modify the situations in which they find themselves. This phase, like the previous one, is behavioral. In this study, the intervention was used the least amount during this phase of the emotion cycle.

An illustration of situation modification was provided by Cindy when she described her co-worker's unkind treatment of her. She said that in the past she tried to deal with the issue by going to the human resources department but that had not made a difference. Therefore, Cindy continued to struggle with knowing how to deal with her colleagues. She said that after she recalled a song in her mind, her anger went from a

SUDS level of 8 to a 3 and she felt a sense of calm. She said she simply told herself, “Stop being moved by this. Come back.” Instead of trying to do something to fix the problem, she changed her internal dialogue, which resulted in her modifying how she might otherwise have handled the situation.

Attentional Deployment

In the attentional deployment phase of the emotion cycle, the emphasis is on where attention is directed (Gross & Thompson, 2007). As described previously in Chapter Two, during this phase a person can either choose *distraction* as a coping mechanism or *concentration*. Each will be illustrated with examples from participants.

Distraction. Distraction entails choosing to focus on particular elements of a situation, or to shift attention away from an emotional stimulus altogether. During the research, this was one of the most commonly reported forms of emotion regulation.

Rita provided an example of using distraction when she described her stressful life the day before Thanksgiving. She said she had to clean her house, cook the meal and get ready for guests. In addition to that, a member of her family made a veiled remark that she had not done enough to get the house ready. Rita recounted how she handled the situation:

Instead of getting to that angry place, because I had played and listened to the songs while I was shampooing the floor, I made myself slow down. I think I made myself handle the stress a little better. Instead of dwelling on that stress, I just concentrated on the task.

In this example, Rita described how she shifted her focus off her relative's negative remark, which would normally have made her angry, to concentrating on the work that she needed to get done by utilizing the music tool. This attentional deployment lowered her negative affect.

Likewise, Samantha also indicated that having the songs to focus on instead of the stressful situations she found herself in was helpful, "I thought it was cool how when I recalled the song, it turned my focus more towards God so I didn't think of that situation and that calmed me down."

Greg said that recalling the songs in his mind was most helpful on his way to work. He said that as he drove to work his emotional dysregulation would be at about a 4 or 5 and recalling the songs would bring him back down to a 1 or 0. He said, "It took me from where it seemed like I was almost ramping up to coming back down." Greg was able to regulate his emotions by turning his attention away from his upcoming workday toward the lyrics of the songs, which is an example of attentional deployment in the form of distraction. Greg's explanation is in keeping with Gross and Thompson's (2007) conceptualization that the most effective interventions are those that occur in the antecedent phase of an emotion. This is due to the fact that interventions that are employed in this phase serve to moderate or eliminate negative emotions before they have a chance to become full-blown.

A few of the participants experienced minor physical ailments and injuries during the course of the research, and they found that the distraction of focusing on the songs helped mediate their pain by turning their attention away from it. For example, Steven

reported an incident in which he hurt his knee and said he felt exhausted at a 6 on SUDS and injured at 7 (he knew that “injured” was not an emotion but he wrote it in his logs, nonetheless). He noted that after he recalled two songs in his mind, his exhaustion dropped from 6 to 5 but his injured SUDS scored remained the same. He said, “It didn’t lessen the severity of the injury but it wasn’t bothering me anymore psychologically (emphasis).”

Mike provided an example of attentional deployment when he reported that on the last day of his cruise he became a little seasick. He said he was feeling nauseated when he recalled a song in his mind. He reported the following result:

I wrote that I was feeling sick at a [SUDS] level of 7. I used the song “Wrap Me in Your Arms.” The lyrics of the song are “Take me to that place, Lord, take me to that secret place, where I can be with You.” So I was really trying to focus on getting away with the Lord. I wrote that I did feel a little bit of peace after the song and I put the sickness score at a 6 after. I did feel a little bit better; nothing drastic but a little bit. But like I said, I think a lot of it is that it takes your mind off of the situation, which is important.

In this example, Mike demonstrated the psychological impact of using the music tool to distract his attention away from the pain onto the lyrics of a song. Although his pain was not entirely attenuated, it was decreased by his diminished attention to it.

Planned distractor. As stated, the music tool was utilized most frequently in the attentional deployment phase of the Process Model of Emotion Regulation. In particular, the intervention positively impacted the participants because it provided them with a plan of action for when they were facing difficult circumstances and when they experienced negative emotions. The effectiveness of this planned distractor is in line with the results

of the experiments described in Chapter Two by Wegner et al. (1987). Several of the participants expressed this phenomenon. Cindy, for example, said:

(After recalling a song) the fear started to subside but I knew that I had to continue to focus on the fact that God is bigger than this, He's a holy God, He's going take care of it. So it helped me pattern my thoughts: it gave me a direction. Rather than being a splatter balloon on the wall, it helped me bring them in.

In this illustration, Cindy described how important it was for her to have a plan already in place before an emotional situation arose so that she would know where to focus her attention.

Michelle also commented about the importance of having a planned distractor, "It gave me tracks to go on rather than whenever I was feeling a negative emotion not knowing where to start. It gave me a specific direction, a starting point."

Greg remarked that after using the intervention for a few days it became easier to use it as a planned distractor because it became more automatic:

When these moments (of affect dysregulation) happened, I tried to use the songs like a jukebox and I would think, "Ok maybe this song or maybe this song will help." (After a few days of using the music tool) it was kind of getting ingrained in me so I knew "this moment means this song and this moment means this song."

Cindy reflected Greg's sentiment of using the songs in her mind like a jukebox, but she phrased it in terms of brain activity:

I still think the difference is, what little I know about the brain, I think we've started to create a new pathway inside when we sing it in ourselves. There's a difference between when something's applied to you verses when something that's internal, out of you... You know they say that after 30 days you create a habit. I don't know, there's something there. We're reprogramming our brains to think a different way and to feel a different way.

Michelle echoed this idea of how after a time the intervention started to happen automatically as a planned distractor, but she reported its occurrence as being a result of the work of God, “I think after a while with the repetition, the Holy Spirit just has to quicken my spirit with something in one of those songs.”

Concentration. In the attentional deployment phase of the model, concentration refers to the act of focusing on emotional features of a situation. In the present study, the participants did not use this form of emotion regulation as often as they used distraction. Rita did, however, provide one illustration of how she used the music tool to focus on the positive emotions she experienced after she completed one of her college papers:

It put me in a sense of mindfulness that when I was feeling good and in those moments of celebration, I would say it expanded (my positive emotions) because it was the fulfillment of me accepting the truth in the song that I had been playing in my mind.

In this example, Rita described how she increased her positive emotions by paying attention to them (i.e., concentrating on them). As stated previously, Samantha also reported being able to focus more on the positive emotion of gratitude when she used the music tool on days when she did not have any negative emotions.

Cognitive Change

The fourth phase of the Process Model of Emotion Regulation (Gross & Thompson, 2007) is cognitive change. In this phase an emotion can be attenuated, amplified, extinguished, or maintained by internal dialogue. In this investigation, there

were many instances where the participants reported that their thoughts were changed as a result of the music intervention.

Rita provided an example of how the music tool changed her internal dialogue when she spoke about her job. She said she does not feel well equipped for the work she is doing and, to make matters worse, there are times when her work environment becomes hectic which causes her to feel even more incompetent. On one particular occasion during the research period, Rita experienced one of those hectic days and she said she felt angry at a SUDS level of 7. She said that after she played the song in her mind, her anger dropped to 3 because she told herself that God had given her this job to do and that He had equipped her for it. From this example, it is evident that the music intervention resulted in changed cognitions, which then changed her negative affect.

Another example of cognitive change was given by Samantha, when she described a situation in which she had the opening shift at the restaurant where she worked. She said that she was not looking forward to going to work that day because she did not like to work in the mornings. After she played a song through in her mind, she decided that instead of having a negative attitude, she would think about the positive things that being at the restaurant alone in the morning could afford her, such as an opportunity to spend some quiet time of worship and prayer with the Lord. This change of thoughts resulted in an improvement in her emotional state of mind.

Another example of a participant employing the emotion regulation strategy of cognitive change was when Steven described a day that he went Christmas shopping with his wife. He said he was perturbed at a SUDS level of 5, bored at an 8, and vexed at a 6

because he felt like it was a waste of time. As he sat around waiting for his wife, he decided to recall all three of his songs since he had nothing else to do. He remarked:

It was really helpful. By the time I finished I thought, “You know what? I don’t have anything else to do or any place else to go.” And that’s not where my mind was at the beginning. At the beginning it was, (drumming his fingers on the table), “Come on, come on, come on! This is ridiculous!”

Here again we see that the change of cognitions resulting in improved affect.

Response Modulation

Response modulation is the only category in Gross and Thompson’s (2007) taxonomy that is considered response-focused, all of the other phases are considered antecedent focused. Attempts to modulate emotion in this category occur when an emotion has already produced emotional and physiological changes. Once again, the lines become blurred when trying to place an emotion into one discreet part of this cycle, as there is much overlap and crossing over from one place in the cycle to another. Nonetheless, Gross and Thompson contend that this is the most difficult place to intervene in the emotion cycle because the emotions are already having an effect upon the person.

The best demonstration of how the music intervention was effective, even in this last phase of the emotion cycle, was when Gracie experienced a panic attack at one point in the experimental period. The following is a detailed description of the episode which includes the full dialogue between the researcher and Gracie.

Gracie: For some reason I started to feel my chest get heavy, my breathing got deeper, it felt like an anxiety attack was about to happen. And I have suffered/ battled with anxiety in the past. So ...

Nancy: So you knew what was happening.

Gracie: Right, and I also have asthma so at first I wasn't sure if it was asthma or anxiety, but after I was going through the checklist I boiled it down to an anxiety attack. Nothing really brought it on; it just started. So I put "labored breathing" (in my logs) – I know that's more of a physical than emotional...

Nancy: That's ok...

Gracie: ...and anxiety and I put both at a [SUDS level of] 7. Then I listened to "It is Well" and ...

Nancy: Listened to or played it in your mind?

Gracie: Oh, sorry, played it in my mind

Nancy: Ok

Gracie: I listened to it in my head (laughing).

Nancy: Pressed the play button in your mind (laughing)

Gracie: Exactly. And right after that song (emphasis) my labored breathing had reduced to about a [SUDS level of] 5 and my anxiety was down to a 4. But within 20 – 30 minutes after playing the song in my head it was gone completely [SUDS of 0]. It wasn't immediately right after, but I didn't take Xanax or anything like that.

Nancy: So, since you said you've had anxiety attacks before, what would be the normal course for an anxiety attack to run for you if you weren't doing this?

Gracie: I would just deal with it. I would hit my inhaler and see if that worked, if it would help clear up some of the breathing. I would think, "Ok, what is it? What's going on?" I would try to control the breathing myself. Since I was working I wouldn't have taken a Xanax. If I was at home or someplace where I didn't have to drive afterwards, (I might have taken a Xanax), but most of the time I would just suffer and/or I would pray, "God, take this, I don't know what's bringing it on."

Nancy: So normally when you would just suffer through it, how long would it take for it to get down to a zero?

Gracie: (Pausing, sadly) Sometimes hours. When I was working at the school district last year and I would have issues like this – they would last hours until I could get home and get away from the situation. So probably at least 2 hours but it could go longer.

Nancy: If you were at home and weren't going to have to drive anywhere and you could take a Xanax, how long would that take to bring your anxiety down to a zero?

Gracie: Within an hour. I don't take many Xanax – I probably have had just a handful in my life. But then at times even when I took a Xanax it wouldn't necessarily always take it all the way down to a zero. I can think of a couple times where it didn't and then I would either just go to bed with anxiety and then

when I woke up I was ok. Or after more than enough time I would have to take another one.

This poignant example described how in the past Gracie has dealt with her anxiety, which, at times, has not been successful. This furthermore demonstrated the effectiveness of this music tool after an emotion is already in the response modulation part of the cycle.

Section Summary

In this section the psychological theme of the participants' experiences with the spiritually-integrated music intervention were depicted as part of Gross and Thompson's (2007) Process Model of Emotion Regulation. There were two phases of the emotion cycle where the participants most often utilized the music tool. First, they used it during the attentional deployment phase using distraction. This phase was discussed in light of the research by Wegner et al., (1987), regarding the use of planned distractors to circumvent the rebound effect. Second, the participants in this research regulated their emotions most commonly in the cognitive change phase of the emotion cycle. This is not a surprising development in view of the empirically-established robust relationship between CBT techniques and affective change (see Chapter Two). Figure 4.1 provides an overview of the results of the music intervention. While it was hypothesized that the participants would use this intervention for acceptance of their emotions, that effect was not demonstrated in the current investigation.

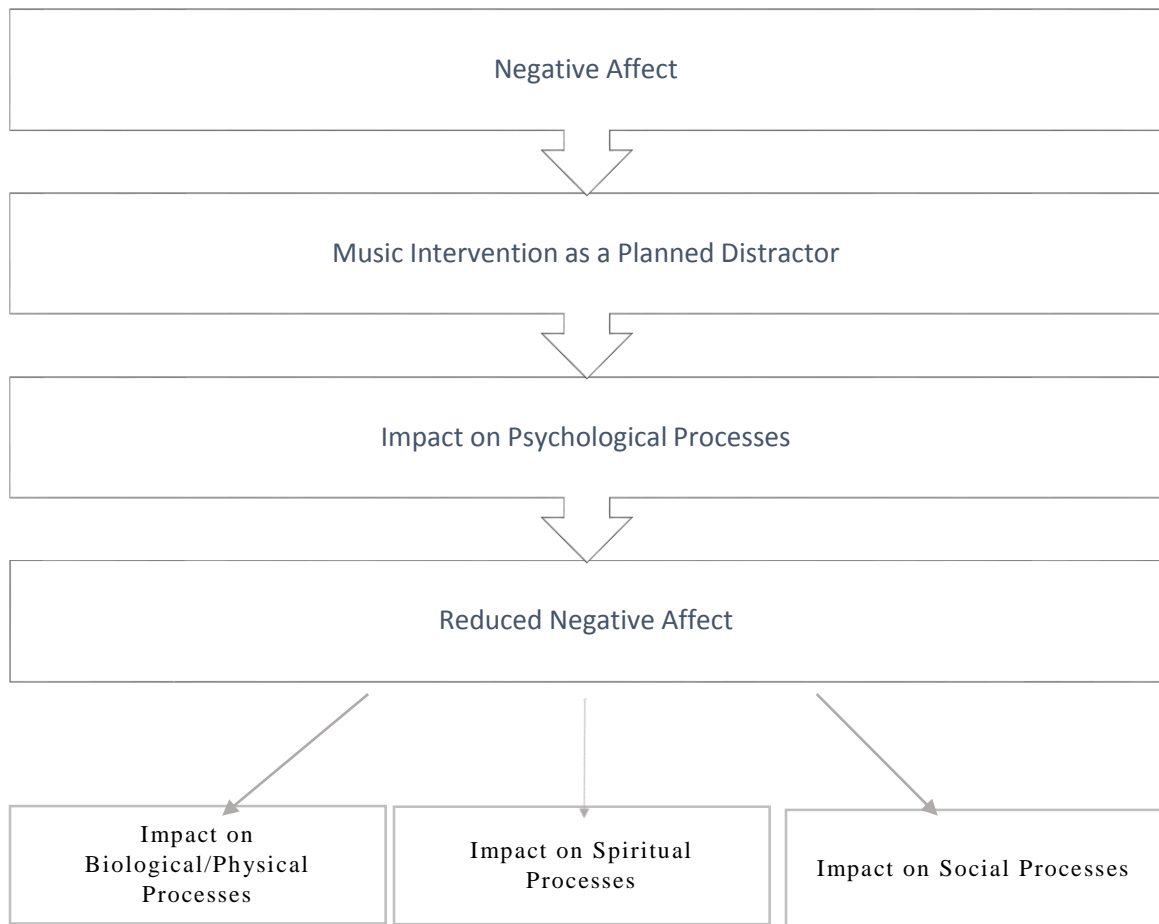


Figure 4.1. Impact of the spiritually-integrated music intervention on psychological, biological, social, and spiritual processes.

Chapter Summary

This chapter began with a description of the demographic information of the 10 participants who participated in this study. Next, a narrative was presented answering the research question: How did a select sample of individuals describe their experiences using a spiritually-integrated music intervention for emotion dysregulation? The written narrative was presented using the four themes that emerged from the analysis of the data which were: the impact of the intervention on the biological, social, spiritual, and

psychological processes of the participants. Example vignettes from each of the participants were provided as representations of each theme. The impact of the intervention on the psychological processes of the participants was further explicated in light of Gross and Thompson's Process Model of Emotion Regulation (2007).

In the upcoming chapter the findings of this research will be discussed in terms of the literature that was reviewed in Chapter Two. Also, the implications for use of this music tool in a clinical setting will be addressed. Furthermore, the limitations of the present research will be discussed as well as recommendations for future research.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This study explored 10 participants' experiences using a spiritually-integrated music intervention during times of affect dysregulation. The participants were Christian students from a small southwestern Christian university. This study was situated in the research literature that describes emotion dysregulation as the basis for many of the psychological disorders. This research was also placed within the context of the literature that supports the effectiveness of complementary and alternative forms of treatment for various mental disorders. In the present study, the two forms of CAMS that were utilized were spirituality and music. The qualitative method of Phenomenological Analysis (Moustakas, 1994) was utilized to explore the use of this music intervention. This method was chosen because there has only been one case study in the literature describing the effects of *recalling* music during times of affect dysregulation. All previous research has described the effects of either listening to music or playing musical instruments on psychological conditions. Therefore, Phenomenological Analysis was utilized in order to gain in-depth descriptions of the impact of this intervention on the participants.

During the two-week experimental period, research participants recalled Christian music in their minds at least once per day during times when they were experiencing negative emotions. They also kept daily logs of their experiences with the intervention. After the experimental period, the participants provided information about their experiences in audio-recorded interviews. The interviews were then transcribed and

thoroughly analyzed in order to glean convergent and divergent data and to construct themes. The themes that emerged were the impact of the intervention on the participants' biological/physical, social, spiritual, and psychological processes. The psychological impact of the intervention was further described in terms of Gross and Thompson's (2007) Process Model of Emotion Regulation.

This chapter presents an overall view of the intervention in light of the literature surveyed. Furthermore, in this chapter the usefulness of the intervention in clinical settings for clients diagnosed with anxiety and/or mood disorders is proposed. The limitations of the current research as well as recommendations for future research are also discussed in this chapter. Finally, the researcher's personal experiences with this music tool before and after this research was conducted are described.

Significance: Engaging the Literature

Findings from this study reflect previous research in several key areas. In this section results are compared and contrasted with the empirical literature in the areas of emotion regulation and complementary and alternative medicines (CAMS).

Relationship to Emotion Regulation Literature

In this section the emotion regulation literature pertaining to the adaptive coping strategies that were presented in Chapter Two are described in light of the present investigation. In particular, the participants' use of the tool for cognitive reappraisal and

as a planned distractor is discussed. The utility of the music tool as an adjunct to treatment methods that target emotion regulation is also presented.

Cognitive reappraisal. Previous research establishes that the regulation of emotion is a complex phenomenon. Several adaptive coping strategies for regulating emotions identified in the literature were presented in Chapter Two, including problem solving, cognitive reappraisal, and acceptance (Aldao & Nolen-Hoeksema, 2012; Aldao, et al., 2010; Gross & John, 2003). In the present investigation, participants used the music tool most often for cognitive reappraisal. In particular, the results of this study are similar to van Goethem and Sloboda (2011) findings wherein participants used music to regulate their emotions in several ways, such as distraction and cognitive reappraisal. For example, Greg used the music tool for cognitive reappraisal, as seen in this interview excerpt:

It definitely helps, especially when I was trying to process a certain situation that I didn't have time in the moment to process or that I just didn't have time in the day to really sit down and think about.

Another example of cognitive reappraisal is represented by Michelle, who said that the songs helped her gain control over her negative emotions by moving her attention away from her transitory circumstances, which then caused her to see “a bigger picture.” In both of these examples, the participants demonstrated how the tool was beneficial in changing their cognitions, which in turn impacted their emotions.

Planned distractor. As expected, this research demonstrated that the tool was used as a planned distractor to beneficially cope with negative emotions. The use of the tool as a planned distractor is epitomized by Cindy who said, “[The tool] helped me pattern my thoughts: it gave me a direction. Rather than being a splatter balloon on the wall, it helped me bring them in.” Here Cindy is expressing that the tool provided her with a positive and constructive place for her thoughts, rather than merely trying to avoid painful situations or emotions altogether. All of the participants used the tool as a planned distractor at times when they experienced negative affect, and all of them had a decrease in their SUDS at various times as a result.

Adjunct to treatment. Previous research demonstrated that a common underlying factor in many of the psychological disorders is emotion dysregulation (see Allen et al., 2008 for a review). Several therapeutic methods demonstrate efficacy in treating emotion dysregulation, including the Unified Protocol for Emotion Dysregulation (UP), described previously in this paper (Barlow et al., 2011). The goal of UP is to help clients learn to adaptively respond to their emotions (Barlow et al., 2011). The music tool in this investigation demonstrated effectiveness in helping the participants regulate their affect when confronted with emotionally evocative situations. Therefore, this study provides preliminary evidence for the use of this tool as an adjunct to treatment methods such as the UP.

This section described the effect of the music tool in light of previous research on adaptive emotion regulation strategies. The adaptive coping strategy of cognitive

reappraisal that was used most often in this investigation was described. Furthermore, the use of the tool as a planned distractor was also presented. In the upcoming section, previous research on the two CAMS of spirituality and music that were employed in this investigation are reviewed.

Relationship to Complementary and Alternative Methods of Medicine Literature

As described in Chapter Two, there is increasing support for the efficacy of integrating spirituality (Armento et al., 2012; Brown et al., 2013; Kirkland & McIlveen, 1999; Koenig, 2004; Propst et al., 1992; Stanley et al., 2011; Tan, 2007; van Dierendonck & Mohan, 2006; Wade et al., 2007) and music (Brandes et al., 2010; Choi et al., 2008; Mok & Wong, 2003; Pelletier, 2004; Sacks, 2006; Silverman, 2003; Wang et al., 2011) into the treatment of psychological disorders. The present study draws upon the research in these two areas as a basis for this investigation. The results in this study provide support for the previous literature as it demonstrates that the use of these CAMS decreased the participants' negative affect as indicated by their diminished subjective units of disturbance scales (SUDS). This study departs from previous investigations where participants listened to music or played musical instruments. In this investigation the participants recalled songs in their minds. The manner in which this tool diminished the participants' negative affect is described using a taxonomy of four themes in the upcoming section.

This section provided an overview of the manner in which the present study engaged the literature in the areas of emotion regulation and CAMS. Table 5.1 provides

a summary of the studies described in the literature review. In the upcoming section, a review of the themes that emerged from the data in this research is provided.

Table 5.1

Synthesis of Studies on Emotion Regulation

Type of Study	Authors, Year of Study
Studies confirming a transdiagnostic principle of emotion regulation in the mood and anxiety disorders	Allen et al., 2008; Barlow et al., 2011; Britton et al., 2012; Ellard et al., 2012; Farchione et al., 2012; Garnefski et al., 2002; Glenn & Klonsky, 2009; Green et al., 2007; Hofman et al., 2012; Kring & Sloan, 2010; Mennin & Farach, 2007; Norton, et al., 2004; Norton & Hope, 2008; Norton, 2012; Norton & Barrera, 2012; Roemer & Orsillo, 2007; Rusch et al., 2012; Salters-Pedneault et al., 2006; Tull, 2006; Turk et al., 2005; Wilamowska, 2010
Studies confirming the importance of the appropriate use of adaptive emotion regulation strategies	Aldao & Nolen-Hoeksema, 2010; Aldao & Nolen-Hoeksema, 2012; Aldao, 2013; Ball et al., 2013; Bonanno et al., 2004; Campbell-Sills et al., 2006; Dear et al., 2011; Ehring et al., 2008; Gratz & Roemer, 2004; Mennin et al., 2005; Pandey et al., 2011; Roemer, 2009; Salters-Pedneault et al., 2006; Sheppes et al., 2011; Turk et al., 2005; Wegner et al., 1987; Wegner et al., 1991; Wolgast et al., 2011
Studies confirming the use of music or spirituality (CAMS) for affect regulation	Brandes et al., 2010; Juslin & Laukka, 2004; Khouzam et al., 2005; Mok & Wong, 2003; Saarikallio, 2010; Skånland, 2013; Thayer et al., 1994; van Goethem & Sloboda, 2011; Wang et al., 2010

Themes from the Data

The analysis of the data revealed that the intervention impacted the participants by decreasing their negative affect in various situations over the two-week experimental period. Four themes emerged from the analysis that describe how the participants were affected. These themes include the impact of the intervention on the participants' biological, social, spiritual and psychological processes. In this section, each of these

themes is reviewed. The psychological impact of the intervention is then discussed in light of Gross and Thompson's (2007) Process Model of Emotion Regulation.

The Impact of the Intervention on Biological/Physical Processes

The participants indicated that the music tool often brought about a sense of calm and peace with an accompanying sense of physical relaxation. Cindy expressed the physical effect she experienced as follows:

I realized that I hold my breath when I get anxious or when I'm fearful... But I realized when I'm relaxed or when I'm listening to the music it makes me exhale. So it's showing me that I'm back in the rhythm of what God's done. It's like I always think about how God breathes His life into us and He breathes it out and there's a rhythm – everything in us has a rhythm. But when we get anxious and fearful it stops the rhythm and (the music) helps me get back into the rhythm again. So I'm really starting to see that. And I felt it because I felt the release – my muscles were not tense and tight.

In this illustration Cindy describes the impact of the music on physical processes. Many of the participants echoed this idea that their breathing was changed by focusing on the music. Others indicated that they experienced a general sense of decreased muscle tension or relaxation when recalling the songs in their mind.

The Impact of the Intervention on Social Processes

Nine of the participants described the positive effect of the intervention on their relationships with others. The participants provided various descriptions of the ways in which the intervention impacted their relationships. For example, at times it caused them to put their problems from work and school out of their minds so that they were able to

focus on being present mentally and emotionally with their families. For some of the participants, the intervention helped them deal constructively in their relationships in the midst of difficult situations. Steven expressed this result when recounting a situation where he was offended by a comment his wife made. After recalling the songs in his mind he said it caused him to want to “lovingly process (what had happened) together as a couple.” Steven’s description provides evidence of how the music tool was able to reduce his negative affect, thereby causing him to change the way he related to his wife. For many of the participants, the music tool provided an opportunity to respond positively in their relationships because it had reduced or eliminated their negative affect in the moment.

The Impact of the Intervention on Spiritual Processes

All of the participants indicated that they experienced a positive impact on their spiritual processes from using the intervention. For some of the participants, the impact was momentary, as described by Mike who said:

It really made me aware of the fact that God is aware of what’s happening. He’s not just distant but He’s really close and He’s there in the moment with me... which changes everything if I choose to embrace that fact.

In this example, Mike expresses how the tool raised his awareness of God’s involvement in his daily life. Other participants indicated that the tool impacted their spiritual lives because it brought them to a greater understanding of God or of spiritual truths.

Stephanie expressed this idea when she said:

I'm learning not to focus on falling in love with humans because they are imperfect and will let me down. Instead I'm falling in love with God, my Creator, and my Father and letting Him be what I need, not people. I've had a lot of really good days because I was realizing those things through this first week of recalling the songs. Singing them over and over again caused me to realize that.

In this example, Stephanie described how recalling the songs during times of affect dysregulation gave her a deeper understanding of basic Scriptural truths for which she had previously only had intellectual knowledge. Whether the results were temporary and circumstantial or whether they created a greater understanding of spiritual matters, the use of the tool had a beneficial impact on the spiritual processes of the participants.

The Impact of the Intervention on Psychological Processes

The music tool's greatest impact was on the psychological processes of the participants. This psychological impact occurred because whether the intervention affected a person socially, biologically, or spiritually, the influence was first demonstrated in their cognitive processes. For example in the previous chapter, the impact of the tool on Cindy's relationship was provided. In that vignette, she said:

When I would be leaving work I would have these issues in my mind, but when I focused on the music it helped calm me so that when I got into my home environment, I wasn't a nut (laughs). I was more balanced with my kids and my husband.

In this illustration, Cindy implies that her thoughts changed from her work-related stressors to focusing on the lyrics of the songs. These songs then helped to calm her down, resulting in being in a better state of mind to be with her family. Another example of how the intervention first impacted the participants' thoughts before impacting other

processes was described in the previous chapter when Rita spoke about the incident where two dogs were fighting in front of her. She explained how the intervention affected her biological/physical processes after first impacting her psychologically:

[After using the intervention], it did bring my fear and my panic down... my insides calmed down. Before the song I felt scared at a [level of] 10 and panic was at an 8, and I brought them down to a 4 and a 1 just by stopping and saying, "Wait a minute. This is over, it's in the past. God's brought me into this place, He brought me through it. He didn't fail me before, He's not going to fail me now."

Once again, the impact surfaces in the cognitive processes before it moves into the physical processes. Even when the intervention impacted spiritual processes, there was a cognitive change that occurred first. Samantha describes the process as follows:

In comparison [to my circumstances], I realized they were so small compared to God... It just opened my eyes to how good He is, how we need to be more grateful and thank Him for all the things He gives us and provides, and does for us and blesses us.

This cognitive shift for Samantha occurred and then she was affected spiritually. All of the participants indicated that the intervention made a positive impact on their psychological processes.

The impact of the tool on the participants' biological, social, spiritual and psychological processes was described in the previous chapter in light of Gross and Thompson's (2007) Process Model of Emotion Regulation. The analysis of the data revealed that the music tool was utilized most often in the model's attentional deployment phase (in the form of distraction) and in the cognitive reappraisal phase. As mentioned, the intervention was most frequently used as a planned distractor and as the

adaptive emotional regulation strategy of cognitive reappraisal, which dovetails with these two phases of the model.

This section reviewed the four themes that emerged from the analysis of the data. These themes were further explicated in the context of the Process Model of Emotion Regulation. In the upcoming section, implications of the research findings for pastoral counselors and mental health counselors is presented.

Implications of Findings for Mental Health Counselors

Many of the goals that bring people into mental health counseling relate to developing emotion regulation skills. Therefore, although further research is indicated to determine efficacy, pastoral counselors and mental health counselors may find that the tool introduced in this study benefits their clients in several ways including reducing negative affect, improved relationship quality and spiritual enrichment. In this section the findings of this study are applied to the work of pastoral and mental health counselors.

Pastoral Counselors

The utility of journal writing is well-known to many pastors and their parishioners, and the record keeping logs (see Appendix B) in this research are similar in some ways to journal writing. According to Richards, Hardman, and Berrett (2007), the use of spiritual journals can provide encouragement and support for people as they serve as reminders of the progress they have made. Several of the participants commented

about the usefulness of the logs, including Caitlyn who said, “I think recording the feelings before and after allowed me to see a tangible change which beforehand I may not have been so aware of.” As illustrated by Cindy in the following vignette, there is an important difference, however, between the usual practice of journaling and the record logs used in this research. Cindy commented about this difference and the beneficial effect of the logs when she said:

I think it’s a cool journal for seeing where my issues are, for example of helping identify why I am always so angry. I journal anyway but never a journal of tying an emotion to something. This is different. When I was identifying what my triggers were and how I responded and then of how I got to sing a song and see how it made me feel, wow! I just loved the journaling part of this. I thought it was really good and helpful.

Cindy indicates that the logs were useful to her because they specifically helped her to connect environmental or internal triggers to her responses and then she was able to see the results that occurred from using the intervention. The participants in this research were able to use the logs without difficulty after receiving the simple instructions that are outlined in Appendix F; therefore, pastoral counselors will likely find that their counselees are able to use the logs following simple and brief instructions.

It is worth noting that during the interviews some of the participants seemed to indicate that talking about how the intervention affected them helped them process what they had experienced. Michelle, for example, while trying to describe how she experienced the tool’s impact said, “I haven’t really processed this out loud yet, sorry.” Therefore, it may be beneficial for pastoral counselors to go over their counselee’s logs with them to discuss the changes that they experience.

As mentioned, all of the participants in this research were impacted spiritually by using this music tool. Because it is easy to use and since many people like music, this tool might be useful in working with clients who are struggling with spiritual issues. As indicated by some of the participants in this research, counselees might find that focusing on spiritually-themed songs may help them solidify doctrinal truths. Also, some counselees may find, as did some in this research, that the music tool is helpful in shifting Scriptural principles from an intellectual knowledge to a deeper, experiential understanding of those truths. Furthermore, counselees may find that the music tool is helpful in making them more cognizant of the fact that God is present with them in their daily lives. Mike, for example, said:

It really made me aware of the fact that God is aware of what's happening. He's not just distant but He's really close and He's there in the moment with me... which changes everything if I choose to embrace that fact.

This moment-by-moment appreciation of God's presence in Mike's circumstances gave him a sense of peace and calmness as he was able to let go of his troubling circumstances and turn them over to God whom he experienced as being aware of his situations.

Caitlyn likewise had an experiential awareness of God's presence which also gave her a sense of peace. As described earlier, she said:

I thought it was interesting because what I felt after (using the tool) was that I felt understood by God. And I remember thinking, "That's very interesting – I would never really pick up on that before unless I was logging it." And I felt like it really was the empathy of God. I felt that He got it and that He was ok with it. In other words I felt Him saying, "I'm not expecting you to not stress out over everything you've got to do, you've just got to realize that I'm the One Who carries it." ... (One of the songs was) "All I need is You" and it says "You've got the whole world, You hold me in Your hand" and I was just able to realize that

circumstances are what they are, but He's close and He gets it. So sometimes you don't have to get an answer from the Lord – it was just more of a relating.

This touching vignette from Caitlyn illustrates how the songs brought her to *experience* a connection to God. This awareness then served to soothe her negative affect because she felt understood which caused her to feel that she did not have to keep striving. Because of experiences like these in the participants' lives, pastors working with parishioners who have experienced inadequate or damaging treatment from significant caregivers in their childhood may also find that the use of this tool can reach their woundedness in ways that words cannot. As described earlier, Cindy reflected that using the music tool affected her in the following way:

It's almost like a baby starts crying and then the mom comes in and comforts it, and then the baby stops crying. To me it's that kind of feeling. Because at first I wondered how you go from a (SUDS) of 10 down to a 5 or a (SUDS) of 8 down to a 2 – because it happened all of a sudden. But it's because the love of God is so powerful and it's coming through this music.

Cindy seems to indicate in this vignette that the music had an impact upon her in a way that mere words could not. Garzon (2008) indicates that since many of the mood and anxiety disorders originate early in life when the amygdala and implicit memory systems are being developed, psychotherapeutic interventions which are verbal and aimed at the logic-processing centers of the brain may be missing the mark for some individuals. He encourages psychotherapeutic treatment methods that work in the right side of the brain where issues related to the God-image might have their earliest inception. As indicated by a few of the participants, the music tool allowed them to have an experiential

awareness of God or a deeper level of understanding about spiritual matters, which may indicate that the right hemisphere was accessed.

Another portion of the experiment that was beneficial to the participants was spending a week prior to the experimental period memorizing the song lyrics. In the present investigation, it ensured that all the participants knew the lyrics well which made them readily accessible during times of affect dysregulation. As Mike pointed out:

I had these songs stuck in my head, they're kind of on REPEAT on somewhat of a regular basis ... even when I didn't recognize it all the time because I listened to them so much the week before this.

For many of the participants, there was an important spiritual significance to selecting songs in advance when using this music intervention as described by Cindy in the following excerpt from her interview:

We have a kazillion songs playing in our heads but I think maybe these are the songs He just wants us to tap into or adjust the frequency, like in a radio, that we're listening to in order to hear from Him.

In this vignette Cindy is indicating the importance of choosing specific songs as she believes these songs were a way for her to connect with God. Many of the participants indicated that the songs were supernaturally selected because they were particularly well-suited for the events that occurred in the lives of the participants for the two-week experimental period. Steven explained this concept in the following way:

In retrospect I think God was instrumental in, not instrumental, He directed (emphasis) me to choose these songs because the three songs just seemed to be perfect. Whenever I was experiencing a negative emotion and trying to get a handle on it and deal with it and I would use these songs to process it, they just seemed to be perfect.

In this vignette Steven indicates that even the song selection itself had spiritual implications that demonstrated to him God's working in his life.

Mental Health Counselors

Counselors interested in targeting emotion regulation as part of their work with clients may find the method described in this research to be a helpful adjunct to therapy. The introduction of this tool could begin psychoeducation about the negative effects of avoidance and thought suppression and how utilizing a planned distractor attenuates those effects. While many participants referred to the fact that they normally have songs playing in their head a great deal of the time, based upon Wegner et al.'s (1987) research, simply choosing any song at random is not as likely to produce the beneficial effects demonstrated in this research. In the study by Wegner et al. (1987) cited in Chapter Two, the participants did not experience the rebound effect typically associated with suppression of unwanted thoughts because they focus their attention on a red Volkswagen. In that experiment, the red Volkswagen was a very specific object; likewise, in this research the participants had all picked three specific songs that they were to focus on during times of affect dysregulation. Therefore, clients should be instructed about the importance of specifically utilizing songs that have been selected ahead of time as planned distractors, rather than using any song that comes to mind.

As indicated in the discussion about the themes that emerged from this research, the music tool impacted the participants' relationships with others. Therefore, this tool could be a useful component for helping clients with their troubled relationships. Part of

the treatment approach could specifically target the cognitive reappraisal that occurs when using this tool and how the cognitive shifts positively impact relationships.

This section focused on the implications of this research in terms of pastoral and professional mental health counseling. Suggestions were made for counselors based upon previous research and the results of this investigation. In the upcoming section the limitations of this research are reviewed and recommendations for future research are proffered.

Limitations and Recommendations for Future Research

When investigating the outcome of several spiritually-oriented treatment studies, Richards and Worthington (2010) stated that future research is needed that can shed light on the efficacy of spiritual psychotherapies and whether those therapies affect participants in domains of functioning apart from spirituality. The present research was designed to do as Richards and Worthington suggested: to understand the experiences of participants who used this spiritually-integrated music intervention as a tool for emotion regulation. There were several factors in this investigation that could be altered or enhanced in order to bring further clarity to this intervention. These factors are discussed in this section and recommendations are made for future research in this area.

The present research was based upon a small number of participants. Although this is an intentional feature of qualitative inquiry (Moustakas, 1994; Smith & Osborne, 2007; Volpe & Bloomberg, 2012), it nonetheless restricts the generalizability of the findings to a similarly constructed sample. Future investigations could include a greater

number of participants. Also, future research could employ quantitative measures with a larger sample to aid in the understanding of the effectiveness of this intervention.

In this investigation the participants were not selected based upon clinical diagnoses; therefore, it is unknown if the tool would be as successful if all of the participants had been diagnosed with a mood and/or anxiety disorder. However, it is worth noting that three of the participants in this study did evidence mild to moderate levels of anxiety and/or depression on the DSM-V measures, and those participants discussed the beneficial effects of this intervention in terms similar to the other participants. Future research could target populations based upon diagnoses in order to glean information about the effectiveness of this tool as a transdiagnostic treatment method for the mood and anxiety disorders.

Finally, for the purpose of the present investigation, spirituality was delimited to the Christian faith. Therefore, the participants were selected based upon their self-identification as Christian and the music selections contained Christian lyrics. Whether the findings in the present investigation would be replicated for other religious belief systems could be the subject of future research.

This section reviewed the limitations of the current research and offered suggestions for future research in this area. In the final section, the researcher's reflections on the use of this music tool are provided.

Relocating the Researcher in Light of the Findings

This study provided a deepened appreciation for the positive benefits of using spiritually-integrated music for regulating negative affect. Observing the magnitude of effect it had on the participants was especially rewarding. It was encouraging to hear the in-depth descriptions of participant's experiences with the tool during their interviews, and the positive influence it had in their lives over the two-week experimental period. Motivation to recommend the tool to other clinicians and to clients and to continue conducting research on the tool is very high.

Chapter Summary

This chapter provided a brief review of the literature on emotion regulation, complementary and alternative methods for treating psychological disorders, and the present investigation's findings in light of this literature. There were four themes that emerged from the analysis of the data: the impact of the intervention on biological, social, spiritual, and psychological processes. These four themes were reviewed and were placed within the Process Model of Emotion Regulation. The potential utility of this tool for pastoral and mental health counselors was discussed. Additionally, the limitations of the current research were provided as well as recommendations for future research. Finally, the researcher's personal experiences with the music tool were presented.

Final Summary

This paper began with a description of the various consequences that the anxiety and mood disorders have on the lives of the individuals who suffer from them. Research on effective treatment methods for these disorders was presented with an emphasis upon the transdiagnostic principle of emotion dysregulation. Research pertaining to the two CAMS of spirituality and music that were utilized in this study was also reviewed. The portion of the population who remain unaffected by these treatment methods or who receive only partial or temporary remission of their anxiety and mood disorder symptoms was described, evidencing a gap in the literature which was addressed in the present investigation. In addition, the work of Gross and Thompson (2007) was provided as a means for placing this music tool in the emotion cycle.

Ten participants spent two weeks using the spiritually-integrated music tool during times when they experienced negative affect. The participants recorded their daily experiences with the tool in a record keeping log which they presented at the time of their in-depth interviews. The interviews were then transcribed and analyzed for convergent and divergent themes. Four themes emerged from the data analysis and were described in terms of their impact on the biological, social, spiritual and psychological processes of the participants. The psychological theme was further explicated in terms of the Process Model of Emotion Regulation.

In the final chapter, the results from this investigation were discussed in light of the empirical literature. The potential usefulness of the emotion regulation tool in counseling settings was also discussed. Additionally, this chapter outlined the limitations

of this study and provided recommendations for future research. In conclusion, it is this researcher's hope that counselors will consider utilizing the tool presented in this empirical project in their work and further explore its efficacy with clinical samples.

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APPENDIX A: Consent Form

CONSENT FORM

The Experience of Recalling Spiritual Songs on the Regulation of Emotion

Nancy Cochran

Liberty University

Center for Counseling and Family Studies

You are invited to be in a research study exploring the effects of a spiritual music intervention on emotion. You were selected as a possible participant because you are a Christian who is interested in Christian music. Please read this form and ask any questions you may have before agreeing to be in the study.

Nancy Cochran, a doctoral candidate in the Center for Counseling and Family Studies at Liberty University is conducting this study.

Background Information:

The purpose of this study is to understand what it is like for participants to recall spiritual songs during times when they are feeling negative emotions such as anxiety, sadness, discouragement, or hopelessness.

Procedures:

If you agree to be in this study, I will ask you to do the following things: Take two brief tests about anxiety and depression. You will then select and memorize three Christian songs that you find uplifting, comforting, encouraging, calming, and/or that help you focus on God. You will be given a \$10 iTunes gift card so that you can purchase these songs on your personal MP3 device. If you do not have an MP3 device, Nancy Cochran will provide you with a CD with the songs you have selected. You will be given one week to memorize the lyrics to these three songs. Then, for two weeks you will be asked to recall those songs when you are feeling distressed, anxious, discouraged, sad, or hopeless. Each time you do this, you are to fill out the Music Intervention Record of Significant Units of Disturbance to describe how you were feeling before the music intervention and how you felt afterward. After the two-week period, I will meet with you again for approximately one hour and conduct an audio-recorded interview with you about your experience using this musical intervention.

Risks and Benefits of being in the Study:

The study has the following risk: As you pay attention to your feelings, you may become more aware of them and the thoughts you are having when you are distressed, anxious, discouraged, hopeless, and/or sad. These feelings are not likely to cause you to feel overwhelmed, but if they do, you are encouraged to contact the principal investigator and discuss whether or not you would like to continue in this research.

The benefits to participation are that you may learn a new method to help you regulate your thoughts and emotions when something triggers you to worry, be sad, fearful, feel hopeless or discouraged. It is an easy method to use and is cost-free and can be done anytime and anywhere since it is all done in your mind.

Liberty University will not provide medical treatment or financial compensation if you are injured or become ill as a result of participating in this research project. This does not waive any of your legal rights nor release any claim you might have based on negligence.

Compensation:

You will not receive payment for your participation in this study but the \$10 iTunes gift card will cover more than the cost of the three songs.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify you. Research records and audio recordings will be stored securely; only I will have access to the records. You will be assigned a pseudonym (fake name) when the report is written and only I will know your true identity. All written records will be stored on a password protected computer and will not contain your real name.

When the current study is over, I may continue to use the data for future publication purposes. Again, your information will be anonymous. Demographic information about you will be included in this and other research papers such as age, gender, race, marital status, number of years you have been a Christian.

As a mandated reporter, if during the investigation I learn that you intend to harm yourself or someone else or that you have abused a child or elderly person, I will be required to notify the appropriate authorities. Other than those exceptions, the information you give to me will be confidential.

Voluntary Nature of the Study:

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

How to Withdraw from the Study:

If you decide that you would no longer like to participate in the study, please notify Nancy Cochran. She will then not use any of the information you have provided up to that point in any of her publications.

Contacts and Questions:

The researcher conducting this study is Nancy Cochran, M.A, Ph.D. Candidate. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at (940)206-7237 or at ncochran@liberty.edu. The researcher's advisor is Lisa Sosin, Ph.D., (434)592-4042, lsosin@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email at irb@liberty.edu

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL
INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS
DOCUMENT.)

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Signature: _____

Date: _____

Signature of Investigator: _____

Date: _____

APPENDIX B: Music Record Keeping Log

<i>Date/Time</i>	<i>Event or thought that caused you to have negative feelings</i>	<i>Feeling/s with Significant Units of Disturbance (1-10)</i>	<i>Music Intervention</i>	<i>Resulting Feeling/s with Significant Units of Disturbance (1-10)</i>	<i>Additional Thoughts</i>

APPENDIX C: PROMIS Emotional Distress—Anxiety—Short Form

PROMIS Emotional Distress—Anxiety—Short Form

<http://www.nihpromis.org/measures/availableinstruments>

APPENDIX D: PROMIS Emotional Distress—Depression—Short Form

PROMIS Emotional Distress—Depression—Short Form

<http://www.nihpromis.org/measures/availableinstruments>

APPENDIX E: Demographic Survey for Participants

Demographic Survey for Participants

1. What is your pseudonym for this study? _____
2. What is your age? _____
3. Are you married, single, separated, or divorced? _____
4. What is your ethnic heritage and race? _____
5. Are you currently in treatment with a counselor? Yes _____ No _____ If yes, how long have you been in treatment? _____
6. Have you ever been hospitalized due to a psychiatric condition? Yes _____ No _____ If yes, for how long were you hospitalized? _____ What diagnosis were you given at that time? _____
7. Are you currently taking medication for a psychiatric condition? Yes _____ No _____ If yes, what medication(s) are you taking? _____
8. How many years have you been a Christian? _____
9. How often do you attend church? _____
10. How would you like me to contact you during this study? (Circle one)

Text Phone call Email

Please provide the phone number or email address you would like me to use:

APPENDIX F: Oration to the Participants

Oration to the Participants

Eph. 5:18-20 – Instead, be filled with the Spirit, speaking to one another with psalms, hymns, and songs from the Spirit. Sing and make music from your heart to the Lord, always giving thanks to God the Father for everything, in the name of our Lord Jesus Christ. Col. 3:16 – Let the message of Christ dwell among you richly as you teach and admonish one another with all wisdom through psalms, hymns, and songs from the Spirit, singing to God with gratitude in your hearts.

Anxiety and depression are common disorders in the world. In fact, the WHO has found that depression is the third leading cause of disability in the world. While there are many tools that treat these conditions, not everyone is helped by the existing tools clinicians use. Therefore, researchers are always trying to develop new tools that can aid people in recovering from anxiety and depression.

For many years, therapists have used various kind of music interventions to help treat people with anxiety and depression and there is a great deal of research that supports music therapy as an effective intervention for these conditions. The idea behind this research is that music can be used to help people when they are feeling some negative feelings that they don't know what to do with such as sadness, fear, hopelessness, anger, discouragement, etc. So I will be asking you to use this tool when you are feeling those negative feelings and then to keep a record of what happens to your feelings after you use the tool.

This is how the experiment is going to work. I am going to ask you to memorize three Christian songs that you like that give you hope or are encouraging, lift you up when you are down or discouraged, or that give you peace, or that turn your attention to

God. These can be songs that you have known for years or they can be new songs that you have just recently heard on the radio or at church. The only criteria are that they must be Christian songs, that they encourage you, uplift, comfort and/or give you peace, or focus your attention on God, and that you like them. If you can't readily think of three songs like this, I have a list of songs that you can look at today. If you don't already own the songs that you would like to use for this experiment on a CD or an MP3 device, I will give you a \$10 iTunes gift card so that you can buy them for yourself either on your phone or your computer today (if you already own the songs, I will still give you the \$10 iTunes gift card). I will also burn a CD for you and bring it to you tomorrow if you would like to have these songs on a CD or if you don't have an MP3 device.

Beginning tomorrow, 11-14-14, I would like you to listen to the three songs that you have selected for one week until 11/21/14, as often as you need to in order to memorize all of the lyrics to all three songs. If you have already memorized the lyrics for the songs, I would ask that you listen to these songs once a day for the next week. In the middle of this next week, I will either call/text/email you to confirm that you are memorizing the lyrics. At the end of this next week, I will text/email/call you and confirm that you have memorized the lyrics to all three songs.

After the week of you memorizing the song lyrics (Friday, 11/21/14), I will ask you to take a two day practice period. During this time, every morning and every night I would like you to recall those three songs through in your mind, not on the CD or MP3 player. It's important to understand that I am not asking you to play these songs during this part of the experiment, I am asking you to recall the songs in your mind. After you

have recalled all three songs through in your mind, I would ask that you answer this questionnaire (the researcher will then distribute the Two Day Trial Period with the Musical Intervention questionnaire in Appendix H). This part of the experiment is just to familiarize yourself with this tool. It is better if you can do this trial part of the experiment when you are not emotionally upset so that you can just focus on how it feels to recall these songs in your mind. If you happen to be upset during this two day trial period in the morning or evening, go ahead and recall the songs anyway and fill out the questionnaire. Do you have any questions so far?

Beginning on (11/23/14), the main experiment will begin and will last for two weeks. During that two-week period of time, I will ask you to recall these songs that you have chosen (i.e., play them through in your mind) when you are experiencing negative emotions. Once again, it's important to understand that I am not asking you to play these songs during this part of the experiment, I am asking you to recall the song(s) in your mind. Now I'm going to give you an example of how this works. If you and a co-worker get into an argument and you are feeling mad or frustrated, you are to recall *one or more* of these songs and play them through in your mind. Notice that you are not being asked to play these songs on a CD or an MP3 player, but to simply recall them in your mind. This is an important part of this research as it is different than any other study that has been done using music interventions. Pay attention to the lyrics as you recall the song(s) in your mind. If one section of the songs stands out for you as the most important part of that song and that is what comforts, encourages, uplifts you, gives you peace, or focuses

your attention on God, then you can recall just that part of the song in your mind when you are experiencing negative emotions.

Each time you do this, I have a chart for you to fill out (Example Music Record Keeping Log). In the first column you will record the date and time. In the second column, you will write what triggered the negative emotion. In the example I gave you it would be the argument with your co-worker. Or sometimes a negative thought will pop into our mind without any external event happening and that may cause you to become emotionally upset. Like all of a sudden you might think, 'I don't have any friends. Nobody likes me.' That thought might make you feel sad and lonely. In that situation, you would write down in the second column that the trigger for your negative emotion were your thoughts of 'I don't have any friends. Nobody likes me.'

In the third column, you are to write down the feelings you have as a result of the triggering event. For example, in the last example I gave you, you might write 'Lonely and Sad' or just 'Sad. Then, you are to write on a scale of 1 to 10 (1 being barely noticeable and 10 being overwhelmed with the emotion) how much it affected you. We call this rating scale the SUDS scale meaning Significant Units of Disturbance. So, in this example let's imagine that you were really sad when you thought, 'I don't have any friends. Nobody likes me,' therefore, you could write down: Sad=6, Lonely=7 in the SUDS column (the researcher is referring to the Example Music Intervention Log from Appendix I during this time).

Then you would recall one or more of your three chosen songs in your mind. You can play the whole song through in your mind or just a portion of it that brings you the

most comfort, uplifts or encourages you, or makes you focus on God in a positive way.

The idea is to pay attention to the lyrics and their meaning as the music plays in your mind. So, let's say that one of your three chosen spiritual songs (remember, the songs you will be recalling are only those three songs you select today) was 'Your Love Never Fails' and so when you had that thought that you didn't have any friends, you decided to recall that song in your mind. You would write down 'Your Love Never Fails' in the fourth column. You can recall more than one song in your mind that you cause you to feel comforted, uplifted, hopeful, calm, or that helps you put your focus on God. In the example log, I have written two songs: 'Your Love Never Fails' and 'By Your Side.' That indicates that you recalled two songs after you had the distressing thought.

After you have recalled the song(s) in your mind and focused on the lyrics and their meaning, pay attention to your feelings. Notice if they have stayed the same or if they have changed. Whatever has happened, you are to record the feelings in the fifth column and the SUDS score of those feelings. So, for example, imagine that after you recalled 'Your Love Never Fails' through in your mind you felt less sad and even kind of relieved or hopeful. In that case, in the fifth column you could write: Sad = 0, Lonely = 2, and then you could also add Hopeful. You would not use the SUDS scale for the positive emotions (in this example Relieved and Comforted) that may result because SUDS has to do with Disturbance, not positive feelings. The reason that there are three different feelings written here is because you can have more than one feeling sometimes and it's important that if you do, you write down what they are.

The last column is for any additional thoughts that you would like to share with me about this tool each time you do it. Anything you would like to share with me would be appreciated because it will help me gain a greater understanding of how this tool affects people when they are experiencing negative emotions.

I would like you to do use this tool at least one time every day for the two weeks of the experiment. You can do it more than that if you like and that is recommended, but at a minimum please do it one time per day. The more times you use it in a day, the more familiar you will become with it. I will give you multiple copies of the Music Intervention Log to use.

Do you have any questions?

If at any time during the next three weeks you have any questions about this experiment, please feel free to call me and I will be happy to clarify any questions or concerns you have.

After the three weeks, I will meet with 10 of you individually for about 60-90 minutes and I will conduct a tape-recorded interview and ask you to describe your experience with this tool. After I have it transcribed, I will give you a copy of it which you can look over to verify that it is an accurate reflection of your experience. You will be able to add anything you would like at that time. The students who do not do a recorded interview with me will answer a written set of questions about their experiences using this tool. I will draw names today to see who will answer the written questions and who be part of the individual, recorded interviews. Do you have any questions?

If you are interested in participating in this experiment, there are some papers that need to be completed tonight. The first is an Informed Consent. This says that you are aware that this research you are about to participate in is voluntary and that you can quit at any time without any repercussions. The basic idea of the experiment is written on this form so you can see what you are basically asked to do. There are minimal risks in this treatment but there is a risk, that since you will be thinking about your thoughts and feelings over the two weeks of the experiment, you may start to experience your feelings more intensely. Should this happen and you become overwhelmed and you decide that you would like to withdraw from this research you are free to do so. All you would need to do to withdraw is contact me (my phone number is on the Informed Consent sheet) and I will destroy any documents that you have worked on. Your relationship with the university will not be affected in any way should you decide to withdraw from this study.

Next, if you are willing to participate, I am going to ask you to fill out the strip of paper that asks for your name and a pseudonym that you create for this experiment. It will help protect your identity. Try to come up with something unusual, not like 'Jane Doe' or 'Jim Jones.'

Next, I would like you to fill out the Demographic Survey and two questionnaires that assess anxiety and depression. The reason I am having you answer these questionnaires is because I would like to have information for my research about all of these factors. Be sure to put your real name on the Informed Consent and then your Pseudonym on everything else.

There is a list of Christian songs (Appendix G) if you can't think of any that you want to use. Please download the songs this evening after class so that you can begin the experiment tomorrow.

APPENDIX G: List of Christian Songs

List of Christian Songs

Oceans Will Part
I Surrender All
Trust and Obey
Leaning On the Everlasting Arms
What a Friend We Have in Jesus
God Will Make a Way
Amazing Grace
Everlasting God
Losing
I Will Follow
Forgiveness
Only Hope
I Lift My Eyes Up
Lord I Lift Your Name on High
You are, I AM
Jesus Saves
No One Else
Show Me Your Glory
Courageous
Healer
One Thing Remains
Your Love Never Fails
Just a Closer Walk with Thee
I Need a Miracle
How He Loves
Here with Me
How Great is Our God
Losing
With All I Am
At Your Name
I Will Follow
Forgiveness
New Way to Be Human
By Your Side

APPENDIX H: Two Day Trial Period with the Musical Intervention

Two Day Trial Period with the Musical Intervention

For the next two days, please spend some time in the morning and in the evening recalling the three spiritual songs you memorized last week. Each time you do this, please answer the questions below. Be as detailed as you can and feel free to add any extra information that you would like. I will pick this two day questionnaire up from you after you have completed it. If you have any questions, please feel free to contact me at (940) 206-7237.

DAY 1

1. On the morning of the first day that you recalled the three spiritual songs that you had memorized, how did you feel before you recalled them?

2. How did you feel after you recalled them? _____

3. Please share any thoughts you had about using this tool on that first morning.

4. In the evening of the first day that you recalled the three spiritual songs that you had memorized, how did you feel before you recalled them? _____

5. How did you feel after you recalled them? _____

6. Please share any thoughts you had about using this tool on that first morning.

DAY 2

1. On the morning of the second day that you recalled the three spiritual songs that you had memorized, how did you feel before you recalled them?

2. How did you feel after you recalled them? _____

3. Please share any thoughts you had about using this tool on that second morning.

4. In the evening of the second day that you recalled the three spiritual songs that you had memorized, how did you feel before you recalled them?

5. How did you feel after you recalled them? _____

6. Please share any thoughts you had about using the intervention on that second evening.

APPENDIX I: Music Record Keeping Logs with Examples

Music Record Keeping Logs with Examples

<i>Date/Time</i>	<i>Event or thought that caused you to have negative feelings</i>	<i>Feeling/s with Significant Units of Disturbance (1-10)</i>	<i>Music Intervention</i>	<i>Resulting Feeling/s with Significant Units of Disturbance (1-10)</i>	<i>Additional Thoughts</i>
Ex. Fri., Oct. 3 10:00 a.m.	Argument with co-worker	Mad=4 Frustrated=4	<i>I Surrender All</i>	Calm, less angry Mad=1 Frustrated=1	
Ex. Fri., Oct. 3 4:00 p.m.	I started thinking, “I don’t have any friends. Nobody likes me.”	Sad=6 Lonely=7	<i>Your Love Never Fails</i> <i>By Your Side</i>	Relieved, Comforted Sad=0 Lonely=2	

APPENDIX J: Participant Interview Questions

Participant Interview Questions

1. How did the experience of using this music intervention affect you? What changes, if any, do you associate with the experience?
2. What was it like for you to do this every day?
3. Describe what it was like for you when you recalled a spiritual song or songs when you were feeling negative emotions. Please give specific examples to explain your answer.
4. Were there times when recollecting the music had greater impact than other times?
5. Was there ever a time over the two-week period of using this music intervention when you weren't experiencing any negative emotions and yet had to use the intervention anyway? What did you do in that situation? How did it impact your mood?
6. Did recalling these spiritual songs when you were experiencing negative emotions have any effect upon your relationship with God? If so, please describe.
7. Did recalling these spiritual songs when you were experiencing negative emotions have any effect upon your relationship with others? If so, please describe.
8. During the investigation, did songs other than the ones you selected ever come to mind that helped with emotion regulation? Did you use those songs instead of or in addition to the ones you originally selected?
9. What incidents connected with this experience stand out for you?
10. Did this experience affect significant others in your life? If so, how?
11. In general, what thoughts and feelings did you have about using this music intervention?
12. Did you notice any bodily changes that occurred as a result of using this music intervention? In other words, did you notice your body having muscle tension or relaxation, increased or decreased breathing, etc.?
13. Prior to this study, did you ever use spiritual songs to regulate your emotions or moods? If so, describe that process and how it affected you. How was your prior

experience using music to regulate your mood different than when you used the method taught in this study?

14. Describe your relationship with music prior to this study. How important is music to you? How often do you listen to or play music? Do you play any instruments or sing? Have you received any training in music?
15. During the investigation, did you speak with any other participants about this research? If so, can you describe what you discussed? (optional)
16. Have you shared all that is significant regarding this experience? Would you like to add anything else?

APPENDIX K: Phases of the Experiment

Phases of the Experiment

PHASE 1 One Week (Dates inserted)	PHASE 2 Two Days (Dates Inserted)	PHASE 3 Two Weeks (Dates Inserted)	PHASE 4 60-90 Minutes Schedule this meeting within three days of experiment completion
As often as needed for one week, listen to the three songs you have chosen on your MP3 and/or CD player and memorize the lyrics to all three songs	Recall the 3 songs that you have memorized and play them through <i><u>in your mind</u></i> (not on the MP3 player or CD) twice daily - once in the morning and once in the evening. Fill out the “Two Day Trial Period with the Musical Intervention” questionnaire each time you do this.	At least one time per day when you are experiencing a negative emotion such as sadness, discouragement, hopelessness, disappointment, anger, etc., recall one of the songs you have memorized and play it <u>through in your mind</u> . You can recall more than one of the songs if you like and you can play it through in your mind as often as you want. Record your experience on the “Music Record Keeping Log.”	Meet with Nancy for a 60-90 minute audio-recorded interview about your experiences with the intervention.