

A QUALITATIVE STUDY OF MUSIC THERAPY'S
EFFECTIVENESS ON TREATING PTSD

by

Shariee Jones

Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

School of Behavioral Sciences

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APPROVED BY:

Committee Chair: Dr. Daniel Marston

Committee Member: Dr. Frederick Milacci

ABSTRACT

The purpose of this descriptive phenomenological study in this qualitative research described how music therapy has been beneficial to the treatment of trauma survivors suffering from post-traumatic stress disorder. The research in this study consisted of six participants and previous research to show how music therapy has been effective in treating PTSD. The six participants were individually interviewed based on their prior experiences with music therapy from Board Certified Music Therapists. For years, the U.S. Department of Veteran Affairs have used music therapy to treat trauma survivors with complementary and alternative medical treatment. Several studies have been done on music therapy as a complementary and alternative treatment but there has been a lack of evidence on whether the treatment can stand alone. Further research is needed for music therapy to be recognized by the government and mental health practitioners as a stand-alone treatment for PTSD. The research questions explored are (a) in what ways did music therapy produced healthy behavioral coping methods, and (b) how music therapy has helped decrease or reduce PTSD symptoms. Prior research has shown how music therapy and Cognitive Behavioral Therapy have been assessed over the years with trauma clients. Research data has been collected with the use of questionnaires that utilized a phenomenological approach for understanding the participants' experiences with music therapy. This collected data described the themes that the participants had based on their experience with music therapy.

Keywords: PTSD, post-traumatic stress disorder, music therapy, cognitive behavioral therapy

Dedication

I dedicate this research to anyone who is searching for peace of mind. I hope you find it.

Acknowledgement

I would like to acknowledge my late grandfather Lawrence who served in The United States Army. I would also like to acknowledge all other United States veterans and other trauma survivors who have inspired me to do research on alternative methods to understand, diagnose and treat post-traumatic stress disorder. I would like to thank Dr. Marston and Dr. Milacci for their time and patience in seeing that my vision in my research is a success. I would also like to thank all the participants who shared their stories with me so that I can do my research.

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List of Abbreviations

Board Certified Music Therapist (MT-BC)

Complementary and Alternative Medicine (CAM)

Cognitive Behavioral Therapy (CBT)

Cognitive Processing Therapy (CPT)

Complex Post-traumatic Stress Disorder (C-PTSD)

Guided Imagery and Music (GIM)

Imagery Rehearsal Therapy (IRT)

Internet-based Cognitive Behavioral Therapy (i- CBT)

Music Therapy Practice Scale (MTPS)

Music Therapy (MT)

Neurological Music Therapy (NMT)

Post-traumatic Stress Disorder (PTSD)

Rational Emotive Behavioral Therapy (REBT)

Single Case Design (SCD)

Skills Training in Affective and Interpersonal Regulation (STAIR)

Substance Use Disorder (SUD)

Traumatic Brain Injury (TBI)

Trauma-focused Cognitive Behavioral Therapy (TF-CBT)

Trauma-focused Music and Imagery (TMI)

U.S. Department of Defense (DOD)

U.S. Department of Veteran Affairs (VA)

Violent Interpersonal Trauma (VIT)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this study described how music therapy has been beneficial to the treatment of trauma survivors suffering from post-traumatic stress disorder. This qualitative phenomenological study explored the use of participants who suffered from post-traumatic stress disorder (PTSD) and have used music therapy as a coping skill to treat their PTSD. Music therapy is a coping skills therapy for people who suffer from post-traumatic stress disorder (PTSD). MT has been used with or without Cognitive Behavioral Therapy (CBT). A phenomenological study and previous research have been explored to describe how music therapy has been effective for PTSD participants who have had treatment from Board Certified Music Therapists. Board Certified Music Therapists (MT-BC) promoted the use of music in therapy and provided music as an intervention for clients or patients mental and physical health (American Music Therapy Association, 2019).

Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone. This qualitative phenomenological study was a collection of previous qualitative studies on music therapy and CBT that has aided PTSD. This research described participants' experiences with music therapy and how they have used music therapy as a coping mechanism for their PTSD (Young, 2010). Future research needs to be considered on how using a qualitative phenomenological study can determine the benefits of music therapy with or without CBT.

Background

The problem explored in this research study showed most trauma survivors have had a hard time with reoccurring thoughts or memories. The use of Cognitive Therapy or Cognitive

Processing Therapy helped clients process their trauma, but most clients have a hard time coping with relived memories. However, music therapy can possibly develop healthier coping mechanisms for clients needing a safe coping experience to process revisiting old memories. Gebhardt et al. stated that “music therapy is a well-established non-verbal treatment method in psychiatry and psychosomatic medicine” (Gebhardt et al., 2018, p. 61). For the clients who find it hard to communicate their feelings or experiences, music therapy has been an avenue used to create, dance, sing, write, talk, share, and understand the process of cognitive thinking in social and therapeutic settings (American Music Therapy Association, 2019). Music has been a way to rehabilitate mentally, physically, and emotionally that increases self-motivation (American Music Therapy, 2019). This could be why CBT with music therapy have worked well together based on years of previous research stating how music increases motivation and a way for a non-communicator to express themselves (American Music Therapy Association, 2019).

Historical

Historically, music therapy has been around for years. Ahonen (2016) stated that music psychotherapy for adult trauma had been explored historically and globally for music listening and improvisation methods to treat clients. The American Music Therapy Association (2014a) also stated that the United States military personnel have used music therapy in veteran hospitals for almost 70 years to treat soldiers suffering from combat trauma. According to the American Music Therapy Association (2014a), one of the earliest references to music therapy appeared in the 1800s in the dissertations of Samuel Mathews (1806) and Edwin Atlee (1804) under psychiatrist and physician Dr. Benjamin Rush.

The first recorded music therapy intervention was in the 1800s under clinical institutional settings and Dr. Rush used music therapy to treat medical diseases (American Music Therapy

Association, 2014a). During the 1900s, music therapy publications, training, and journals were created by the National Society of Musical Therapeutics, National Associations for Music in Hospitals & National Foundation of Music Therapy (American Music Therapy Association, 2014a). Music Therapist and psychiatrist Ira Altshuler, Willem van de Wall & E. Thayer Gaston were key players in developing music therapy and also college training programs (American Music Therapy Association, 2014a). The National Association of Music Therapy was found in 1950 and in 1983 the Certified Board Music Therapists was incorporated (American Music Therapy Association, 2014a). This timeline showed that the creation of music therapy was a process over time.

During The World War I and II eras, musicians visited the Veterans Hospital to play music for veterans who were suffering from physical, mental and emotional traumas (American Music Therapy Association, 2014a). The Urban Federation of Music Therapists as first established in 1971 and later changed to The American Music Therapy Association in 1983 (American Music Therapy Association, 2014a). By 1998, the American Music Therapy Association started treating military families, caregivers, other military personnel, and veterans (American Music Therapy Association, 2014b). In 2014, former President Obama popularized the use of music therapy with The Wounded Warrior Project as a complementary and alternative therapy for soldiers suffering from post-trauma stress disorder (American Music Therapy Association, 2014b).

Music therapy has been used to treat wounded soldiers at Walter Reed National Military Medical Center in Bethesda, MD by Board Certified Music Therapists (American Music Therapy Association, 2014b). Music therapy has also evolved based on clinical “evidence-based medical interventions” outside of the military realms (American Music Therapy Association,

2014b). According to the American Music Therapy Association (2014a), the Certification Board for Music Therapists (MT-BC) have been created to regulate the use of music therapy among therapists, counselors, and other healthcare professionals. Music therapy has been used in government, but still has not been recognized as a stand-alone practice like CBT have been recognized to treat trauma survivors (American Music Therapy Association, 2014a).

Social

According to The Office of Secretary (2014), former President Obama acknowledged the use of clinical music therapy at a concert given at The White House dedicated to active-duty soldiers. He reflected on how music therapy helped a soldier who had used music as a therapy practice for years to regain his peace and overcome his trauma. Acknowledging music therapy as a practice by the highest government was an accomplishment for historians, researchers, and therapists. There was no evidence the soldier used music therapy alone, but the president stated the use of music therapy was successful in helping the soldier overcome his trauma and reclaim his life (The Office of Secretary, 2014).

Music has been known to be a communication tool that connects families, communities, and the world (American Music Therapy Association, 2019). Music stimulates the mind and exists among most social environments. Music can even be heard among nature in the winds, birds chirping, and water flowing (Adams, 2019). Music also lives within the sound of people talking or singing, the movement of people walking or moving as well as the movement of transportation. The sense of hearing sound is therapeutic but can also be traumatic depending on how it is used or perceived (Adams, 2019). Seeing sound that reminds a patient of a traumatic event is the social aspects of trauma, which can determine whether music therapy can be healing or destructive to a trauma survivor's mind (Adams, 2019). Sound therapy is the communication

that can speak to your soul without speaking (Aigen, 2015). Sound therapy can help connect survivors to processing their trauma when other memorial sounds from their traumatic experiences drown the presence of their peace (American Music Therapy Association, 2019).

Theoretical

Music therapy used alone or with CBT can possibly be beneficial to trauma survivors. PTSD has been treated with music therapy and some researchers have shown that it can decrease or reduce symptoms in trauma clients (Schouten et al., 2015). Still, there is little evidence that it was used without another therapy practice. Research on music therapy needs to be done to understand the impact that music therapy has on a client being treated with and without other therapy practices used. Schouten et al. (2015) stated music therapy as a practice needs more research to be made from a systematic view. Wellman (2015) stated that after music therapy treatment on an Army veteran, the soldier's decrease of medication led to improvement of his mental state, helped with unsettled moods and decreased social phobias. The military's music therapy program at Walter Reed National Military Medical Center has an extended history of using music therapists to rehabilitate wounded soldiers who suffer from PTSD and traumatic brain injury (Ashton, 2017). The military has also been known to use alternative and complementary medicine to treat wounded soldiers physically, spiritually, and mentally (Ashton, 2017).

In 1950, the National Association for Music Therapy was the first to explore research after the 1940s advocacy for the effectiveness of music therapy (Gooding & Langston, 2019, p. 316). Music therapy is defined as a clinical, evidence-based therapy practice that a therapist uses to practice intervention methods on their clients and patients (American Music Therapy Association, 2019). Music therapy has been successfully used among the military, children and

adults suffering from trauma. Much research has gone into the use of music therapy as an intervention tool for military soldiers who suffer from Traumatic Brain Injury (TBI) and post-traumatic stress disorder (PTSD) diagnoses (Gooding & Langston, 2019, p. 317). The U.S. Department of Veteran Affairs and the U.S. Department of Defense have used music therapy as complementary and alternative medicine (CAM) for treating soldiers with trauma who are not responding well to other cognitive therapies. Gooding and Langston (2019) stated music intervention has been known to approach whole body needs such as emotional, spiritual, mental, and physical functions.

Therapists who use music as a therapy practice are mainly gifted musicians, but some music therapists with little to no prior music skills use learned musical styles that can work well with meditation, relaxing the physical body and produce healing (Harvard Medical School, 2019). Music therapy has been used to enhance quality of life physically and mentally. Gooding and Langston's (2019) research stated that music therapy has been highly effective in the treatment of clients that suffer from TBI and cognitive as well as physical conditions. Many qualitative studies and research reports have been done to support the effectiveness of music therapy; however, more clinical research needs to be done for support as a stand-alone treatment for healing patients or clients. Furthermore, there is limited research on the use of music therapy on civilians or regular citizens to treat their trauma. Research on music therapy needs to be done so researchers, therapists, counselors, and other health professionals can gain a better understanding whether or not music therapy is effective in treating PTSD.

Situation to Self

The motive for conducting this study showed music therapy is a good alternative treatment for PTSD. Music is universal and can be a source of healing the human body. Treating trauma clients who have PTSD can be challenging when PTSD symptoms trigger unwanted or intrusive memories (American Psychiatric Association, 2018). Music therapy and CBT can be tools used for treating trauma clients that are having PTSD triggers from reliving past events. Music therapy could possibly be used in conjunction with CBT to offset PTSD triggers and make processing traumatic memories better.

According to the American Psychiatric Association. (2018), PTSD can trigger insecurity of self and feeling unsafe in certain environments or events that are brought on by memories of a past trauma. Gebhardt et al.'s (2018) research has shown that music therapy has helped some trauma clients view his or her life as well as self-image in a positive manner. Some research has been based on personality and emotional scenarios from participants' therapy treatments that compared treatment with and without the use of music therapy. Their research was measured using a cross-sectional design based on a cause and effect. Insecurity was said to resolve negative thinking as well as used as an everyday relaxation or mood enhancing technique (Gebhardt et al., 2018). However, non-music therapy was shown to reduce negative thinking patterns.

Gebhardt et al.'s research stated music therapy can "modify personality dimensions" (Gebhardt et al., 2018, p. 61). After years of study of the causes of PTSD and other traumatic disorders with the U.S. Department of Veteran Affairs, this researcher has concluded music therapy works well for active and inactive soldiers. The researcher has benefited from music therapy with some soldiers at Walter Reed Military Medical Center at Bethesda, MD. The

researcher did extensive study with the U.S. Department of Veteran Affairs' PTSD program through their continuing education courses, too, on behavioral tools to help soldiers decrease stress related issues. Board Certified Music Therapists with training in CBT can possibly be very beneficial to trauma clients' overall mental health regime. Treatment plans were used in the Wounded Warriors Project, and personal evidence showed that music therapy can also be an additional benefit to trauma clients in CBT treatment, too.

Problem Statement

Therapists are looking for a way to increase the number of pleasant activities engaged in as well as the productivity to remedy depression, intrusive thoughts, and intensive distress associated with CBT treatment for PTSD (Jongsma & Paleg, 2015). Music therapy could be used in conjunction with CBT to offset problems associated with CBT (Hohmann et al., 2017). However, some researchers claim more research needs to be done on MT to understand the effectiveness of its treatment (Hohmann et al., 2017). Hohmann et al. stated that upon analyzing their research on single therapy sessions, "qualitative studies revealed four themes: emotional expression, group interaction, development of skills, and improvement of quality of life" (Hohmann et al., 2017, p. 1) Single session music therapy has been proven to be useful as an addition to another therapy practice like CBT (Markovich and Tatsumi, 2015). Markovich and Tatsumi (2015) affirmed that one single session of music therapy was just as beneficial to a client's mood as CBT and MT used together. MT and music intervention was found to be beneficial on the improvement of mental health, but more research needs to be made on whether MT can be an effective stand-alone treatment approach to patients or clients who are experiencing traumas and/or using substance abuse as a coping mechanism (Hohmann et al., 2017).

CBT has been clinically known to be beneficial to processing traumatic experiences. However, a healthy coping mechanism needs to be used to resolve the core conflict that is associated with anxiety of remembering traumatic experiences (Jongsma & Paleg, 2015, p. 113). Margoob et al. (2010) affirmed that alternative therapy may improve the core symptoms of PTSD, but treatment options have been shown to be partial in patients with severe, chronic PTSD. Implementing coping skills that result in a reduction of anxiety can help a client to reinvest in healthy social relationships and rebuild relationships with family and sober friends to remedy depression (Jongsma et al., 2014, p.51).

The goal is to find a treatment that could stabilize physical, mental, and emotional wellness. According to Martin et al. (2018), music therapy could be the key to a client's wellness, in which 81.1% of one of the Creative Art Therapy modules such as drama, dance/movement, art, and music therapy improved stress management and prevented stress issues. Music therapy used with CBT can be used in a client's supportive recovery plan in compliance with assessments to understand how to stabilize a client's conditions medically, behaviorally, emotionally, and cognitively as he or she returns to normal parameters (Jongsma et al., 2014). There is a need to explore if music therapy can be used to stand alone as a treatment for PTSD as well as in conjunction with CBT. Clinicians throughout the years have used music therapy to approach some behavioral and other wellness issues but there is still a lack of research in this area. The efficacy of music intervention as a therapy needs more clinical evidenced base research to support MT as a therapy practice alone.

Purpose Statement

The purpose of this qualitative phenomenological study is to understand the effectiveness of music therapy for six participants who have had therapy sessions with prior Board Certified

Music Therapists. At this stage in the research, music therapy alone was defined as a concept for alternative treatment for PTSD. The theory guiding this study is that music therapy is beneficial to the treatment of a trauma client who suffers from reliving memorial traumatic experiences due to the initial processing of their trauma. Studies have shown audio therapy can be discomforting to some clients who suffer from complex trauma and other stress related issues (Meztner et al., 2018). However, Metzner et al.'s (2018) research concluded that music therapy can be beneficial to trauma survivors, but the audio volume of the therapy is important to the clients' ability to healing instead of being triggered by intrusive thoughts, flashbacks, or reoccurring memories.

In the 21st century, humans still live in an age of crisis and how we manage uncertainty as well as discomfort are important to our healing and growth (Millar & Warwick, 2019). Early intervention on trauma reduces chronic psychiatric morbidity and world distress (Millar & Warwick, 2019). Researchers have found that “activities involving music practice can impact positively on young people’s wellbeing, enabling the development of emotional expression, improved social relations, self-knowledge and positive self-identification, and a sense of agency” (Millar & Warwick, 2019, p. 67). The dynamics of modern crisis intervention are immediate, proximity and expectancy. Sometimes people who suffer from traumatic events numb or shut down mentally because they react to things their minds refuse to process, and their minds protect them from the events that took place (American Association of Christian Counselors, 2017). Most times people either fight or flee from traumatic events to help remain safe (American Association of Christian Counselors, 2017). The mind protects a person from immediate danger to self-preserve from traumatic events such as automobile accident, natural disasters, sexual abuse, airplane crash, torture, physical assault, terrorist attack, witnessing the death of another person, etc. (American Association of Christian Counselors, 2017).

The reactive nature in the mind is an alarm system that has been triggered within the brain (American Association of Christian Counselors, 2017). Several researchers have noted how the use of music therapy can help process a trauma survivor relived experiences from the use of CBT as a treatment for trauma or PTSD (American Association of Christian Counselors, 2017). Teaching a trauma survivor or client good coping skills can be greatly beneficial to the healing of the client and could possibly be used as a long-term nonmedical treatment to PTSD triggers (American Association of Christian Counselors, 2017). Research has been found that music therapy can be supportive of CBT treatment for trauma clients (Millar and Warwick (2019). Millar and Warwick (2019) stated that teaching trauma clients with the use of music practice can have a positive impact on personal and social health that can break communication barriers in different environmental settings.

Significance of the Study

Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone (Bradt et al., 2013). This qualitative phenomenological method in this study was based on six participants with PTSD who have had experiences with music therapy. The research explored how music therapy and CBT have aided in the healing process for PTSD, and if music therapy is an effective stand-alone therapy practice. A study has shown that a mixed research method can be one appropriate approach to understanding the practice of music therapy (Bradt et al., 2013). Bradt et al. (2013) stated that a mixed method approach can strengthen the validity of the research on MT. However, using a phenomenological approach can help researchers understand the qualitative aspects to how music therapy has been beneficial to the healing of post-traumatic

stress disorder (PTSD) clients. This research described highly varying outcomes and the effects of the personalized treatment of a client or patient who has been diagnosed with PTSD.

Trahan et al.'s (2016) research had indicated that a veteran in integrative treatment for PTSD with the use of CBT was successful to the veteran's sleep habits, eating habits, and physical fitness. Their research was based on a weight loss management program and CBT treatment plan used on their participant. Trahan et al. (2016) indicated that music therapy could be an experimental factor in integrative wellness for their studies, since music could be a tool used for physical therapy. Theoretically, using music therapy as an integrative wellness therapy and CBT as a behavioral wellness approach to mental therapy can be successful to the balance of the overall wellness for a trauma survivor (Trahan et al., 2016). For example, Trahan et al.'s (2016) research stated how integrative therapy can help decrease a veteran's PTSD symptoms who could be a trauma survivor suffering from military combat.

There was empirical evidence that integrated therapy works for a veteran who suffered from PTSD or some other trauma related disorder because Trahan et al. (2016) proved that CBT and weight loss management worked to improve the veteran's mental and physical health. If processing CBT needs an integrative therapy, music therapy could be explored on how psychological treatment on trauma survivors with music intervention could be conducted to teach coping skills, develop self-care and resiliency (The National Child Traumatic Stress Network, 2019). Research done with a phenomenological approach can examine qualitative studies on participants who have used music therapy in order to gain a closer look at the impact that it has had on the clients' healing process in and after music therapy treatment.

Teaching Coping Skills

The primary goal of teaching coping skills is “to provide information about stress reactions of survivors and coping methods to reduce distress and promote adaptive functioning after a disaster” (The National Child Traumatic Stress Network, 2019, para. 4). The mental health professional helps the survivor identify and manage trauma, promote adaptive coping skills, and avoid negative approaching maladaptive skills such as abuse of drugs, food, alcohol, etc. Simple exercising and breathing techniques are a few ways for the survivor to manage and cope with PTSD. For example, Trahan et al. (2016) conducted a single qualitative case study on integrative CBT therapy approach to healing, shedding light on the possibility of using a mixed therapy practice such as CBT and MT that had been beneficial in a veteran’s overall health. Theoretically and empirically, prior research stated how integrative therapy can promote a trauma patient or client’s healthy lifestyle and teach them healthy coping skills (Trahan et al., 2016). The method used is music notation recognition, mindfulness and talk therapy that focuses on the connections between emotions and thoughts (Trahan et al., 2016).

Music has been used to enhance breathing skills associated with therapeutic practices (The National Child Traumatic Stress Network, 2019). The first step to helping survivors cope is to talk with them and let them know that there are positive and negative ways of coping with stress and adversity. Identify and acknowledge the survivor’s personal coping strengths. Talk them through the negative consequences of maladaptive or negative coping actions so that the survivor can regain his or her self-control. Address highly negative emotions with questions that the survivor can answer to help them process the feelings that he or she is having (The National Child Traumatic Stress Network, 2019).

Teaching coping skills to a client in treatment can work for group therapy or meetings, too. For example, a low-intensity CBT-based music group intervention can be successfully administered to clients of community mental health services (Trimmer et al., 2018). Trimmer et al.'s (2018) research with a group of 28 participants who suffered from depression, anxiety and mental health disability improved with the use of music intervention. Music therapy does have the possibility to be an “effective and engaging” therapy in the treatment of mental illness for people who are coping with depression and anxiety yet there needs to be more research in this area of practice (Trimmer et al., 2018, p. 168).

Tull and Gans (2018) highlighted that a trauma survivor may need some guidance or help coping with their reactions to traumatic situations or events when processing those thoughts. Tull and Gans (2018) indicated that triggers cannot be avoided and learning coping skills is necessary in order to aid in grounding and relaxing techniques that can soothe PTSD triggers such as our internal or external events, situation, or feelings. Some of the more common discussions mental health professionals may have with a trauma survivor or survivors include the use of relaxation techniques, helping families cope, assisting with developmental issues, addressing highly negative emotions such as guilt or shame, helping with sleep problems, discussing anger management, and addressing alcohol and substance abuse (The National Child Traumatic Stress Network, 2019).

The National Child Traumatic Stress Network stated that “stressful post-disaster situations can make survivors feel irritable and increase their difficulty in managing their anger” (The National Child Traumatic Stress Network, 2019, Assist with Anger Management section). Clarification of what took place is a way of processing the trauma and how the patient or client feels (The National Child Traumatic Stress Network, 2019). For an example, when a mental

health professional address a patient or client's anger, the trauma patient may explain feelings of anger and frustration as common PTSD symptoms that most survivors use to process their experiences after a disaster (The National Child Traumatic Stress Network, 2019). Empathy is an important approach to the processing of traumatic events and using integrative treatment such as music can benefit the processing of the survivor's trauma.

Music has been known to help connect people as a social support skill. The National Child Traumatic Stress Network (2019) stated that this support and connection could help the survivor feel stronger and more empowered, confident, and valued. Survivors who are connected to their support networks not only help themselves cope better, but also play a more active role in supporting others (The National Child Traumatic Stress Network, 2019). This research conducted on qualitative studies can show the impact that music therapy can have when combined with CBT or used as a stand-alone practice. A phenomenological study can aid in a closer look at the outcome of a client's experience with a board certified music therapist's intervention method. Gathering individual studies on participants' experiences with music therapy can provide more information on the impact the treatment has on their behavior, moods and social interactive coping strategies.

Music therapy could be used as a prolonged long exposure treatment for a trauma survivor to provide as a positive coping skill when PTSD triggers flare up. Prolonged exposure therapy is usually about 50 to 60 minutes increments over 18 weeks that include self-guided breathing techniques (Willis et al., 2015). Prolonged treatment with the use of music therapy can demonstrate an ability to confront traumatic memorial situations or events in a mindful and calming manner (Willis et al., 2015). Wilson et al. (2012) used a qualitative approach to gather data from trauma survivors with the use of trauma-focused cognitive behavioral therapy. A

therapist can use music therapy as an after-treatment booster for a client's overall health as an individual or group music therapy so that the client or clients can do a follow-up on his or her mental, spiritual, and medical needs if side effects of CBT is present after processing memories of a traumatic experience (Wilson et al., 2012).

Wolf et al.'s (2016) research on patients who have experienced PTSD from abuse or violence, stated that the use of music as an intervention needs to be modified based because it could lead to re-traumatization. Therefore, more research needs to be done to understand how it responds to clients who have experienced personal traumas such as sexual abuse or other violent acts against them (Wolf et al., 2016, pp. 96-97). The significance of the study is to examine the participants' experiences with music therapy on whether it has been beneficial to their mental health and if music therapy has been useful as a coping mechanism.

Participants diagnosed with PTSD can share their experience of using music therapy as a long-term exposure treatment. The music therapist's goal is to use plan and prepare for practical and psychological issues that the trauma survivor has experienced in order to create a state of calmness and peace within and provide a social coping skill that could benefit the healing process during and after treatment (Centers for Disease Control and Prevention, 2019; Stebnicki, 2017, p. 277). Music is universal and music therapy as a treatment could possibly be used in the aiding of developing self-care and creating resilience in trauma survivors.

Developing Self-Care & Resiliency

A pilot study on the music therapy method called Trauma-focused Music and Imagery (TMI) was used along with several measurements to conduct studies in previous research that was gathered (Beck et al., 2018). The research design in some previous studies was used as a randomized control group study with several scales for measurement. One primary outcome

measure for music therapy was the therapist-administered Harvard Trauma Questionnaire which measured the degrees participants experienced in prior studies. Eight other questions measured the effect on trauma symptoms during treatment. Beck et al. (2018) stated that music therapy and imagery have been found to be an effective treatment to improve refugees' social skills and health and integration. Treatment such as music could be used as a sleep aid for trauma survivors who suffer from sleep disturbances such as refugees, but research showed that music therapy has its limits (Sandahl et al., 2017).

Previous research has demonstrated that in the military population, music therapy can be an effective behavioral therapy. A study was shown that the U.S. Department of Defense and the U.S. Department of Veteran Affairs have used MT as a therapeutic approach with 79% of military personnel requesting a follow up once the patients have had one session in music therapy (Bronson et al., 2018). Lacking in some previous research was whether the clients in the military population had come back to use music therapy because it worked or if they were still trying to understand the benefits of it. Dela Cruz Fajarito and De Guzman (2017) stated that understanding combat-related PTSD symptom expression through index trauma on military culture depends on how they were personally traumatized. Guilt has played a main factor in those symptoms.

Their most incapacitating symptoms: hypervigilance (case 1), negative belief in oneself and negative emotions (case 2), prolonged distress, and marked physiological reactions to trauma-related cues (case 3), may be understood in the light of how they personally experienced different circumstances of their index traumas. (Dela Cruz Fajarito & De Guzman, 2017)

Clinical studies were done on military subjects to see if music therapy was beneficial to lessening the PTSD or trauma symptoms that plagued military soldiers (Bronson et al., 2018). Other previous research has shown the benefits of music therapy as well. Colegrove et al. (2018) stated that music can help parents who suffered from childhood trauma communicate better with their own children. This study was based on an intervention clinical session. Music was found to help parents and their children communicate in a nonverbal and responsive way towards each other. Group treatment integrated elements of cognitive-behavioral therapy with imaginal exposure, empowerment, exploration of coping styles, and socially supportive interventions was said to have reduced anxiety, PTSD, and depression among trauma victims (Drozdek et al., 2014). Previous research has shown that long-term treatment of PTSD lasted for 5 years and then symptoms start to increase again but a test after seven years showed a reduction in PTSD symptoms (Drozdek et al., 2014). This could be due to an issue with stability and not the treatment. CBT based intervention for sensory processing is effective in raising meta-conscious awareness and self-regulation in autistic adolescents (Edgington et al., 2016).

Previous research, related to trauma, music therapy and CBT, proved that art and music can assist in healing the mind and enhancing mood therapy (AMTA Professional Advocacy Committee, 2008). Previous research could be used along with the Music Therapy Clinical Self-Assessment Scale to do research on a qualitative phenomenological study to create survey questions for a client who has used integrated therapy (AMTA Professional Advocacy Committee, 2008). Varvogli and Darviri (2011) stated that based on their evidence-based research, stress management techniques have been found to reduce stress, create a relaxation response, and promote overall health. Trauma and stress affect the whole body and developing coping strategies that can treat the whole body is needed. There are many benefits for treating

traumatic symptoms with music therapy (MT) that researchers believe had improved concentration, altered the emotional state in a positive manner, created self-awareness, improved social skills, relaxation and developed coping strategies for clients who suffer from mental disorders (Nizamie & Tikka, 2014). Therefore, the data collected in this study needs to provide an understanding of how well the participants adapted to music therapy treatment after sessions with their prior Board Certified Music Therapists (MT-BC). Qualitative phenomenological data needs to be collected to examine how and if music therapy really works as a stand-alone coping treatment to create or promote resilience to PTSD triggers.

Research Questions

The qualitative research conducted was based on a phenomenological study to describe how music therapy benefitted six participants suffering from post-traumatic stress disorder (PTSD). Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone. CBT practices have been known to be a stand-alone treatment to treat PTSD, but research suggested that Cognitive Behavioral Therapy (CBT) can cause relapse or more severe trauma in clients with symptoms of undiagnosed or diagnosed PTSD (Lonergan, 2014). This is where a coping method was implemented. Previous research and two questionnaires in this study described the experiences of six participants who have used music therapy for PTSD treatment. The research questions conducted were to determine whether music therapy helped decrease or reduce PTSD symptoms experienced by the participants, and if music therapy produced healthy behavioral coping methods. Several previous research articles from single qualitative studies and

phenomenological studies were used as supporting information on how music therapy and CBT have been used over the years with trauma clients.

A single qualitative research study from previous research has shown the validity of a telephone-based cognitive behavioral therapy that can be used to collect data on participants who have used music therapy (Trahan et al., 2016). The researcher used a telephone-based approach as well as email interactions with each participant to collect data for this study. The research questions also shed light on each participant's end of treatment experience with music therapy from their Board Certified Music Therapists. The questions were explored with the use of two questionnaires to understand the experiences the six participants with PTSD have had with music therapy (Zoteyeva et al., 2016).

Zoteyeva et al. (2016) stated that reexperiencing could be an automatic thought pattern of negative emotions when CBT is used. The use of music intervention in music therapy could help facilitate healthy thinking patterns. The use of music therapy can possibly determine if music therapy can be effective alone as a treatment and meet clinical standards that fit traditional therapy standards in behavioral health. This can be explored with the use of gathering information to evaluate clients' or patients' experiences in the phenomenological study (Trahan et al., 2016). The goal is to determine music therapy's effectiveness on participants with PTSD. An assessment can show how different behavior themes have been effective with the use of music therapy. The central research question can be used to focus on this study, whereas the other two research questions are sub-research questions to develop an understanding of how the use of music therapy was beneficial to the participants (Zoteyeva et al., 2016).

Definitions

This is a list of terms that were used in this study that is being conducted and supports previous research. Listed beside each term is the abbreviated text or acronym that the term is related to in parentheses:

Board Certified Music Therapist (MT-BC) – a music therapist who is board certified and effectively aids in improving the mental and physical health of their clients or patients. The music therapist promotes the use of music in therapy and provides music as an intervention for clients or patients (American Music Therapy Association, 2019).

Complementary and Alternative Medicine (CAM) – a treatment used for treating victims with trauma who are not responding well to other cognitive therapies. Gooding and Langston (2019) stated that music intervention has been known to approach whole body needs such as emotional, spiritual, mental, and physical functions.

Cognitive Behavioral Therapy (CBT) – is said to be the best treatment for PTSD to bring normalcy to behavior, thoughts and feelings associated with fear or cognitive distortion (Friedman, 2015) CBT usually have two approaches Prolonged Exposure Therapy (PE) and Cognitive Processing Therapy (CPT) that can be delivered by telehealth, virtual reality, Internet and in person sessions (Friedman, 2015).

Complex Post-traumatic Stress Disorder (C-PTSD) – a type of disorder that exists as prolonged trauma because of multiple traumatic events over time (Friedman, 2015, p. 31). Sometimes these symptoms have been known to create physical and psychological impairment (Friedman, 2015). The criteria to meet this disorder depends on the exposure; triggered pattern of repeated dysregulation in response to trauma cues such as changes in emotional, mental state and self-

awareness; persistently altered attributions and expectancies; and functional impairment (Schupp, 2015).

Executive Functions (EF) – the way the brain processes information that can have long or short-term effects on an adult or child’s behavior (Op den Kelder et al., 2017).

Guided Imagery and Music (GIM) – used along with medical treatment to improve mental health and reduce PTSD symptoms in clients (Cordtz et al., 2018). Defined as the use of music and imagery to reduce PTSD symptoms and regulate emotions that can be used in individual and group therapy sessions (Story & Beck, 2017).

Imagery Rehearsal Therapy (IRT) - a therapy practice created to reduce insomnia, traumatic sleep disorders related to PTSD and reduce the severity of PTSD symptoms. The treatment is delivered in a three-week intervention, usually as a group therapy that consists of cognitive behavioral techniques that replace the nightmare by changing the nightmare events (Friedman, 2015). “The specifics of IRT are psychoeducation about nightmares and PTSD, anxiety management skills, cognitive restricting, sleep hygiene, and (e) focused use of pleasant imagery to replace negative imagery in recurrent traumatic nightmares” (Friedman, 2015, p.64).

Internet-based Cognitive Behavioral Therapy (i- CBT) – therapy provided with a technical device through a computer device or mobile app that focuses on reducing depression, anxiety and PTSD symptoms and can be a less invasive treatment approach since the client or patient controls the setting (Lewis et al, 2019).

Music Intervention – music used by a music therapist or therapist as a therapeutic method to manipulate the client’s mood and reduce stress upon the mind and body (de Witte et al, 2020).

Music Therapy Practice Scale (MTPS) - an assessment scale that can be used to test “the validity and reliability” between the correlation in a music therapy practice and other constructs (Biasutti, 2019, p. 40).

Music Therapy (MT) - defined as a clinical, evidence-based therapy practice of affective music that a therapist uses to practice intervention methods on their clients and patients (American Music Therapy Association, 2019). Some music therapy techniques consist of learning world percussions or/and classical instruments, writing music or/and songs, listening to music for meditation, dancing or exercising to music and singing to familiar music that affects the mood in a positive manner or creates positive memories and thinking (Craig, 2019). Music Therapy promotes physical rehabilitation and wellness, helps patients express their feelings, enhance memory, manage stress, and improve communication (American Music Therapy Association, 2019).

Phenomenology – describes the experience of the emotional state or consciousness instead of the actual events. Researchers also call this branch of descriptive approach a transcendental phenomenology that focuses on the human beings’ everyday lived experiences (Business Research Methodology, n.d.). Business Research Methodology (n.d.).

Post-traumatic Stress Disorder (PTSD) – a disorder caused by impairment or distress that leads to intrusive thoughts, avoidance behavior, and hyper arousal symptoms that consist of these symptoms for more than one month (Schupp, 2015). The person can be exposed to trauma directly or indirectly to meet the PTSD criteria (Friedman, 2015).

Present-centered Therapy (PCT) – the managing or supporting of current PTSD symptoms, developing healthier interpersonal relations and enhancing psychosocial functioning of self-care, goal setting, and hopeful thinking with problem-solving approaches (Belsher et al., 2017). PCT

targeted daily challenges with PTSD or trauma related symptoms with the use of psychoeducation on recognizing PTSD, learning effective coping methods, and creating after care plans outside such as monitoring and journaling stressors to practice effective coping skills (Belsher et al., 2017).

Prolonged Exposure Therapy (PE) - a technique that used in vivo exposure (expose or confront fears) and imaginal exposure (use of mental imagery to process trauma) (Friedman, 2015)

Rational Emotive Behavioral Therapy (REBT) – education on rational-emotive and cognitive-behavior to identify irrational beliefs and negative thought patterns on positive and negative emotions (Soflau & David, 2018). This method was introduced by Albert Ellis (Soflau & David, 2018).

Single Case Design (SCD) - a design of a single case study used in research that offers a feasible and strong option for examining the influence of a study in clinical and research settings, where the number of participants may be limited and diverse (Geist & Hitchcock, 2014).

Skills Training in Affective and Interpersonal Regulation (STAIR) – a short term treatment that helps reduce PTSD symptoms and improve social as well as emotional behaviors (Cloitre et al., 2016).

Substance Use Disorder (SUD) – a disorder that affects the physical, behavioral, and cognitive wellness of a person due to the abuse of substance usage (Schupp, 2015). SUD causes social impairment, risky use, cravings, and intoxication (American Psychiatric Association, 2018, pp. 483-484).

Traumatic Brain Injury (TBI) – concussive injures such as wounds, headaches, memory loss, and concentration that come from mild, moderate, and severe impairment of brain function and exposure of psychological trauma (Friedman, 2015).

Trauma-focused Cognitive Behavioral Therapy (TF-CBT) - a healing method that focuses on trauma that can help a trauma survivor control intrusive thoughts and refocus on healthier thinking patterns (Friedman, 2015, p. 38).

Trauma-focused Music and Imagery (TMI) - music therapy method used to treat trauma symptoms that is considered an adaptation of Guided Image and Music Therapy (GIM) that consist of elements of imagery and music as a guide to healing (Beck et al., 2018).

Violent Interpersonal Trauma (VIT) – violent abuse that was inflicted onto someone from another person emotionally, mentally, or physically that can be direct or indirect (Bynion et al., 2018).

Summary

In conclusion, the mind protects a trauma victim from immediate danger in order to self-preserve from traumatic events such as automobile accident, natural disasters, sexual abuse, airplane crash, torture, physical assault, terrorist attack, witnessing the death of another person, etc. when it causes the effects of trauma or PTSD resiliency (The National Child Traumatic Stress Network, 2019). There are many ways to treat trauma and live a healthy life. Music therapy (MT) is one natural, universal approach that should be further researched to see if it is just as efficient as Cognitive Behavioral Therapy (CBT). Music therapy has been used with CBT to address trauma or PTSD in patients who suffer from processing intrusive thoughts or memories after being treated with CBT (American Music Therapy Association, 2019).

The purpose of this qualitative, phenomenological study is to understand the effectiveness that music therapy has had on participants with PTSD. The participants shared their experiences with music therapy that they have received from Board Certified Music Therapists. The theory guiding this study is that music therapy is beneficial to the treatment of trauma

survivors who suffer from reliving memorial traumatic experiences due to the initial processing of trauma. Researchers have found that “activities involving music practice can impact positively on young people’s wellbeing, enabling the development of emotional expression, improved social relations, self-knowledge and positive self-identification, and a sense of agency” (Millar & Warwick, 2019, p. 67).

Several researchers have noted how the use of music therapy has helped trauma survivors process the trauma of relived experiences from the use of CBT as a treatment for trauma or PTSD (Millar & Warwick, 2019). Millar and Warwick (2019) stated that teaching trauma clients with the use of music practice can have a positive impact on personal and social health that can break communication barriers in different environmental settings. Teaching a trauma survivor or client good coping skills can be greatly beneficial to the healing process of the client and could possibly be used as a long-term nonmedical treatment to reduce or stop PTSD symptoms (American Association of Christian Counselors, 2017). The dynamics of modern crisis intervention with CBT is an immediate and effective cognitive treatment (American Association of Christian Counselors, 2017). However, music therapy could be used as a long term safe, and adaptive approach to treating trauma instead of a survivor’s use of maladaptive coping skills caused by intrusive memories from CBT (American Association of Christian Counselors, 2017).

The goal is to confirm a treatment that could stabilize physical, mental, and emotional wellness. Music therapy could be the key to benefiting a client’s long-term wellness. Therapists are looking for a way to increase the number of pleasant activities engaged in as well as the productivity to remedy depression, intrusive thoughts, and intensive distress associated with CBT treatment for PTSD (Jongsma & Paleg, 2015, p. 113). However, music therapy can be used in a client’s supportive recovery plan in compliance with assessments to understand how to

stabilize a client's conditions medically, behaviorally, emotionally, and cognitively as he or she returns to normal parameters (Jongsma et al., 2014, p. 260). Since research has shown that music therapy has been used for long-term treatment with people who suffer from PTSD, it is necessary to examine MT as an effective and efficient treatment that can be viewed as a major therapy practice instead of an alternative therapy practice (Millar & Warwick, 2019).

Clinicians throughout the years have used music therapy to approach some behavioral and other wellness issues but there is still a lack of research in this area. The efficacy of music therapy needs more clinical evidence-based research to support that it can be used as a traditional and major therapy practice alone. Research should be explored on a phenomenological approach to evaluate people's experiences with music therapy to treat trauma or post-traumatic stress disorder. This current study endeavors to contribute to that understanding.

CHAPTER TWO: LITERATURE REVIEW

Overview

This section of the study covered the use of music therapy in conjunction with Cognitive Behavioral Therapy (CBT) as a coping skill for clients who suffer from post-traumatic stress disorder (PTSD). Music therapy is a coping skills therapy for clients who suffer from PTSD symptoms. This approach can be used in conjunction with CBT. A phenomenological study, two questionnaires, and previous research were explored on how music therapy has been effective as a therapy practice for PTSD participants. Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone.

This review is a collection of qualitative studies on music therapy and CBT that has aided clients with PTSD. The research that was conducted for this study used a phenomenological design method on six participants to gather their experiences with the use of music therapy and its effect on coping with PTSD. This study can give a closer look on how CBT and music therapy have benefited people who battle with PTSD symptoms (Trahan et al., 2016). This section of the research focused on previous research covering topics on CBT, MT, and PTSD. CBT has been known to be a primary therapy method to treat PTSD. Music therapy is now becoming a popular form of treatment for PTSD with some Board Certified Music Therapists using MT with CBT as an integrated therapy practice. This study shared ways that music therapy has helped trauma patients from diverse backgrounds and how music therapy has been used as an alternative therapy or complementary medicine.

Theoretical Framework

Understanding the concept of how therapy works on post-traumatic stress disorder can only be examined by examining the therapy practices that therapists, other mental health

providers or researchers decide to study and use. This section of this study concentrated on the practices of CBT and MT treatments on clients who suffer from PTSD. Being able to use previous research and a phenomenological study helped gain an understanding of more personal and practical approaches to therapy and how the client responds to each practice. In order to understand the beneficial impact of (music therapy (MT) on a client or patient, we must understand the contextual use of it in ways that music therapy has impacted prior patients or clients who have experienced MT benefits (Rolvjord & Stige, 2015). Presented were previous research literature on individuals, refugees, military, family, and community use of music therapy as a physical wellness and relaxation practices. Understanding the context of the ecological concepts helped explain how music medicine and therapy practices work among different scenarios and situations (Rolvjord & Stige, 2015). First, the research explored what PTSD is and how CBT has helped treat it.

Post-Traumatic Stress Disorder

PTSD can be caused by “exposure to one or more traumatic events” (American Psychiatric Association, 2018, p. 274). PTSD has been known to cause a negative strain on relationships and the experience can cause negative views of self (American Psychiatric Association, 2018). Some traumas become reoccurring thoughts due to guilt, while other intrusive or distress memories are caused by unresolved closure or stuck points (American Psychiatric Association, 2018). When experiencing multiple traumas over time, most PTSD clients develop Complex PTSD. Complex PTSD (C-PTSD) is “defined by PTSD symptoms plus disturbances in emotion regulation, self-concept, and interpersonal relationships” (Bohus et al., 2019, Abstract para. 1).

Post-traumatic stress disorder is a mental or emotional disorder that causes distress and occurs after exposure to a direct or indirect traumatic experience or event which triggers memories of the incident (U.S. Department of Health and Human Services et al., 2020). According to the American Association of Christian Counselors (2017), 25-30 of trauma victims develop PTSD which was twice as common in women and at least 50% of military veterans suffer from PTSD. Post-traumatic stress is a natural response to an unusual incident that can come from witnessing or experiencing an event, as well as helping someone who has had a traumatic experience (American Association of Christian Counselors, 2017). PTSD has become a popular diagnosis for military veterans and active-duty soldiers (Popivanov et al., 2014).

Our world is plagued by terrorist activity and wars that causes mental and physical combat injuries (Popivanov et al., 2014). The emotional toll on soldiers at war led to intrusive memories, depression, suicidal ideation, and anger issues that are symptoms of PTSD. Germain et al. (2016) stated that “the way anger is expressed and efforts to control anger may be particularly important in post-traumatic stress disorder (PTSD).” Germain et al. (2016) also indicated that there still needs to be more research on the causes influencing the connection between the severity of PTSD and the actions while angry. Research is needed on the trauma client’s effort to control his or her anger and whether this symptom is prompted in part by cognitive processes (Germain et al., 2016).

Mental health professionals have used different methods to diagnosis and treat trauma survivors. Behavioral researchers are not always mental health professionals, but they have laid groundwork to aid mental health professionals to use differential diagnoses to understand the symptoms and factors of the patient or client. Symptoms for C-PTSD or PTSD include direct experiencing and witnessing of traumatic events meets the requirement for Criteria A in the

American Psychiatric Association (2018). Recurrent memories and dreams as well as dissociative reactions and psychological stress/reactions were met for Criteria B in the American Psychiatric Association (2018). Avoidance issues based on avoidance of memories, places the event happened and lack of social skills at home and work meets the requirement for Criteria C in the American Psychiatric Association (2018). Having negative thoughts or beliefs, feelings of detachment and lack of interest in daily routine activities meets some of the requirement for Criteria D in the American Psychiatric Association (2018). A client having startled responses, sleep disturbance and problems concentrating due to his or her trauma who meets the requirement for Criteria E meets in the American Psychiatric Association (2018).

The duration of PTSD is different for each trauma survivor, but most symptoms are similar regardless of the magnitude of the traumatic event (American Psychiatric Association, 2018). Some clients have delayed PTSD while others have onset trauma. Onset PTSD that happens within the first month of the experienced or witnessed trauma is called acute PTSD (American Psychiatric Association, 2018). PTSD has been known to affect not just the mental, but the physical wellness of a trauma survivor as well. Culture and gender do play a role in how environmental factors impact mental state. Rates of PTSD are considered high among people with traumatic exposure with the highest level of reported PTSD symptoms among African Americans, Latinos, and American Indians when compared to non-white Americans. Asian Americans are considered having the lowest rates in PTSD. A “twelve-month prevalence among U.S. adults is about 3.5%” (American Psychiatric Association, 2018, p. 276).

PTSD is a delayed disorder and can happen quickly without warning. Extensive research needs to be done to find ways to prevent undetected triggers and provide continuous alternative treatment for PTSD victims to identify as well as understand when coping methods need to be

introduced. Temperamental, environmental, and genetic factors as well as psychological factors play a role in trauma disorders. Outside of traumatic military culture or adult experiences, childhood abuse has been a factor in most suicidal rates (American Psychiatric Association, 2018). Most suicidal occurrences with women are due to interpersonal violence or rape in America, however, when referencing all demographic groups in society, the statistics of PTSD can be nonsignificant when understanding the risk of suicide (American Psychiatric Association, 2018). The impact of the trauma would depend on the individuals' severity of their stressors. There are many therapy practices that have been beneficial to trauma survivors. Trauma-focused CBT and CBT are two cognitive therapies that have been clinically tested to improve mental health among trauma survivors (Rodriguez et al., 2018).

Prior researchers have stated that the analysis of TF-CBT showed significant improvement of PTSD symptoms based on research of 3 phases with the use of this therapy (Rodriguez et al., 2018). Rodriguez et al. stated that "TF-CBT is composed of 3 phases: 1) skills; 2) narrative; and 3) consolidation, as defined by treatment developers Judith Cohen, Anthony Mannarino, and Esther Deblinger" (Rodriguez et al., 2018, p. S184). The researchers evaluated the symptoms based on severity of PTSD with the consolidation phase showing the most improvement from a range of skills phase to narrative phase to the consolidation phase Rodriguez et al. (2018). Trauma-focused CBT (TF-CBT) greatly improved symptoms of PTSD, but it was unknown how much of the treatment improved the client's wellness (Rodriguez et al., 2018). Due to the stigma in seeking therapy, the present research states that CBT does not work for everyone, alternative therapy practices need to be explored (Lonergan, 2014). The use of music therapy with CBT could be beneficial to a trauma client who is suffering from stuck points

or unable to process the trauma. Understanding the nature and cause of the client's trauma will assist in how the client is diagnosed and treated.

The Nature and Causes of Trauma

Several factors create traumatic experiences that impact an adult. Childhood or familial and adult traumas lead to a lifelong traumatic experience for most trauma survivors (DeBeer et al., 2016). One of the most impactful symptoms that a trauma survivor acquires is depression. Studies have shown that “major depressive disorder, which is highly comorbid with PTSD, independently increases risk for suicidal ideation and attempts” (DeBeer et al., 2016, p. 2). Identifying factors that could decrease the connection between PTSD indicators and suicidal ideation are important to a trauma survivor's recovery (DeBeer et al., 2016). Some trauma survivors do not show signs of suicide. They do show signs of depression and PTSD symptoms. This has been a theme in childhood and adulthood lifestyles including behavioral after serving in the military (DeBeer et al., 2016). Research has shown the positive and negatives effects that war and post war can have on the trauma survivor's behavior and physical state (DeBeer et al., 2016). Besides military trauma, childhood trauma has also been a factor in long-term complex trauma or Complex PTSD.

Research should be done on preexisting factors that adulthood experiences add to past lifestyle or childhood experiences to determine the cause and nature of all the traumatic stuck points for a trauma survivor or client. Op den Kelder et al. (2017) study showed that youth exposed to complex traumas are more deficient in executive function in the relationship between trauma exposure and posttraumatic stress in youth. “Children exposed to complex trauma have been exposed to multiple, persistent, and traumatic events (e.g., maltreatment, child sexual abuse, and neglect” as referred in Op den Kelder et al., 2017, p. 1688). Additional traumatic

experiences over the years, as the child becomes an adult, could make traumatic symptoms harder to recover from. “Single trauma is defined as exposure to a single traumatic event, such as a traffic accident or rape” (Op den Kelder et al., 2017, p. 1688). When a person is exposed to multiple traumas, a single trauma then becomes complex trauma. Therapists or mental health professionals will need to be able to understand the nature and causes of the client or patient’s trauma to properly diagnose and treat the symptoms in therapy.

Complex trauma is more often interpersonal, has an early onset, and more often occurs in the care-giving system of the child than single trauma (DeBeer et al., 2016). Children with complex trauma histories develop more problems within various domains: attachment, neurobiological changes, affect regulation, dissociation, behavior control, and self-concept (DeBeer et al., 2016). Additionally, results of a recent study suggest that while approximately 16% of children exposed to trauma develop PTSD, the prevalence of PTSD in children differs greatly across single and complex trauma (Op den Kelder et al., 2017). Still, past childhood traumas should be considered when treating an adult with complex PTSD or trauma. A traffic accident, severe bullying, maltreatment, and sexual traumas are some examples of complex traumas if a person was exposed to multiple or prolonged traumatic events. In a recent study, children who were exposed to prolonged or recurrent traumatic events where abuse or assault had taken place, were assigned to the complex trauma group (Op den Kelder et al., 2017). Complex trauma can be a diagnosis of a child or an adult that can lead to long-term PTSD.

Complex trauma tends to be a long-term memory disorder for a survivor that can affect his or her quality of life in social, emotional, mental, physical, and financial matters. Op den Kelder et al. (2017) created a study to discuss the lasting cognitive disorders trauma has on children or young adults called the executive functions. “Three core concepts of EF are

frequently addressed in empirical neuropsychological research in youth: inhibition, working memory, and cognitive flexibility” (Op den Kelder et al., 2017, p. 1688). The executive functions work in a way that the brain process information that can have long or short-term effects on an adult or child’s behavior. Op den Kelder et al. “described EF as a range of mental skills that allow individuals to pay attention, manage their feelings, think in flexible and creative ways, control their impulses, plan and start activities, monitor their own performance, and remember and manipulate key information” (Op den Kelder et al., 2017, p. 1688).

The executive functions are how music therapy can possibly be beneficial to the healing process of the mind (Op den Kelder et al., 2017). The way music is interpreted during cognitive functioning can be a positive or negative impact influence for a trauma survivor (Op den Kelder et al., 2017). This solely depends on how the patient or client perceives the intake of the music therapy process during treatment. Executive dysfunction could cause the trauma survivor to block trauma because the survivor is not able to process the traumatic event (Op den Kelder et al., 2017). Most times, these occurrences happen during child trauma and continue until adulthood.

Common losses associated with complex trauma and CSA (child sexual abuse) include actual and symbolic losses such as loss of childhood, loss of protective parent(s) and loss of nurturing family, as well as the loss of self, self-esteem and self-worth, and loss of control and autonomy. (Sanderson, 2013, p. 256)

Extensive counseling can help balance the way the cognitive control the behavior of EF in the way the thought pattern can be healed (Sanderson, 2013). Cognitive Processing Therapy and Cognitive Behavioral Therapy are two therapies that have been known to help trauma survivors process trauma disorders (Op den Kelder et al., 2017). Research has shown that music

therapy used with CPT or CBT could allow trauma clients, patients, or survivors to get through stuck points in and outside of therapy practice (Op den Kelder et al., 2017). More research needs to be made on whether music therapy alone just as effective as integrative therapy practices can be.

According to Op den Kelder et al. (2017), talk and music therapies are other ways outside of medication that can be beneficial to a client's overall health. Talk and music therapies can teach executive functions of the brain to function by accepting the trauma that happened and moving past the tragedy to feel better (Op den Kelder et al., 2017). Psychopharmacology can help clients with intrusive memories or flashbacks but clients who use other medications associated with dissociative disorders can possibly suffer from attempt of suicide due to other personality issues present. Thus, patients or clients would need to be monitored to make sure medications are taken properly as well as safe (Chu, 2011, pp. 253-54).

Treatment history of other behaviors is very important to the client's therapeutic healing process because one problem or diagnosis can be fixed but could possibly present another issue (Bynion et al., 2018). Moods and behavior in psychopharmacologies need to be monitored and journaled for progress and any problematic issues (Bynion et al., 2018). Bynion et al. (2018) stated that violence interpersonal trauma (VIT) could be similar to dissociative disorders in clients who are high risk to suicidal ideation. VIT is a possible risk to trauma clients or patients taking psychopharmacologies, so therapists must monitor presenting behaviors and new behaviors that arise. Dissociative disorders could possibly be a differential diagnosis or complication that happened because of complex PTSD. Proper diagnosis of mental disorders is important to understand every option and outcome when treating a patient who has suffered from traumas (Bynion et al., 2018).

Besides direct traumas, indirect traumas that happen within the community can cause PTSD or add to existing PTSD. Aggression perpetrated by youth, whether in the context of events such as school shootings (other-directed aggression) or suicidal behavior (self-directed aggression), remains a pressing public health matter. In addition to human suffering, billions of dollars are spent annually in direct (e.g., medical/mental health treatment) and indirect (e.g., law enforcement expenditures) costs related to aggression due to unresolved traumas (Sanderson, 2013). Such costs do not always include intangible costs related to pain and suffering or death-related losses. Indeed, recent estimates indicate that both self-harm and interpersonal violence remain one of the leading causes of death among adolescents (Sanderson, 2013). One factor that may be linked to both types of aggression is a history of violent interpersonal trauma (VIT). Given the unique opportunities and challenges that characterize adolescence, including high rates of traumatic event exposure, prior research has examined whether the experience of a violent interpersonal traumatic events would relate to elevated aggression among youth (Bynion et al., 2018). The use of music therapy could be preferable to rehabilitate the youth since they have a hard time responding to traditional cognitive therapies (Bynion et al., 2018).

Social support for clients can create resilience for people suffering with trauma and can help ward off suicidal thoughts (Sanderson, 2013). “Your client’s internal safety is dependent on how well [he or she is able] to function and manage in their everyday life” (Sanderson, 2013, p. 147). Faith that feeds the spirit in a healthy manner is important to creating a safe environment for the trauma victims’ as well as non-trauma victims’ mental, emotional, and physical health (Sanderson, 2013). “If they are able to get up, perform daily tasks, have some control over their anxieties and intrusive memories and are able to regulate their mood, then they have a degree of internal safety” (Sanderson, 2013, p. 147). Violent interpersonal trauma (VIT) is an easily

assessed indicator of potentially elevated risk for these types of negative outcomes (Sanderson, 2013). Research has shown that youth with a history of VIT may be a risk for experiencing aggression directed towards others and the self, compared to those without this specific trauma history.

The research findings with non-trauma and trauma patients were aimed at continuing to refine the researchers' understanding of the link between interpersonal trauma and aggression (Bynion et al., 2018). Being able to process these issues instead of oppressing the intrusive thoughts helped the client or patient recover and possibly move forward with less to no medications (Bynion et al., 2018). DeBeer et al. (2016) study showed how suicide is contemplated among other clients outside of aggressive means or impact of side effects associated with psychopharmacologies. Depression and anxiety are more common ways that trauma and suicide ideation has been present among clients (DeBeer et al., 2016). Besides psychological treatment history, medical history should be monitored too and could possibly play a factor in more behavioral patterns. Suicide is one of the leading causes of death in postpartum women (Sit et al., 2015).

Clinics and hospitals have used music therapy to treat postpartum in women (Sit et al., 2015). Studies have examined associations between suicidal ideation (SI) and plausible risk factors (experience of abuse in childhood or as an adult, sleep disturbance, and anxiety symptoms) in depressed postpartum women (Sit et al., 2015). There were similarities in the symptoms, but there is not one general treatment for all diagnoses. Therefore, a therapist or mental health professional must properly diagnose the patient and researchers must continue to explore how some disorders are similar in nature to another disorder. CPT and CBT have been

therapies used to heal trauma victims who suffer from depression and related symptoms (Sit et al., 2015).

Training therapists, counselors, spiritual leaders, and teams capable of ideally adapting their expertise into trauma required doctrine with a program of instruction to address and help clients overcome the cognitive, technical, logistical, physical, environmental, and tactical challenges of operating in traumatic environments has been proven to benefit client-based needs (Drakos et al., 2018). The way to treat the cause of trauma is to understand the nature of it. Trauma can happen to anyone and at any time. However, complex trauma happens over time. Being able to treat trauma and find healthy coping methods are important to the trauma survivor's recovery. Using a phenomenological study to understand the experiences and effectiveness of treatment methods on patients or clients could help both the clients and therapists understand the positive and negative outcomes of trauma.

Positive and Negative Outcomes of Trauma

According to a study with Vietnamese Survivors and US Military Veterans, combat in warfare and being exposed to toxic substances has had long impacts on the health of veterans (Korinek & Teerawichitchainan, 2014). Most veterans do not talk much about the war and drank very heavily to suppress memories (Korinek & Teerawichitchainan, 2014). Besides traumatic events after serving in the military, other life stressors such as pre- and post-adult events contribute to the stress factors present and cause complex trauma (Korinek & Teerawichitchainan, 2014). Some veterans go through marital issues and separate from their families due to not being able to process existing trauma and combat trauma. Researchers stated that substance abuse is a primary concern for the Department of Defense (DOD) based on environmental and social factors making substance use disorder (SUD) rates higher among

military personnel than civilians (Woodruff et al., 2018). Suicidal ideation, alcohol abuse, substance abuse and prescription pills abuse are some maladaptive coping strategies that are practiced by some trauma survivors (Woodruff et al., 2018). The use of music therapy in and outside of counseling sessions can become a good coping strategy when reoccurring memories become too hard to process. CBT has been known to be beneficial to a trauma survivor's recovery but the side effects of retelling a traumatic experience could reveal that the person is reliving the experience (Woodruff et al., 2018).

Trauma survivors do not forget the impact that trauma has on them. Most times, in hopes of numbing the memories, substance abuse or some other maladaptive coping skill can continue to destroy the trauma survivor's life. Krieger et al. (2017) stated that personal attitudes may predict a key variable in the behavioral of some trauma survivor. Every trauma survivor is not the same and should be treated based on how they respond to the trauma. Fear attachment, excessive dependency or excessive independence upon memories can hinder the growth of healing and processing of trauma (Sanderson, 2013, p. 63). Some trauma survivors use their experience as a turning point in their life and their reaction to what they have experienced can be viewed as a positive healing process (Sanderson, 2013).

Effects from Trauma

Maladaptive coping skills in a response to trauma have been known to cause anxiety, sleep and depressive disorders and these issues can interfere with a client's responsibilities or daily activities (American Psychiatric Association, 2018). Yet some trauma survivors can be highly functional in intoxication (American Psychiatric Association, 2018). The use of alcohol has been known to cause black outs, liver problems, nervous system issues, cardiovascular problems, gastrointestinal problems, esophagus issues, depression as well as an increase

aggressive behavior just to name a few (American Psychiatric Association, 2018). So many people use substance abuse and tobacco products to cope with their stress which causes more stress on their bodies. For example, tobacco is known to cause depressed moods as well as alcohol (American Psychiatric Association, 2018). This issue is only present upon the use of withdrawal from tobacco or alcohol use (American Psychiatric Association, 2018). Learning good adaptive coping skills has so many benefits and music is an approach to helping soldiers who suffer from PTSD (Korinek & Teerawichitchainan, 2014).

Understanding PTSD

Van Winkle and Safer (2011) stated that the Diagnostic and Statistical Manual of Mental Disorders fourth edition [DSM-IV] defines posttraumatic stress disorder (PTSD) as a cluster of symptoms caused by an individual either having experienced, or being witness to, an event that involved actual or threatened death or serious injury, or a threat to the physical integrity of others. PTSD is characterized by involuntary re-experiencing of memories, avoidance and emotional numbing, and hyperarousal including, for example, hypervigilance and outbursts of anger and hostility (Van Winkle & Safer, 2011). The four categories of post-traumatic stress disorder are Intrusion symptoms; Avoidance symptoms; Alterations in cognitions and moods; and Alteration in arousal and reactivity (Sanderson, 2013).

According to Sanderson (2013), intrusion symptoms could possibly be the most difficult symptom to cope with. Lu et al. (2017) stated how intrusive thoughts are unwanted and repetitive thoughts that surface due to a trauma survivor experiencing stressful events that have been hard to process. Having flashbacks, intrusive thoughts or nightmares can be frightening and can also affect the physiology of a person (Sanderson, 2013). Intrusive thoughts or memories can lead to dissociative reactions brought on by external and internal triggers (Sanderson, 2013). Military

veterans' trauma related symptoms have been studied and examined in a clinical setting. Porter et al. (2013) study showed that about 86.8% patients suffering from traumatic experiences had a significant relationship between pain severity and PTSD severity. "With regard to PTSD, cognitive theories suggest that the development and maintenance of symptoms are related to the way a person processes and interprets the traumatic event" (Porter et al., 2013, p. 1798).

According to Beidel et al. (2017), pain and intrusive thoughts have been associated with military veterans returning from combat who suffered from PTSD. Reoccurring thoughts could be hard to manage when external and internal PTSD triggers happen without cause external cause.

"Negative cognitions regarding the self were associated with the level of pain-related interference, and partially mediated the relationship between PTSD and pain" (Porter et al., 2013, p. 1797).

Other research showed that intrusive thoughts plagued minor cancer survivors in Asian Americans of Chinese culture. Many trauma survivors do not identify as trauma survivors but believe life happened. (Ferentz, 2015) There is a possibility that some trauma survivors have intrusive thoughts and have not been diagnosed with these symptoms. "Inhibition of emotional expression is therefore believed to inhibit cognitive processing and increase distress associated with intrusive thoughts" (Lu et al., 2017, p. 3282). A therapist or counselor needs to be prepared to ask the patient specific questions in order to effectively diagnose and help the patient. "It has also been proposed that emotional expression helps individuals confront intrusive thoughts and reduce the distress associated with these thoughts" (Lu et al., 2017, p. 3282).

One of the best approaches with trauma survivors are to provide positive reassurance "throughout the treatment process, clients should be encouraged to internalize (the historical context of their emotions and behavior) mantra of normalizing symptoms and experiences, so it

can be incorporated into positive self-talk and used in a new internal resource for self-soothing” (Ferentz, 2015, p.30). Trauma survivors are impacted in different ways. Some internalize their pain, and some aren’t affected at all. Therapists need to prepare to respond to symptoms of their client and be able to identify the causes of their PTSD symptoms. A great way for counselors or therapists to help clients who are in distress has been to prepare for Psychological First Aid. Psychological First Aid consists of stabilizing clients of their symptoms, maintaining symptom reduction, helping them reestablish a functional capacity and seek a higher level of care if needed. (American Association of Christian Counselors, 2017).

The American Association of Christian Counselors (2017) stated that PTSD is higher in women who suffered sexual abuse and higher in men who suffered from combat trauma. The DSV-IV criteria showed that in the United States the lifetime risk for PTSD at the age of 75 years old is 8.7% and the prevalence adult rate is about 3.5% (American Psychiatric Association, 2018). Research has shown that most combat trauma participants uphold a soldier’s oath to never leave a fallen comrade behind (Dela Cruz Fajarito & De Guzman, 2017). Dela Cruz Fajarito and De Guzman (2017) stated that this soldier’s oath, in military culture, has added PTSD symptoms such as feeling guilty for the fellow soldiers’ death (Dela Cruz Fajarito & De Guzman, 2017). Another trauma that has been trending in military culture is a high rate of sexual trauma according to the U.S. Department of Veteran Affairs (American Psychiatric Association, 2018). However, these traumas aren’t exclusive to military culture. According to the American Psychiatric Association (2018), trauma can happen to anyone and in any environment.

Causes of PTSD

The cause of PTSD varies from different traumas in life. PTSD can be a temporary disorder or a prolonged disorder. PTSD can surface from one single event or multiple single

events. Automobile or plane accidents, sexual abuse, physical abuse, terrorist attacks, robbery, kidnapping, trafficking, war, etc. are examples of traumatic events that can cause PTSD (American Psychiatric Association, 2018). “A detailed safety assessment, that includes evaluation of childhood abuse history and current symptoms of sleep disturbance and anxiety, is a key component in the management” of depression (Sit et al., 2015, p. 95).

Description of PTSD Symptoms

According to Diagnostic Criteria I-CM-9: 309.81, I-CM-10: F43.10 in the *DSM5*, PTSD is defined as the “development of characteristic symptoms following exposure to one or more traumatic events” (American Psychiatric Association, 2018, p. 274). Exposure to any traumatic event that is directly witnessed, based on secondhand accounts, or exposed to repeatedly can cause PTSD. The intrusive symptoms could be recurring, involuntary and intrusive distressing memories. Post trauma can cause negative cognitive moods and create a behavior in self that can cause avoidance of familiar people, places, and things (American Psychiatric Association, 2018). Other symptoms of PTSD are flashbacks or intrusive thoughts, expressed loss or interest in activities, as well as avoidance of places and activities that evoke memories of the traumatic event (Jongsma & Paleg 2015).

Difficulty sleeping, irritability, anger outbursts, difficulty concentrating, hypervigilance, exaggerated startled response, verbal guilt and emotional numbness are signs of PTSD as well (Jongsma et al., 2014). Internal Triggers includes anything that happens within your body such as thoughts or feelings. External Triggers are anything that happens *outside* your body, such as a stressful situation (Tull & Gans, 2018). External pain has been associated with PTSD. Most clients with PTSD do not indulge in the abuse of alcohol or substances (Jongsma & Paleg, 2015). However, the suicide rate is high among PTSD clients (American Psychiatric Association, 2018).

Short-Term and Long-Term Effects

Many people, places and things can be brought on by traumatic experiences. Post-traumatic stress disorder happens when internal or external triggers happen such as sound, familiarity, arguments, smell, etc. PTSD can also happen in remission with occasional relapse. “Patients in remission, who have been without symptoms for some time, may suddenly relapse and begin to exhibit the full pattern of PTSD symptoms. When this occurs, it is likely that they were recently exposed to a traumatic reminder or some situation that resembled the original traumatic event in a significant way” (Friedman, 2015, p. 16).

PTSD sufferers can experience the disorder throughout their lifetimes (where symptoms are chronic, severe, and permanent), sometimes as remissions and relapses (typically linked to some exposure that resembles the original trauma), and with delayed expression (occurring months or years following exposure to a traumatic event). They may also achieve a full recovery after the initial episode and have no further problems. (Friedman, 2015, p. 17)

Repressed memories are memories that have been blocked. “Dissociative experiences, involving altered states of consciousness, have long been understood as a consequence or response to traumatic experiences, where a reduced level of consciousness may aid in survival during and after a traumatic event” (Mckinnon et al., 2016, p. 210). A repressed memory is not a memory lost but a memory that can’t be retrieved for a given amount of time. “Dissociative are reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic events were recurring” (American Psychiatric Association, 2018, p. 271). The cognitive therapist lays out a careful plan to help the client focus on repressed memories and not false memories. “Managing flashbacks is by coming to an understanding that they can feel terrified while not being in any

actual danger, and flashbacks are powerful and intense internal experiences that do not reflect external reality” (Sanderson, 2013, p.176). Music therapy can possibly be useful to handle processing repressed memory as well as reducing PTSD symptoms that happen when these memories are triggered (Trimmer et al., 2018).

Memory research does not provide an explanation of how traumatic memories that were once conscious become nonconscious other than through normal forgetting, selective inattention, or avoidance. False memories can be created when the mind can't process the events that took place. False memories can surface when remembering traumatic events that are related to a current event (Chu, 2011). There is also evidence that persons can “remember” events that did not occur (Chu, 2011, p. 83). False memories can be brought on by suggestion, emotional arousal, or fabricated stories. Chu (2011) stated that false memories occur when the powerful influence of others unconsciously takes on another person's view on a narrative. False memories create panic and false association to events that hadn't happened or make illusions based on an attempt of comprehension of what took place when the trauma survivor has blocked out factual memories.

Possible Treatment Methodologies

Hassija et al. (2012) stated that patients needing healthcare services at the U.S. Department of Veteran Affairs post-deployment clinic completed screening questionnaires that assessed lifetime interpersonal trauma, combat exposure, a history of childhood abuse, and adult sexual and physical abuse. “In a regression model, combat exposure was the only significant independent variable associated with PSS [Post-Traumatic Stress], DSS [depressive symptom severity], and alcohol misuse” (Hassija et al., 2012, p. 216). Questionnaires and Surveys can be used in Trauma Management Therapy (TMT) or Cognitive Processing Therapy (CPT) treatment

or research studies to gather information to evaluate trauma patients. “Despite the development of evidence-based treatment protocols for posttraumatic stress disorder (PTSD), many clinicians are hesitant to begin trauma-focused treatment for individuals presenting with co-occurring conditions, particularly disorders with psychotic features” (Arens, 2015, p. 115). This lead back to VIT issues and the need for a therapy that could be effective but more sensory such as music therapy.

Beidel et al. (2017) stated that the comprehensive, methodically supported treatment Trauma Management Therapy (TMT) can be done in a 3-week outpatient intensive therapy process. “TMT combines individual exposure therapy with group social and emotional rehabilitation skills training to address specific aspects of the combat-related PTSD syndrome” (Beidel et al., 2017, p. 107). Even though psychopharmacology is necessary for most clients, the focus should be centered on mental stimulation and natural healing. Natural approaches, TMT and CPT are closely related to the healing with alternative methods. “Cognitive processing therapy (CPT) is frequently recommended for treatment of PTSD, but little is known about whether substance use comorbidity affects the outcome” (McDowell & Rodriguez, 2013, p. 357).

There are natural ways to approach PTSD that can be supplementary to other methods such as CPT or TMT. Beidel et al. (2017) stated that CPT is well researched and recommended for PTSD because TMT needs more evidence research. Mindfulness relaxation, self-soothing, grounding, deep breathing, expressive writing, and social support are some of the physical ways to distress a trauma client physically and mentally (Tull & Gans, 2018). These are also therapeutic results of music therapy. Also, coloring, reading, talk therapy, meditation and music are therapeutic tools that can be used for PTSD as well. Finding peace and creating good coping skills are the main goals in therapy for PTSD clients (Chu, 2011).

Coping Skills

So many trauma survivors suffer from PTSD and use maladaptive coping skills to avoid the memories of the trauma. Irritability, difficulty sleeping, startled responses, and experienced remembrance of the traumatic event can cause physical issues too. Proper addiction recovery, reducing negative experiences, and applying good coping strategies could help trauma survivors have a better quality of life (Jongsma et al., 2014, p. 331). DeBeer et al.'s (2016) research are good examples of how with proper intervention, a survivor could have a better-quality life. Good, healthy coping practices promote wellness for the healing of the trauma survivors which is stated in the following:

Health-promoting behaviors include those that promote nutrition, physical activity, stress management, spiritual growth, health responsibility, and interpersonal relationships.

Nutrition and physical activity refer to choosing healthy foods and regular participation in exercise. Stress management consists of engaging in relaxation and strategies that reduce tension. Spiritual growth refers to the development of inner resources and working towards goals. Health responsibility involves attention to and accountability for one's health. Finally, the interpersonal relations dimension focuses on closeness, intimacy, and communication with others. (DeBeer et al., 2016, p. 2)

Researchers conducted studies for coping strategies with military veterans who worked as part of Operations Enduring and Iraqi Freedom who served in Iraq/Afghanistan wars. Research shows that health-promoting behaviors moderate the association between PTSD symptom severity and suicidal ideation among Iraq/Afghanistan veterans (DeBeer et al., 2016). DeBeer et al. (2016) stated that military veterans who experienced higher PTSD severity and engaged in more frequent health promoting behaviors would have lower levels of suicidal ideation in

comparison with military veterans who experienced higher PTSD severity but engaged in less frequent health promoting behaviors (DeBeer et al., 2016).

The Use of Alternative Therapy to treat Post-Traumatic Stress Disorder

Complementary and alternative medicine have been a treatment strategy for PTSD in the U.S. Department of Veterans Affairs (VA) for some time (Libby et al., 2012). Exercise, art, and music have been some treatments used for clients such as guide-imagery, mindfulness (mediation), stress management and muscle relaxation techniques. Other treatments for CAM have been diet plans, vitamins, and herbs. Libby et al. (2012) stated that CAM treatments have been effective and evidence-based in VA clinical PTSD programs all over the country. Researchers are still assessing the effectiveness of CAM on mental health services (Libby et al., 2012). Research has shown that collaborative music therapy has worked for military veterans who have had PTSD. These sessions were done remote video and the assessment had shown that this therapy has been effective and reduced symptoms of chronic, complex PTSD (Lightstone et al., 2015). Lonergan's (2014) research stated that CBT can cause more issues for clients with C-PTSD. Having an alternative therapy to use with CBT could possibly avoid the client's relapse or further impairment when treated for C-PTSD or PTSD (Lonergan, 2014).

Harik et al. (2017) stated that people with PTSD symptoms rarely know the signs or symptoms of PTSD and need to be educated more on the topic. By educating themselves on the symptoms and triggers of PTSD, trauma survivors are able to learn when, what and how to use coping methods to combat the disorder. A descriptive population study was done in Australia to test the psychological well-being in professional orchestral musicians because music can be a good coping method for PTSD triggers as well as other mental disorders related to it (Kenny et

al., 2014). Some musicians had social phobias, anxiety disorders and PTSD. Kenny et al. (2014) stated that a total of 22% musicians met the PTSD criteria.

Most musicians have used music as a way of bonding and committing to a social lifestyle among musicians. In order to use music therapy with CBT, researchers must explore how these methods can work together as an alternative therapy or treatment for mental health (Soflau & David, 2018). Soflau and David (2018) believe that understanding and educating the client on the impact that music can have on the cognitive and emotional state would benefit a trauma survivor, client, or patient's conditions. Soflau and David confirmed that "music-based rational-emotive and cognitive-behavioral education might change the intensity of people's positive and negative emotions simultaneously" (Soflau & David, 2018, p. 89).

These findings are discussed in line with the existing models of music and emotions.

Although there is an extensive literature showing that both rational-emotive and cognitive-behavioral interventions (REBT/CBT) and music can alter various emotional responses, little is known about their ability to impact on both positive and negative emotions simultaneously. (Soflau & David, 2018, p. 90)

Soflau and David (2018) explored the use of music therapy on how it can impact a patient's behavior or emotions. Cognitive Behavior Therapy has been used to explore ecological conditions and how the negative and positive interactions influenced a person's behavior (Soflau & David, 2018). With music therapy, it has been used as a healthy buffer coping strategy with the use of CBT (Soflau & David, 2018). Soflau and David (2018) also stated that more research needs to be explored on the impact that music therapy has on behavior.

Cognitive Behavior Therapy

Cognitive Behavioral Therapy is an intervention therapy that focuses on improving cognitive distortions and behaviors, regulating emotions, and creating coping strategies to improve cognitive functions (Brown et al., 2018). There has been evidence that CBT has helped clients overcome their traumatic experiences (Brown et al., 2018). Research has shown that CBT can have a negative impact on cognitive narratives in treatment due to remembering or recalling negative events (Brown et al., 2018). Brown et al. (2018) stated that improvement in the CBT approach is needed to understand if it is causing more negative side effects using CBT than positive results with PTSD clients. Several therapy practices have been recognized as successful psychotherapeutic treatments for (PTSD) such as CBT, Cognitive Processing Therapy, and Prolonged Exposure Therapy that can be used in qualitative phenomenological study design to understand the effectiveness of treatment in clients or patients (Zalta, 2015).

CBT is an Effective Treatment

Most practices of therapy are in a clinical setting. Therapists, counselors, and mental health practitioners are now exploring the use of online therapy as an option to treat clients. Lewis et al. (2019) stated that internet-based cognitive behavioral therapy (i- CBT) is just as effective as Internet-delivered non-CBT post-treatment. This research is evidence that assessments and therapy online are just as effective as in-person therapy sessions. Papazoglou (2017) stated that CBT has been used on first responders who suffer from PTSD related rescue missions of traumatic events. Traumatic events can cause acute stress that can impact the job of a first responder (Papazoglou, 2017).

Multiple evidence-based studies have shown that CBT has been known to help first responders become more effective in their rescue missions and improve cognitive distortion

(Papazoglou, 2017). Sijbrandij et al. (2016) stated that an iCBT is a reasonably innovative treatment method that could improve the approachability of mental health care for trauma survivors, patients, or clients with (PTSD) depending on the evaluation of the effectiveness of the treatment. Sijbrandij et al. (2016) findings show that iCBT is an effective treatment for sufferers of PTSD and its symptoms. They stated that further research needed to be made to understand the effectiveness of iCBT in clinical practice (Sijbrandij et al., 2016).

Simon et al. (2019) used a study of 720 participants in ten studies with the use of clinical and research questions to measure i-CBT effectiveness on the intervention for adults with PTSD. For example, Symes et al. (2018) stated that early intervention on trauma related issues have been helpful for women who have been exposed to domestic violence. Symes et al. (2018) results showed that diagnosing and treatment measures can lower the trauma survivor's PTSD symptoms and improve decision making when treated in early interventions. Trauma survivors or other trauma clients can learn coping mechanisms in therapy to use outside of therapy, but CBT does not need to be practice alone and especially for trauma survivors who have chronic PTSD symptoms (Lonergan, 2014). So, there is history of iCBT used on individuals and group participants but there is room to explore more intervention use with iCBT in order to understand if it is effective and if another form of therapy such as music therapy is needed to strengthen the effectiveness of the treatment.

Trauma-focused Cognitive Behavioral Therapy

CBT has been known to help children who have experienced sexual abuse (Kolko et al., 2018). Trauma-focused CBT has worked on young children who have been victims of domestic violence and have helped decrease PTSD symptoms (Lowell & Renk, 2018). Lowell and Renk (2018) indicated that TF-CBT has helped clients with cognitive restructuring symptoms,

emotional and behavioral functioning, and gained an understanding of coping skills. In family intervention with the use of CBT, results have shown that it has improved family behavior (Kolko et al., 2018). Trauma-focused CBT has been measured using a questionnaire that focuses on behavior and modes of clients with chronic post-traumatic stress disorder (Ford, 2015). Evidence has shown that older adults benefit more from trauma focused CBT than teens or children (Lenz & Hollenbaugh, 2015). This is where an alternative therapy other than CBT would be beneficial for a client's treatment; to help young people process information and make them comfortable sharing their trauma with their therapist and support team.

Integrated Cognitive Behavioral Therapy

Integrated CBT with another behavioral therapy has been proven to reduce the symptoms of PTSD and substance use disorder (SUD) in smaller sample population (veterans) but need to be tested on a larger group in order to enhance the strength of the validity (Capone et al., 2018). Studies have shown that CBT has been an effective treatment for depression and problem-solving appraisal in treatment that helped reduce depression symptoms (Chen et al., 2006). The intervention technique that is called Skills Training in Affective and Interpersonal Regulation (STAIR) has been used for military sexual trauma clients as an intervention in treatment of PTSD (Cloitre et al., 2016). STAIR is an alternative approach to CBT that promotes social skills and reduces "social withdrawal, hostility, and aggression" (Cloitre et al., 2016, p. e186). Cloitre et al. (2016) stated that STAIR treatment is beneficial to trauma clients and their families.

The STAIR approach is related to music therapy because it causes social engagement. Cohen and Mannarino (2008) stated that Trauma-Focused Cognitive Behavior Therapy was effective for children suffering from trauma. Research has been used to support this evidence-based practice of TF-CBT. The use of music therapy with CBT or TF-CBT can be very

beneficial for trauma clients. Music therapy gives the clients a balance between processing cognitive distortion and using music as a coping skill that could be beneficial to their whole well-being (Skean, 2019). Music that the client likes and can identify with brings a level of calmness (Skean, 2019). Skean (2019) suggested that integrational client-chosen music can be useful when using music with another therapy practice. Skean (2019) also stated that short term therapy with the use of music was successful with reducing depression and increased positive signs in overall wellness.

Silverman and Bibb's (2018) research studied themes between the client, music, and the therapist to gain an understanding on if music therapy is effective in non-music settings. Their research brought on questions of the effectiveness of music therapy education, music therapy advocacy and whether the quality of the music therapy helped therapists guide better sessions for their clients (Silverman & Bibb, 2018). The expectations of what music therapy could do as an integrative therapy method with non-music therapy can be a concern not just for the client but also for the therapist. CBT has been known to treat many disorders, whereas music therapy is still a work in progress when understanding the effectiveness of the practice on clients with PTSD or other mental disorders related to trauma or symptoms related to trauma (Silverman & Bibb, 2018).

CBT for the Treatment of Physical Wellness

Mental wellness is just as important as physical wellness. CBT is a therapeutic practice that focuses on feelings and behaviors to provide psychological healing (Vranceanu & Safren, 2011). "CBT has been proved effective not only for treatment of psychological illness but also for teaching adaptive coping strategies in the context of chronic illnesses, including chronic pain" (Vranceanu & Safren, 2011, p. 124). Studies have shown that CBT can be used for

physical pain, as part of an integrated therapy practice for patients (Vranceanu & Safren, 2011). Vranceanu and Safren (2011) came to an understanding that CBT can be an effective in the treatment for physical pain, however, their research suggests that more research needs to be done on the effectiveness of CBT's use to treat physical pains. "Preliminary studies do show that CBT is a useful tool that can be used alone or in conjunction with treatments offered by hand therapists, surgeons, and physiatrists" (Vranceanu & Safren, 2011, p. 8). With the help of a mental health professional, a patient or client can learn to assist in their own mental and physical recovery (Vranceanu & Safren, 2011). Lessons learned in music therapy can fill this need.

Trahan et al. (2016) stated that client-centered PTSD treatment and physical fitness goals can be integrated into CBT therapy sessions that can help decrease depression and fatigue symptoms. Their research was based on a qualitative study that was done on a female African American military veteran who suffered from obesity, depression, and PTSD. The results from the treatment showed that an integrated therapy practice was beneficial in decreasing her PTSD symptoms, helped managed her weight, and improved her esteem (Trahan et al., 2016). Since music has been known to be used in an integrated therapy practice such as CBT or CPT, music therapy needs to be explored on if it can stand alone as a primary therapy method to treat PTSD.

CBT for the Treatment of Sleep Disorders

Having sleep disturbances and other sleep issues has been a symptom of some PTSD clients. CBT has been known to help with insomnia and depressive symptoms (Ho et al., 2016). Gehrman (2015) stated that CBT for insomnia has been beneficial to military veterans with PTSD. However, some researchers stated that more research needs to be made to test the validity of Cognitive Behavioral Therapy's success as a pretreatment and post treatment for combat-related PTSD (Levi et al., 2016). Levi et al. (2016) stated that CBT should only be used in

clinical settings. Talbot et al.'s (2014) research showed that sleep disorders improved after a 6-month treatment with CBT for insomnia, however, sleep medicine was still suggested to treat PTSD. Macedo et al. (2018) believed that more research needs to be done on whether CBT has lasting effects on clients who suffer from PTSD. This is where an alternative therapy such as music therapy for long term treatment can be explored for PTSD.

Hinton et al.'s (2013) treatment with visuals and ambient sound was stated to be effective for ethnic minority populations and refugees with PTSD. This coping therapy called emotional regulation techniques was based on culturally designed CBT that focused on mindfulness and acceptance of trauma. Culturally adapted therapy can promote psychological flexibility and address anxiety disorders related to traumatic events (Hinton, et al., 2012). Margolies et al. (2013) research showed that Afghanistan and Iraq veterans who suffer from insomnia, PTSD-nightmares, distressed memories, and depressive symptoms reported improvement in symptoms with CBT and imagery rehearsal therapy (IRT).

Hinton et al. (2017) also stated that culture forms within a community can impact the way trauma is processed among people. Research was done to show how "flexibility primers" such as music therapy, visual art and scenery can be effective in relieving PTSD symptoms in clients or patients (Hinton et al., 2017). According to Hinton et al. (2017), these ritual practices could be used as a factor to heal the client to change his or her mood. Music has been shown to affect physical, emotional, and cognitive aspects of the body to improve the client's health conditions. Hinton et al. (2017) stated that healing rituals have been shown to bring change among clients who suffer from PTSD that leads to a changed perspective and promotes healing.

The Use of Music Therapy on Trauma Clients

Music intervention can be done with the use of cultural forms to promote healing and change that can lead to whole body wellness and transformation (Hinton et al., 2017). These musical interventions are coping mechanisms to stabilize the cognitive that depends on the levels of music rhythm, scales, repeated patterns, and metronome (Hinton et al., 2017). The use of music in this manner was considered a healing ritual because it provokes change in behavior and enhances self-awareness (Hinton et al., 2017). Nizamie and Tikka (2014) stated that music intervention or music medicine was used in psychiatric hospitals as early as 1918 that consist of classical music. The use of music was dispersed in psychiatric in-patient group music sessions and as background music with the use of a music band (Nizamie & Tikka, 2014).

Evidence has shown that music therapy has worked for trauma clients. The use of CBT and music therapy together has some research available but has not been explored much clinically. The use of music therapy instead of CBT can be effective and beneficial for trauma patients who suffer from distress memories. Neurological research that has been done by Hunt and Legge (2015) stated that music therapy for mental health has been effective in treating mental disorders. It was also stated that music therapy is an effective coping method and promotes social bonding as well as empathy during and after traumatic events. Guided Imagery and Music (GIM) and medical treatment was stated to improve mental health and reduce PTSD symptoms in clients (Cordtz et al., 2018). The test was used on refugees and the results showed that this method of GIM and medical treatment also helped improve their sleep patterns. This is a good example that music therapy works.

This current research study was based on participants with PTSD experiences with music therapy. Music Therapy is considered an alternative therapeutical practice in the arts that can be

used to counteract everyday PTSD symptoms (Hunt & Legge, 2015). According to some researchers, “cognitive neuroscience research over the past decade has produced increasingly fascinating insights into how the human brain processes and react to sound as well as imaging methods, while also enhancing our understanding of brain processes related to many mental health disorders” (Hunt & Legge, 2015). Research shows that some cognitive neurosciences are being studied by Board Certified Music Therapists in order to understand the cognitive function and injuries associated with the brain activity (American Music Therapy Association, 2019). Several imaging methods have been used to explore how sound can trigger memory and also create calmer states for clients (Hunt & Legge, 2015).

Trahan et al. (2016) used CBT practices in their research to understand the results of an African American veteran’s PTSD and weight goals experiences. CBT could have similar results to music therapy but possibly better. Music is known to be universal and stimulates the mind that could bring more positive healing results for a client when using music therapy than CBT (Trahan et al., 2016). Trahan et al. (2016) stated that music therapy can be beneficial for the mind and body if applied in treatment plans. Scott-Moncrieff (2015) have explored MT in their therapy sessions to treat clients. “In the initial sessions the treatment focused on stabilization and arousal regulation, finding inner secure places, breathing, and sensing the body to music” (Scott-Moncrieff, 2015). Scott-Moncrieff (2015) stated how music and imagery contributed to the effectiveness of treating trauma. There were two ways the researcher used to explore the way MT worked on the participants. One group focused on the ability to contain both positive and negative emotions. The other group worked through past traumatic experiences while sitting and closing their eyes to focus on listening to music in order to avoid re-traumatization of traumatic memories (Scott-Moncrieff, 2015). Music was used as a coping mechanism for both groups of

participants that helped them cognitively process emotions and memories (Scott-Moncrieff, 2015).

A prior research study on one patient proved that music can be used as psychotherapy for a client's coping mechanism against severe childhood trauma (Adams, 2019). Songs that were selected by the patient instead of by the counselor have been shown to help the patient with interpersonal or relatable music. Song choice can help personalize the treatment for a client based on the age and culture. Research was made that stated that music therapy can be used as a form of healing (Arthur, 2018). A music therapist can work through the therapy session with the client by using music as a grounding technique in a clinical setting or office (Arthur, 2018).

Music therapy can also be an outpatient therapy treatment used as a grounding technique as well (Ho et al., 2011). Ho et al.'s (2011) research has addressed how children, adults, and soldiers have used music therapy to cope with trauma or other social emotional behaviors related to trauma that interfere with everyday living. This research paper examined how music or art has been used to counteract PTSD symptoms such as anxiety and stress in hopes to increase positive thinking and reduce re-experiencing symptoms (Ho et al., 2011). Beever (2015) stated that there are four kinds of music therapy: Nordoff Robbins Music Therapy that assist in healing disabled children, Bonny Method of Guided Imagery in Music that are designed to facilitate conscious healing, Analytical Music Therapy that involves the experimental analyzation of creative music, and Neurologic Music Therapy that is used to treat neurologic disorders and stimulate the brain. "In these and others (hospice and palliative care music therapy, N-ICU music therapy), music therapists are trained to work with specific populations or with specific musical interventions for a number of populations (Beever, 2015).

Research gathered on the six participants with PTSD in this study have had experiences of data related to the Bonny Method of Guided Imagery in Music that are designed to facilitate conscious healing and Neurologic Music Therapy to treat neurological disorders. In previous research, a controlled clinical study was done on participants that showed evidence that music helps lower PTSD (Baker et al., 2018). Baker et al. (2018) suggested that more study need to be done to show if music therapy works for the treatment of clients to rule out error. Sad songs were stated to have a lower negative effect on the relief of PTSD on older adults than young adults. However, sad national songs had a higher negative effect on older adults than young adults (Bensimon et al., 2017). Song selection matters and relational messages in the song can create negative or positive experiences within the client or patient based on PTSD triggers or life experiences. PTSD was reduced in clients who participated in group music therapy together (Carr et al., 2012).

There has been a history of qualitative, single case design (SCD) studies on music therapy, but more research can be done on this topic. Geist and Hitchcock (2014) researched music intervention to understand the use of it in clinical practical settings. They suggested that small sample sizes need to be studied in order to understand the effectiveness that music therapy has in clinical settings. It was said that “single case design (SCD) studies offer a viable and rigorous option for investigating the impact of music therapy interventions, particularly in clinical settings where the number of students/clients seen may be small in number and diverse in their abilities” (Geist & Hitchcock, 2014, p. 295). That theory makes this research viable for examination in order to understand each participant’s beneficial experiences with music therapy.

Related Literature

Researchers have collected qualitative data, quantitative data, and mixed design data to understand if music therapy and CBT could work for clients’ treatment. Evidence-based practice

of music therapy have been explored using mixed, qualitative, and quantitative data (Aigen, 2015). Aigen's (2015) research suggested that music therapy needs to be explored more to understand the science and evidence of using it as a form of treatment. There is an assessment scale that can be used that is called the Music Therapy Practice Scale (MTPS as seen in Biasutti, 2019). It is a self-assessment used to test "the validity and reliability" between music therapists and music therapy students (Biasutti, 2019, p. 40). Results showed that there was an enormous difference between the music therapist and music therapy students based on their ability to design treatment plans, manage sessions, and perform duties (Biasutti, 2019). This is an example that shows that music therapy can be measurable and has been tested as a personal assessment before testing on clients.

Music Therapy use with Refugees

A study has shown that mixed method research is one appropriate approach to understanding the practice of music therapy that strengthens the validity of the research (Bradt et al., 2013). However, several studies on psychological treatment of refugees have been conducted to describe highly varying outcomes, and research on multi-faceted and personalized treatment of refugees with post-traumatic stress disorder (PTSD). This is one reason that phenomenological qualitative studies are important to explore because they provide a realistic outcome that can be used to comprehend mixed method studies for further research (Gaya & Smith, 2016). A pilot study on music therapy method called Trauma-focused Music and Imagery (TMI) was used along with several measurements to conduct testing on clients with PTSD (Beck et al., 2018). The research design used a randomized control group study with several scales for measurement. The primary outcome measure was the therapist-administered Harvard Trauma Questionnaire that measured the degrees that the participants experienced. Eight other questions

measured the effect on trauma symptoms during treatment. Beck et al. (2018) stated that in their research that music therapy and imagery have been found to be effective treatment for refugees' health and integration. In order to test the effectiveness of music therapy, using a phenomenological approach is necessary in order to understand the experiences the participants have had with MT.

Music Therapy as a Treatment for Children Refugees

Wiesmüller and Stegemann's (2016) research has shown that the use of music therapy has been beneficial in treating children refugees based on active participation that has improved their mental, emotional, social, and physical wellness. "Music is a useful tool in treating children and adolescents with psychiatric disorders because of the engagement of multiple areas of the brain that occur during music listening" (Wiesmüller & Stegemann, 2016, p. 155). Ter Heide and Smid (2015) stated that intervention treatments have been proven very effective among refugees. According to their research, from the use of a Harvard Trauma Questionnaire, the greater the refugees PTSD symptoms were during treatment intake showed a reduction in PTSD symptoms a year after treatment (Ter Heide & Smid, 2015).

Yinger et al. (2014) stated that the use of music therapy enhances brain function and has been beneficial to children and adolescents suffering from trauma. Research has shown that the use of specific music selections with a music therapist has been an effective approach to treating trauma patients (Yinger et al., 2014). Uggla et al.'s (2016) clinical pilot study on 16 severely sick children showed that music therapy lowered stress levels, stabilize heart rates, and reduce the chance of PTSD symptoms. However, the use of music to treat trauma has the possibility of intensifying stress levels in patients with personality disorders, eating disorders, and substance abuse if music therapy is used without a music therapist or other trained therapist in music

because it triggers emotional vulnerability (Yinger et al., 2014). Research has also shown that patients with emotional disorders, learning disabilities, and intellectual disabilities have had some success with the use of music as a treatment for coping skills and positive change outcomes (Yinger et al., 2014).

Some researchers believe that musical interventions, such as music medicine and music therapy, are used for the purpose of helping patients get through difficult experiences. “Music medicine is the use of music to improve the patient's well-being, and it is often administered by professionals other than music therapists” (Uggla et al., 2016, p. 1225). Uggla et al. (2016) stated that music therapy can promote healing, for social engagement, emotional regulation, and social engagement. Uggla et al. (2016) did a study on six children who were patients to determine the effects music had on their well-being by analyzing their psychological and physiological parameters related to heart rates. This research was relevant because PTSD has long-term effects on the mental and physical well-being of people who suffer traumatic experiences. Previous research demonstrates the success rate among different demographics and age groups who have used music and art therapy and made it possible to be used as a general or individual music therapy practice for PTSD counseling (Carr et al., 2012).

Music Therapy use with the Military

Researchers determine the effects of art/music therapy as medicine on each group of subjects. Gathering collective previous data from different researchers and comparing the statistics by using qualitative sampling of children, adults, and soldiers of relative trauma experiences such as stress and anxiety associated with PTSD are relevant to this qualitative phenomenological study to be conducted (Carr et al., 2012). Research was done on a military population to see if music therapy is an effective behavioral therapy. According to Zoteyeva et

al. (2016), military veterans have used music as a self-therapy to regulate their emotions. Zoteyeva et al. (2016) study on Australian veterans stated that music therapy practice was used for mental and physical wellness. Zoteyeva et al. (2016) study showed that music therapy assisted in healing veterans who have suffered severe emotional and cognitive issues. Pezzin (2018) found evidence that music instruction intervention programs improved overall health of veterans suffering from depression and moderate to severe traumatic problems.

Zoteyeva et al. (2016) indicated that their findings showed potential for customized music listening as a useful contribution to effective lifestyle management that can benefit veterans emotional, mental, and physical health. In vocalist Paula Lind Ayers (1891-1974) biography, she stated that she used a systematic approach with live singing to treat injured active-duty soldiers who were considered shell-shocked during World War I (Reschke-Hernandez, 2014). Her approach was considered one of the earliest MT treatments to treat trauma patients among a military setting (Reschke-Hernandez, 2014). Music therapy practices used for military can be used for civilians as well. Every client or patient is different so tailoring a treatment plan depends on the trauma survivor's needs that need to be met or diagnosis given by mental health professional.

A study was shown that the U.S. Department of Defense and the U.S. Department of Veteran Affairs could use this approach due to a study showing that 79% of military personnel requested a follow up once they have had one session in music therapy (Bronson et al., 2018). This study was based on an intervention clinical session. Clinical studies were also done on military subjects as well. Dela Cruz Fajarito and De Guzman's (2017) research demonstrated an understanding of combat-related PTSD symptoms expressed through index trauma on military

culture depends on how they were personally traumatized. Guilt has played a main factor in those symptoms.

Their most incapacitating symptoms: hypervigilance (case 1), negative belief in oneself and negative emotions (case 2), prolonged distress, and marked physiological reactions to trauma-related cues (case 3), may be understood in the light of how they personally experienced different circumstances of their index traumas. (Dela Cruz Fajarito & De Guzman, 2017, p. e1665)

Music therapy in the military culture has been used in individual and group therapy sessions for soldiers, contracted civilians or military families who are coping with PTSD or trauma related issues. “Treatment integrated elements of cognitive-behavioral therapy with imaginal exposure, empowerment, exploration of coping styles, and socially supportive interventions reduced anxiety, PTSD, and depression” (Drozdek et al., 2014, p. 378). Long-term treatment of PTSD lasted for 5 years and then symptoms start to increase again but a test after seven years showed a reduction in PTSD (Drozdek et al., 2014). This could be due to an issue with stability and not the treatment. CBT based intervention for sensory processing was effective in raising meta-conscious awareness and self-regulation in autistic adolescents (Edgington et al., 2016). This proved that art and music can assist in healing the mind and enhancing the mood.

Music Therapy as a Treatment for Family Trauma

Garrido et al. (2015) stated that music therapy helped trauma survivors’ bond with one another during times of grief as well as people with insecurities or shyness. Research on music therapy for survivors of violence has shown that it has helped with coping and reducing stress. Harris (2016) stated that music therapy provides creative healing from trauma for children during

conflict in wars. This proves that music therapy could possibly be highly effective on healing severe trauma. There is also evidence that music therapy works for the whole family.

An exploratory study was made on forensic psychiatric patients that showed that music therapy improved coping skills for clients suffering with anxiety, avoidance, and anger issues (Hakvoort et al., 2015). For example, parents who have infants in the Neonatal Intensive Care Unit (NICU) have been known to suffer from PTSD. Music therapy has been a good coping skill for parents who suffer from anxiety. Colegrove et al. (2019) stated that parents with a history of trauma who have had reoccurring memories of childhood mistreatment have had success with the use of music as an intervention. The music therapy was said to regulate the clients' emotions, reduce patterned behavior and help them process the trauma. Lower levels of conflict were found to be present with the use of music therapy and helped the parents improve their relationship with their family in their household.

Music intervention, psychotherapy education and music-assisted relaxation have been beneficial for exploring family-music therapy practices (Gooding & Trainor, 2018). Lobban and Barrowclough (2016) stated that an interpersonal CBT framework for psychosocial interventions has been an effective approach for families helping a relative with their treatment. Social environment on mental health has been evidence based and clinical implications. "All three treatment interventions are equally effective at reducing depressive symptoms and increasing psychosocial functioning at posttreatment" (Schaub et al., 2018, p. 570). Schaub et al. (2018) indicated that cognitive psychoeducational group treatment outside of a clinical therapy was a more successful intervention that showed promising results as a long-term method to treat depression. Schaub et al. (2018) compared some of their study group participants on behavioral changes and psychosocial functioning with the use of extended clinical management, group

CBT, and group with individual CBT for major PTSD symptoms that include depression. One phenomenological study showed how the impact of PTSD can have a negative effect on the military veterans' family relationships who are dealing with a family member's healing process from trauma (Ray & Vanstone, 2009). Ray and Vanstone (2009) stated that interpersonal skills or coping methods need to be explored and genuine support from family to have a balanced healing process.

Music Therapy as a Relaxation Technique

Music has been known to be effective as a relaxation technique to improve sleep quality and regulate emotions for those who have been diagnosed with PTSD (Kremer et al., 2012). Kremer et al. (2012) has found that music at bedtime has helped improve insomnia because it is calming and relaxes the muscles. This is beneficial for both adults and children. Kremer et al. (2012) stated that music self-therapy has been discovered to stimulate memories and influence mood. Recently, music self-therapy practices have benefited clients that suffer from psychiatric disorders, cognitive distortion resulting from traumatic brain injury as well as other medical issues (Kremer et al., 2012). However, Kremer's research does not express whether another therapy was mixed with music therapy to create positive healing results for traumatic brain injury (TBI). This leaves room for future research to explore and cite results of patients with TBI.

Some researchers using music therapy have shown that music therapy can help clients who have traumatic brain injury. Froutan et al. (2020) study was done on Intensive Care Unit patients with TBI with one group assigned to a controlled group without music therapy and another group with music therapy. Froutan et al. (2020) stated that the use of traditional therapy and music therapy has been a successful treatment for patients with TBI. Auditory stimulation and music therapy on coma patients showed results of decreased blood pressure issues, a better

regulated heart rate, and a better respiratory rate compared to the control group without intervention. This shows that music therapy as a primary therapy can be beneficial for a client's mental state as well as overall physical health.

Abd-Elshafy et al.'s (2015) study acknowledged that music helped lessen the effects of stress on children who have been diagnosed with congenital heart disease. The music was found to help them relax during the treatment of congenital heart disease but the wellness score for PTSD differed among the children. Even with the significant difference in score of pain and mental stress between the children, the research showed that music therapy was beneficial to their recovery. Another clinical study showed that music therapy following open heart surgery was shown to not be effective in reducing anxiety and pain. These results were based on duration, frequency and time following the patients' surgery (Grafton-Clarke et al., 2019). There was a limited amount of evidence that showed some pain reduction but not enough to prove that music therapy is effective as a stand-alone nonpharmacological treatment. These music interventions were measured on sedative and relaxation results from seven different qualitative case studies (Grafton-Clarke et al., 2019). Grafton-Clarke et al.'s (2019) research showed that music therapy is beneficial as an integrated method for wellness but needs more research done to see the effectiveness of it as a stand-alone practice.

In Gallego-Gomez et al.'s (2020) research, a combination of progressive muscle relaxation techniques and music therapy was effective in reducing stress levels among a group of nurse students. According to Gallego-Gomez et al. (2020), high levels of stress were stated to impact academic performance and the study showed music therapy and muscle relaxation techniques improved the nursing students' academic results. This shows that music therapy can be effective outside of traumatic experiences. Ogba et al. (2019) stated that the use of music

therapy as a follow-up to treatment can be successfully used as a supplemental treatment to cognitive therapy when dealing with stress management. This treatment was effective as a relaxation technique.

Music Therapy Impact on Physical Wellness

Besides MT being used as a relaxing technique, it can be used for physical fitness or physical therapy. A study conducted by Kamioka et al. (2014) stated that music intervention is effective in music therapy on mental disorders as well as possibly improvement on physical health. “MT treatment improved the following: global and social functioning in schizophrenia and/or serious mental disorders, gait and related activities in Parkinson's disease, depressive symptoms, and sleep quality” (Kamioka et al., 2014, p. 751). Music therapy warrants movement and could possibly boost self-esteem as well as heal traumatic memories. Giordano et al. (2020) found that music therapy can be used as a stand-alone treatment for clinical staff who have suffered from severely stressful situations. Stress has been an issue among staff who have lost loved ones as well as patients from the COVID-19 pandemic. Music therapy has helped treat insomnia, anxiety, spiritual conflict as well as decreased physical tension (Giordano et al., 2020). The results were given from the use of a self-assessment questionnaire that was based on the effectiveness of music therapy among the clinical staff. The study showed that music therapy in a remote setting could be useful to relieve stress in emergency situations.

Music Therapy for Medical Illnesses

Complementary and alternative medicine have been used to treat mental and physical medical illnesses for many years (Kern & Tague, 2017). Researchers have studied CAM over the years, but it lacks most government recognition of its importance in the medical and mental health field (Kern & Tague, 2017). Researchers state that music therapy lowers patient's anxiety

and other related PTSD symptoms ruling it an effective treatment to reduce mental stressors (Rossetti et al., 2017). This theory of intervention was analyzed based on culturally centered individualized use of music therapy on cancer patients (Rossetti et al., 2017). Schubert et al. (2021) used martial art for physiotherapy, energy healing and music therapy to treat a 49-year-old female breast cancer survivor who was suffering from depression and chronic fatigue. The results after CAM treatment showed positive improvement in her behavior however one form of martial arts such as Tai Chi increased agitation (Schubert et al., 2021). Schubert et al.'s (2021) research showed integrated therapy practices with music therapy has been examined.

Throughout the years, music therapy has been proven to be an effective intervention for medical illnesses. It has also been used to treat depression in a postpartum mother that also improved her sleep patterns and decreased pain (Yang et al., 2019). Yang et al. (2019) stated that music therapy, however, has no significant effectiveness on improving anxiety of a postpartum mother. "Strategies to overcome consequences of unresolved trauma include therapeutic intervention, learning to trust the arousal cycle again, the release of frozen energy, and the creation of adequate dress rehearsal opportunities, enabling individuals to again enter the state of 'flow'" (Swart, 2014, p. 386). Further research is still needed on the safety and impact that MT has compared to standard treatment (Yang et al., 2019). "It is emphasized how adverse experience can catalyze Post-Traumatic Growth and how integration can facilitate healing and optimal performance" (Swart, 2014, p. 386). Solli et al. (2013) stated that patients with self-determination can have a strong experience with MT. "Music therapy can contribute to the quality of mental health care by providing an arena for stimulation and development of strengths and resources that may contribute to growth of positive identity and hope for people with mental

illness” (Solli et al., 2013, p. 244). These positive findings can be beneficial to the treatment of trauma survivors, too.

Summary

Music therapy is a therapy that can be used in and outside of therapy. Music therapy can be used long term for outpatient treatment alongside CBT, too. A phenomenological study could possibly show that music therapy can be used alone as a treatment for PTSD or complex PTSD. This section of previous research has shown the benefits of music therapy and CBT treatments on trauma patients who have had therapy from prior music therapists. The goal of this current phenomenological study was conducted to gather the participants’ experiences with music therapy who have received MT for PTSD. This information supported previous research that was gathered in this section to determine the effectiveness of music therapy. There are several strengths and weaknesses that both CBT and MT therapy practices have shown. In order to understand the validity of therapy on PTSD treatments, the researcher must examine the strengths and weaknesses of the practices.

Strengths

Faulkner (2017) stated that a therapy practice combining rhythmic music with cognitive reflection for emotional and social health can assist with trauma recovery. Music therapy with cognitive reflection can also assist clients who are not ready to communicate openly in therapy about their trauma, but music can be used to stabilize mood. Music therapy was stated that it helps better and heal clients’ whole-body experience (Ferrer, 2015). Treatment results depend on the “music, therapist, and client” interaction and feedback.

Hoge et al. (2014) suggested that updated screening instruments need to be used to measure trauma in veterans in order to meet DSM-5 requirements. A PTSD checklist can be a good tool to use in measuring symptoms in Music Therapy with CBT for PTSD. However, there

are several instruments that can be used to measure the effectiveness of music therapy with PTSD. Several assessments that can be used to collect data from PTSD participants can explore the benefits of music therapy based on pretest and posttest or comparison between with or without cognitive therapy. The independent variable can be PTSD participants with music therapy and PTSD participants without music. The dependable variables were how the client or clients respond to therapy practice treatment with their counselors with and without music.

An assessment tool that was found online at MusicTherapy.org can be used to collect data (AMTA Professional Advocacy Committee, 2008). PTSD assessment tools like PTSD Symptom Scale Interview (PSS-I and PSS-I-5), Treatment-Outcome Posttraumatic Stress Disorder Scale (TOP-8), Modified PTSD Symptom Scale (MPSS-SR), PTSD Checklist for DSM-5 (PCL-5), or Short PTSD Rating Interview (SPRINT) can be used alone to measure music therapy or with CBT (American Psychological Association, 2019). Music therapists gain an understanding of sampling and measuring data to strengthen their certified based clinical experiences (AMTA Professional Advocacy Committee, 2008; Web Center for Social Research Methods, n.d.).

Professional and clinical evidence based is important in understanding whether a treatment is beneficial for mental health. According to Landis-Shack et al. (2017), music therapy raises resilience and has attracted clients that have a stigma about seeking therapy. Music provides a sense of identity when used in group therapy. It becomes relatable. Most music therapists are accredited, and board certified by the Certification Board for Music Therapists (Landis-Shack et al., 2017). Landis-Shack et al. (2017) stated that music therapists have been employed in youth centers, detention centers, hospitals, clinics, schools, etc.

Grocke et al. (2014) stated that group music therapy has been shown to enhance self-esteem according to research that was done on a focus group. It has been an addition to clients' treatment as a holistic approach. Music therapy was stated to help improve the quality of life of a severe mental illness. Song lyrics analyses, interviews questionnaires showed results that group music therapy enhanced quality of life among clients with severe mental illness. Grocke et al. (2014) stated that interactive participation with songwriting and singing helped the group connect among each other and has been a good icebreaker for ones struggling with social sharing.

Weaknesses

Cognitive Behavioral Therapy, as a stand-alone therapy, could create more stress when memories of events become intrusive and unbearable (Lonergan, 2014). Music therapy can be a good coping strategy when combined or used with CBT, however, music therapy has been known to be used as stand-alone therapy, too. Kern and Tague (2017) have done research on professional music therapists that stated that they are effectively treating patients with mental health issues. The government has not given much recognition to the field of music therapy as a primary mental health practice (Kern & Tague, 2017). Furthermore, researchers believe that this field of therapy needs more evidence-based research. Several previous research articles were shared in this section of this study on how music therapy and CBT have been assessed over the years with trauma clients. Further research needs to be made, so that music therapy could be recognized by the government and mental health practitioners as primary treatment for PTSD.

Cognitive Behavioral Therapy is an intervention therapy that focuses on improving cognitive distortions and behaviors, regulating emotions, and creating coping strategies to improve cognitive functions. There has been evidence that music therapy and CBT together can

be highly beneficial to trauma survivors. However, there is not much evidence-based research that music therapy can stand alone as a treatment for trauma survivors or PTSD clients. Some previous studies proved that it is possible to use integrated therapies together to heal cognitive distortion and provide a good coping mechanism for people with PTSD. Several previous research studies have been done on music therapy to support it as a complementary and alternative treatment for PTSD.

Supporting previous research studies were used in this section on how music therapy and CBT have been assessed over the years with trauma clients. CBT practices have been known to be a stand-alone treatment to treat PTSD, but recent research suggests that CBT can cause relapse or more severe trauma in clients with symptoms of undiagnosed or diagnosed PTSD (Lonergan, 2014). Further clinical and outpatient evidence-based music therapy research needs to be made, so that music therapy could be recognized by the government and mental health practitioners as a primary treatment for PTSD. Interviewing participants who have PTSD are one way to research patients experiences with the use of music therapy and adds to the validity of it.

CHAPTER THREE: METHODS

Overview

This qualitative phenomenological study was collected with the use of two questionnaires to gather information on how effective the use of music therapy is on PTSD. The qualitative research design was facilitated with the use of an online-structured video interview and emailed interview. Six adult participants who received music therapy for PTSD, identified by Greek letters for confidentiality purposes, were recruited with a recruitment survey for this research. This study was based on the experiences that music therapy for participants who suffer from post-traumatic stress disorder (PTSD). A collective of previous research articles were based on music therapy, CBT, and PTSD studies as supportive research that became the framework to understand the use and need of music therapy as well as the benefits. The main goal of this study is to answer how music therapy has decreased or reduced PTSD symptoms and how it has been effective as a treatment for participants with PTSD.

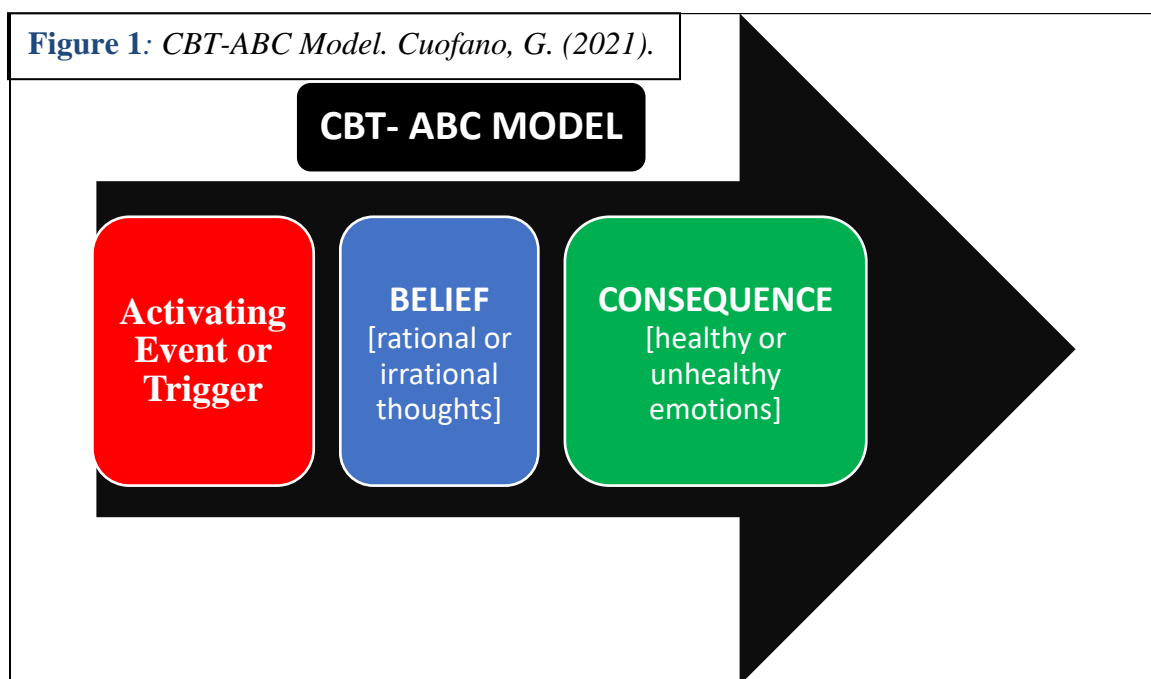
Design

This research was conducted based on a qualitative phenomenological study to describe six participants' experience with music therapy for the treatment of PTSD. Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone as a primary therapy. CBT practices have been known to stand alone but recent research suggests that it can cause relapse or more severe trauma in clients with symptoms of undiagnosed or diagnosed PTSD (Lonergan, 2014). Previous research, a recruitment survey and two questionnaires were used to explore the focus on music therapy for six participants who have received treatment from Board Certified Music Therapists. Several previous research articles were used as supportive information explaining the history of music therapy, how it has been assessed and used over the years.

To gain an understanding of the participants lived experiences with their trauma, I used The ABC model technique that was developed by American psychologist Albert Ellis (Cuofano, 2021). Cuofano (2021) stated that Albert Ellis's model was developed to understand the difference between people's reactions to adversity and stress based on the way that the individual processes his or her thoughts. "The ABC model is an acronym of three components that explain how a person perceives an external [negative] event: adversity, belief, and consequence" (Cuofano, 2021, para. 2). Each person responds to situations differently and this is a main theme in understanding the participants' coping strategy with music therapy. This model gave me the insight to how well the clients description of their lived experiences after their treatment with the use of music therapy has benefited and reduced their PTSD symptoms. Music is universal and the use of music therapy can be therapeutic to anyone if applied as a coping method after treatment (Adams, 2019). It is possible that the research on the participants' experiences with PTSD can give some insight on how music therapy is beneficial and provide long-term learning skills as self-guided copying mechanism.

The ABC model is a form of cognitive behavior therapy model that is effective in helping a client or patient change unhealthy ways of thinking, behaving, or feeling (Cuofano, 2021). There are three components of the ABC model: Adversity (A) – the event taking place, Belief (B) – a rational or irrational reason of why the event took place and Consequence (C) – the result feelings or behaviors that the belief causes (Cuofano, 2021). Rational beliefs lead to healthy consequences, while irrational beliefs lead to unhealthy consequences (Cuofano, 2021). Once the belief is questioned then the participant can make new healthier goals (Cuofano, 2021). Like a CBT-ABC approach, a phenomenological approach can "help to adjust to new issues and ideas

as they emerge but may be harder than positivist approach to control pace, progress and end points” (Business Research Methodology, n.d.). Below is a sample of the ABC Model.



Since music therapy can be considered a form of cognitive therapy, the CBT ABC Model was a good way of structuring the answers to the participants’ questions that were delivered in questionnaire open-ended format. Video-based and email approaches with a focus on present-centered PTSD support occurred over a period of 1 to 2 weeks to gather information (Belsher et al., 2017). Board Certified Music Therapists from Memphis, TN was referred to the participants of this study as a present-centered PTSD support if the participants are exhibiting signs of PTSD (Certification Board for Music Therapists, 2022).

Questionnaires were emailed to each participant to answer and email back. The emailed questions focused on data collected from the online multiple-choice answers from the Music Therapy Clinical Self-Assessment Scale questionnaires used (AMTA Professional Advocacy Committee, 2008). One questionnaire was generated that has a mood scale available and formed into a Word document as a scoreboard. The Music Therapy Clinical Self-Assessment Scale

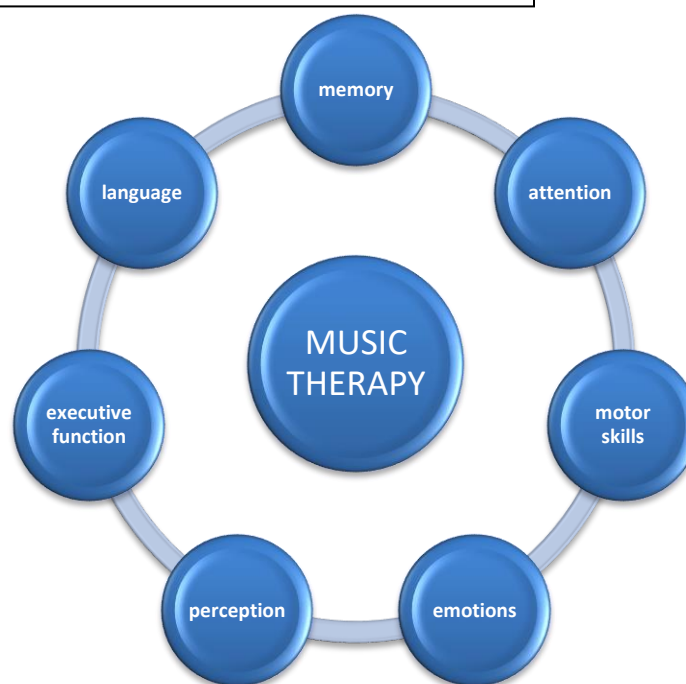
questionnaire created and generated for email to participants based on AMTA Professional Advocacy Committee's self-assessment literature for music therapy practices (AMTA Professional Advocacy Committee, 2008). This questionnaire was in the form of an open-ended semi-structured interview so that participants can share their experiences that they have had with music therapy. The other questionnaire answered through a Zoom meeting so that each participant can describe their moods that music therapy has left them with after treatment with their prior music therapists (Zoom Video Communications, Inc., 2022).

There was a list of nine questions on the mood survey scoreboard and a list of 22 generated questions from the Music Therapy Clinical Self-Assessment Scale questionnaire that was created (AMTA Professional Advocacy Committee, 2008). The qualitative answers from the study on the six participants who received music therapy for PTSD from Board Certified Music Therapists created data to report. Previous research of music therapy for PTSD was used to support the data collected from the participants to support the validity of this current research being reported. The qualitative phenomenological study focused on the participants' psychological improvements, cognitive restructuring, calming thoughts, sleep hygiene, and a reduction in PTSD that they have experienced after the use of music therapy based on the answers that they were given (Trahan et al., 2016).

Miller et al. (2016) stated that action is needed in using music therapy and that the patients or clients need to respond to the intervention of it. "Neurologic Music Therapy is a standardized system of clinical techniques that use the functional perception of all properties of music to train and retrain brain and behavior function" (The Academy of Neurologic Music Therapy, n.d., section 3). The brain is said to be activated by sounds of music that bring relaxation and produce stimulation to mimic a dopamine like response in hopes of reducing

stress (Miller et al., 2016). The use of music therapy has been used as a standardized treatment method for therapeutic music treatment to intervene on the participants' PTSD (The Academy of Neurologic Music Therapy, n.d.). The music assessment instruments assisted in gathering the participants' responses on their experiences with the use of a generated Music Therapy Clinical Self-Assessment Scale questionnaire (AMTA Professional Advocacy Committee, 2008). This research displayed the information provided based on the descriptions given. Charts were used to report the advantages and disadvantages the participants experienced while using music therapy. Figure 2 below shows how music therapy intervenes for healing purposes.

Figure 2. *The Academy of Neurologic Music Therapy, (n.d.)*



One prior research study from previous research has shown that the validity of telephone-based cognitive behavioral therapy can be used to collect data on therapy research (Trahan et al., 2016). Since I interviewed each participant individually who have had prior music therapy, previous research has shown that collecting data over online video chat service and email can be effective in gathering data. I gathered notes on each participant individually with the use of a

mood assessment scoreboard to correspond to the Music Therapy Clinical Self-Assessment Scale (AMTA Professional Advocacy Committee, 2008). The questionnaires came from a Music Therapy Clinical Self-Assessment Scale questionnaire (AMTA Professional Advocacy Committee, 2008).

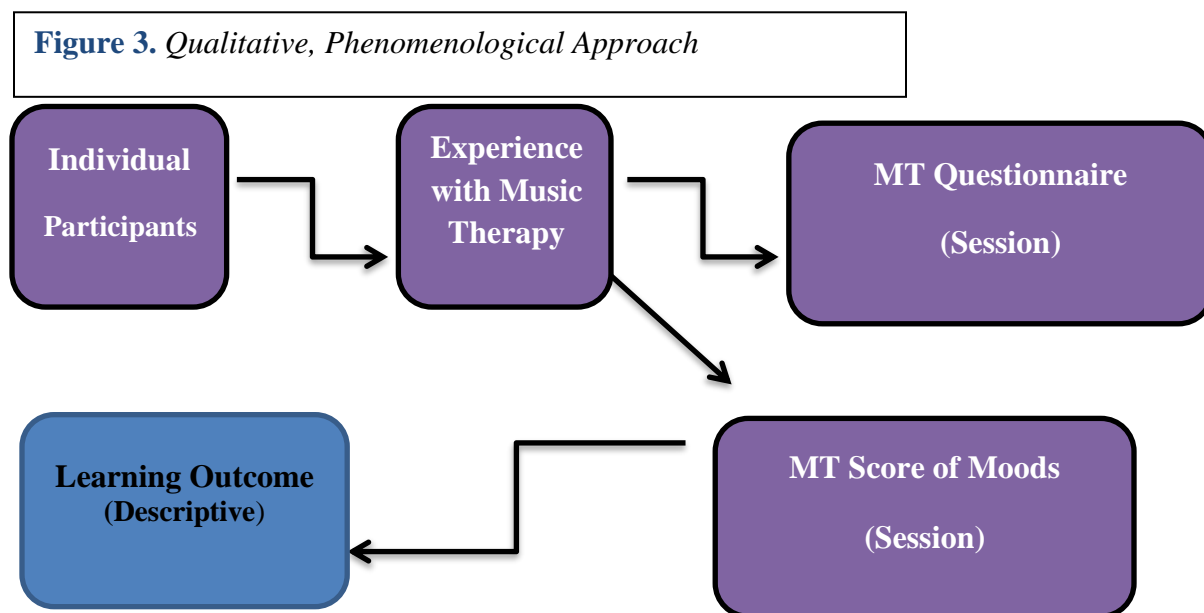
After the participants have emailed all the tests back, there were individual meetings held online for each participant to describe their shared moods and experiences with the use of music therapy. This research consisted of a video-based approach as well as email and chat interactions in individual meetings with me to collect data for this study. The Zoom meeting lasted from 20 to 30 minutes in duration. Each meeting was facilitated with the use of an online-structured interview on Zoom as a phenomenological approach (Zoom Video Communications, Inc., 2022). The main research questions centered on the results of the participants' questionnaires were how music therapy has helped decrease or reduce their PTSD symptoms and in what ways have music therapy produced healthy behavioral coping methods. The collecting of the phenomenological research data via electrical outlets were similar to a prior researcher's design method for collecting information on a participant, an African American woman veteran (Trahan et al., 2016).

Trahan et al. (2016) used client-centered PTSD and a wellness plan that resulted in the reduction of PTSD and depression and PTSD symptoms. "An integrated cognitive behavioral treatment approach can be beneficial for decreasing PTSD and depression barriers to weight loss" (Trahan et al., 2016, p. 280). With the use of music therapy as a coping mechanism skills approach in my study, it is possible that MT could have an overall wellness effect on the participants, too. The six participants had some military history and had similar background to Trahan et al.'s (2016) participants who have had similar traumatic experiences.

Questionnaires were conducted for data collection on the participants' experiences with music therapy. The questionnaires were used to describe the degree of effectiveness of the participants' experiences with music therapy. The study was designed to be a descriptive phenomenological study approach designed to describe the impact music as a therapy has had on the participants coping with PTSD. Music therapy has been viewed as a holistic cognitive approach to treating PTSD (Ho et al., 2011). This research data was collected to describe and prove how the use of music helped each participant's cognitive healing, changed their mood or behavior, and if music therapy is a good coping strategy to combat day to day PTSD issues (Ho et al., 2011).

A Qualitative, Phenomenological Approach Applied to each Participant's Meeting

Below is a chart of Figure 3- A framework of the design for a phenomenological approach to describe the data used on each participant's individual study in support of collecting previous data. This framework can be used in future research or evaluation as a comparative approach among future participants (Wood et al., 2017).



Research Questions

RQ1: How has music therapy been effective in decreasing or reducing PTSD symptoms?

RQ2: In what ways have music therapy produced healthy behavioral coping methods?

Setting

The six participants were given Greek alphabet names as pseudonyms. They described their prior psychotherapy sessions that were done with their prior Board Certified Music Therapists so that I was able to collect data on how music therapy has benefited them. Each participant diagnosed with PTSD shared their prior music therapy's experiences for this phenomenological study. This research was done individually to avoid PTSD triggers from other participants sharing their stories (American Psychiatric Association, 2018). An online recruitment survey and two questionnaires were used to collect this data. The settings took place via Zoom video and by email due to the present state of the world's COVID-19 (coronavirus) pandemic and other public health crises that are present at this time.

Participants

Six participants were picked from a social media recruitment survey that was done online. Each participant came from a collection of an online Facebook music page audience who have been diagnosed with PTSD and have received music therapy. Each participant was offered a \$50 dollar Visa Gift Card for their participation in this study. The recruitment survey consisted of two online questions via Facebook story that asked for participation in my study: (a) if each participant is from a military culture, and (b) have been diagnosed with PTSD and received music therapy to treat PTSD from each of their individual Certified Board Music Therapist. Acceptable participants would have to be a part of the military culture as a family member, veteran and a civilian or soldier on active-duty military orders.

The participants, labeled with Greek alphabet names (Alpha, Beta, Gamma, Delta, Kappa, Chi), have had some prior music therapy treatment for PTSD related symptoms. The participants would have to be over the age of 18 years old and a part of the military culture. Gender and race were not considered for this research. The participants that were chosen for this study were solely based on the answers to all the questions on the online Facebook survey. Upon acceptance to participate in this study, the six participants did two questionnaires: one online via email structure and one via chat feature for this research. Each participant shared their experiences with music therapy individually on how it reduced their PTSD symptoms and how it has been used as a coping mechanism to offset PTSD triggers. Confidentiality agreements were of importance and only the use of questions and answers without the participant's name were used in this research study. Each participant would need to be able to describe his or her individual experiences with music therapy. The data was generated as a phenomenological research design based on the participants' answers from their individual interviews.

Procedures

Online multiple-choice answers from the Music Therapy Clinical Self-Assessment Scale questionnaires were used (AMTA Professional Advocacy Committee, 2008). The questions were facilitated using an online-structured interview utilizing a descriptive phenomenological approach about their lived-experiences with music therapy. The research questions for this phenomenological study were constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD. This research expressed the impact and themes music therapy has had on PTSD that affected each participant's moods, physical health, and emotional state. The first questionnaire was generated from a mood assessment scale available and formed into a Word document as a scoreboard to evaluate individual responses. The other questionnaire was created from the Music Therapy

Clinical Self-Assessment Scale questionnaire and generated based on the AMTA Professional Advocacy Committee (AMTA Professional Advocacy Committee, 2008). All questionnaires were emailed and sent in chat for each participant to answer the Music Therapy Clinical Self-Assessment Scale questionnaire individually (AMTA Professional Advocacy Committee, 2008). The completed data forms were emailed or given back to me, the researcher, to analyze their experiences with MT.

The data was collected through a descriptive, qualitative phenomenological approach from the participants' detailed notes on their experiences with music therapy. The completed questionnaires helped the researcher gain better insight into how music therapy has worked to reduce PTSD and the of MT as a coping method. There was a list of nine questions from a mood assessment survey and a list of 22 generated questions from the Music Therapy Clinical Self-Assessment Scale questionnaire that was created (AMTA Professional Advocacy Committee, 2008). The qualitative phenomenological answers from the studies created qualitative data to explore for future research.

Previous research of music therapy for PTSD was used to support the data collected from the participants for the validity of whether music therapy is a good coping approach for PTSD. The duration of understanding the impact of the use of music therapy and gathering the information was between 1 to 2 weeks. One online meeting lasted from 20 to 30 minutes duration to gather information from each participants shared experiences with music therapy. According to Nizamie and Tikka (2014) using a procedure in this format can help the researcher understand the reduction in symptoms of depression over a time period when a schedule is set for collecting data to understand the participant or participants use of music therapy for behavioral intervention.

The research conducted was a qualitative phenomenological design based on themes of the participants experiences with music therapy. The mood scores were grouped together in a descriptive phenomenological approach since all the subject sampled moods were based on themes from each participants' prior experiences with music therapy. The goal is to describe and verify the success of the use of music therapy from participants who have had prior PTSD treatment from Board Certified Music Therapists. The only comparison that was made in this study is the participants' PTSD, moods, and lived experiences using music therapy based on the information the participants provide.

The participants' feedback showed how music therapy has maintained a healthy thinking process, replaced negative thinking, and have developed an awareness of PTSD triggers. The treatment for the traumatic lived experiences would have impacted their mood, possibly established healthy coping techniques, the ability to forgive self, processed loss, created relapse prevention, increased feelings of control and safety, practiced better judgement, increased self-esteem and productivity, ability to sustain relationships and the returned of some enjoyable activities to each participant's life. The individual questionnaires described those experiences that the participants received with the use of music therapy. This research was gathered in a 1 to 2 week process.

Below is a table of objectives that were accomplished during the 1 to 2 week evaluation of each participant.

Table 1. <i>Plans for Participants in this Phenomenological Individual Study</i>	
OBJECTIVES	INDIVIDUAL STUDY
A. Week 1: Individual Study	<ol style="list-style-type: none"> 1. Have each participant sign waivers to use their information: confidentiality, age, and wellness documents. 2. Have each participant introduce themselves. 3. Ensure that the client understands the participating in this study may elicit a temporary increase in PTSD and other traumatic symptoms. 4. Have referrals from Board Certified Music Therapists from Memphis, TN on hand to give the participants contact numbers and have them to do a follow-up with me about their sessions if needed. 5. Have each participant complete the assessment to see how she or he understands the progress that has been made since the PTSD treatment with music therapy. This Music Therapy Clinical Self-Assessment Scale questionnaire will be sent via email (AMTA Professional Advocacy Committee, 2008).

<p>B. Beginning of Week 2: Individual Zoom Meeting</p>	<p>1. Have each participant describe the symptoms and mood that lead to the need of using music therapy for coping methods for PTSD treatment via Zoom.</p>
	<p>2. Have each participant answer experiences with their use of music therapy via Zoom (Zoom Video Communications, Inc., 2022). This meeting will use some of the prior individual questions from the Music Assessment questionnaire from Week 1.</p> <p>3. Remind the participants that participating in this research may elicit a temporary increase in PTSD. Give them referrals and keep communication open with them in case they need peer support to contact the Board Certified Music Therapists or their own MT-BC.</p> <p>4. Remind the group of confidentiality agreement so that they will feel comfortable in sharing.</p> <p>5. Verbalize the understanding of PTSD and the beliefs that have resulted from the trauma.</p> <p>6. There will be no breaks needed during this focus group chat session since it will be between 20-30 minutes in length.</p>
<p><i>Questionnaire in Week 2</i></p>	<p>1. Ask each participant how the use of music therapy has helped them create relapse prevention, relax, and cope with PTS triggers and negative moods (Bensimon et al., 2008).</p>

	<p>2. Ask each participant to describe the current level of their physical, mental, emotional, and spiritual safety during the use of music therapy.</p> <p>3. Fill out mood chart on each participant to do mood comparison study in Error! Reference source not found. in chat for more data gathering to create chart.</p>
<p>C. End of Week 2: Gather Data</p>	<p>1. Gather all responses and other documents from the participants.</p> <p>2. Work on pulling all of the information and data together to focus on the findings.</p>

The Research's Role

My role in this research study was to interact with the participants as a research facilitator who specializes in educating the public on coping mechanisms after traumatic events. I am a Certified Wellness and Life Coach with training in CBT, CPT, Prolonged Exposure Therapy, and sound therapy. However, I did not diagnose and treat the participants for this research. I collected information from their prior experiences with music therapy in order to understand the effect that music therapy has on their PTSD. I have seen the positive impact music has had on the lives of veterans and others who have experienced trauma. In the past, as a crisis interventionist, I have suggested music therapy as a recommendation to active soldiers and veterans in the military who are in need of an alternative therapy for after care support as a supplementary to CBT in order to improve their mental healing needs. My role in this study is to only collect data as a researcher on the participants based on their answers to my questionnaires, which are listed in the Appendix, List of Tables, List of Figures and throughout this study.

Data Collection

There was an assessment scale that was created and used for this study based on the origin of the scale called the Music Therapy Practice Scale (MTPS as seen in Biasutti, 2019 and AMTA Professional Advocacy Committee, 2008). This new scale was used to evaluate the validity and reliability between PTSD participants and behavioral outcomes from the use of music therapy (Biasutti, 2019 and AMTA Professional Advocacy Committee, 2008). After obtaining permission from the AMTA, this scale showed how music therapy can be measurable by evaluating each participant's response on their music therapy treatment (AMTA Professional Advocacy Committee, 2008). The instrumentation for this study was used in a qualitative phenomenological approach on six participants with a total of 31 questions total from both questionnaires. This qualitative approach was a way to gather the information needed to describe each participant's experience with music therapy who had been diagnosed with PTSD. Each questionnaire should take 20 to 30 minutes depending on the pace.

The topic focused on each participant's prior use of music therapy as a coping mechanism for PTSD. Techniques used focused on the mood and behavior of each participant to describe experiences, asking participant to think back on experiences, asking if the music therapy coping methods works or if it needs additional intervention strategies for coping with behaviors and moods. The topic was directly related to the research questions and data collected to compare an individual survey based on music therapy's effects with behavioral themes. Participants with PTSD described common themes of music therapy from their prior experiences with Board Certified Music Therapists and how this therapy has helped them.

Individual Interview

An assessment tool that was found online at MusicTherapy.org was used to create two questionnaires in order to collect information to support previous research and understand the participant's prior experiences with music therapy (AMTA Professional Advocacy Committee, 2008). Each participant was asked to check to see if his or her stress levels have decreased with the use of MT as well as the experience that they have had with the use of music therapy for PTSD. These questions checked the direction and progress of each participant's behavior and lifestyle based on their answers that they provided via email and an online Zoom conference video (Zoom Video Communications, Inc., 2022). The questionnaires were based on the questions below that were created and generated from the Music Therapy Clinical Self-Assessment Scale (AMTA Professional Advocacy Committee, 2008).

Surveys/Questionnaires

A questionnaire was created from the Music Therapy Clinical Self-Assessment Scale listed below that was emailed to each participant in order to collect data based on their experience with music therapy (AMTA Professional Advocacy Committee, 2008). This questionnaire is an emotional assessment, asked about their lived experiences, and how well music therapy with their prior Board Certified Music Therapists have helped them overcome PTSD after the use of music therapy. These open-ended semi-structured questions were emailed back to me. The questions are listed below.

Emailed Questionnaire

1. What are your views on music therapy from your Board Certified Music Therapist?
2. In what ways have your physical health helped you benefit from music therapy?
3. How was music used in your music therapy treatment plan? Did you experience instruments, sound recordings, or music with lyrics?
4. In what ways have kind music therapy improved your social life?

5. How has music therapy helped motivate you?
6. How has music therapy helped you feel stress-free in your sessions with your music therapist?
7. How has music therapy helped you relieve stress outside of your therapy sessions?
8. What are some of your typical symptoms of PTSD that music therapy has decreased?
9. How has the use of music in your prior music therapy sessions helped you cope with PTSD?
10. How has the use of music on a daily basis prevented negative feelings or moods?
11. What PTSD triggers did you have after using music therapy?
12. How has using music as a coping method made you feel confident, expressing thoughts, feelings, needs, wants, and beliefs?
13. In what ways have music therapy has created a balance between your personal needs and the demand of others' needs in your life or relationship?
14. How does remembering music sound patterns help you cope and ease stress from PTSD symptoms or stressful triggers in music therapy?
15. In what ways have music therapy improved your sleep patterns?
16. How have music therapy interventions promoted wellness, physical rehabilitation, managed stress and pain, enhanced your memory, and improved your communication skills?
17. How did the use of music therapy help with PTSD triggers and moods that created relapse prevention?

18. How has the use of music therapy decreased your intake of medication that was prescription medication by a clinical psychiatrist or other licensed mental health professional? (Jongsma & Paleg 2005).
19. What was helpful in music therapy?
20. What was unhelpful in music therapy?
21. How was the music therapy's room setting and atmosphere in that setting?
22. What would have made music therapy a better experience for you? (Carr et al., 2012, p.186)

Zoom Video Questionnaire

Individual video chats took place between each participant and me. After the greetings, the participant spoke again about the terms of confidentiality and the research causing PTSD triggers. This was addressed so that each participant would feel comfortable speaking about their experience with music therapy. I gave referrals to MT-BC to seek music therapy if needed for PTSD. A mood assessment questionnaire has been created from the Music Therapy Clinical Self-Assessment Scale that was used in order to collect more data from each participant (AMTA Professional Advocacy Committee, 2008). The participants scored their present moods from 1 to 4 on the scoreboard on how well their prior music therapy has helped them overcome PTSD symptoms. A bar chart was made from **Error! Reference source not found..** and the questions are listed below that were used for that scoreboard.

1. Do you feel peaceful after you use music therapy?
2. Do you feel calm after listening to music?
3. Does listening to music make you feel happy?
4. Does music help you reflect on positive thoughts?

5. Does listening to music make you feel angry?
6. Does music decrease your anxiety?
7. Do you feel less irritated and more relaxed with music?
8. Do you believe music therapy helps you concentrate?
9. Does listening to music make you energetic?

Document Analysis

The documents used for this research were permission forms, confidentiality forms, a recruitment survey, and questionnaires on how each participant received music therapy for PTSD with his or her prior music therapist. These documents were used because they gave insight on who the participant is, the participant's experience with music therapy, and how well music therapy has been effective. Sharing these documents for use helped other researchers prepare in the future to analyze and collect data that can be used for new phenomenological research.

Focus Groups

There was no focus group session for this study since this study focused on a phenomenological approach on six participants. This is to avoid PTSD triggers or flareup symptoms among the participants. There were only individual semi-structured interviews via email and an individual chat with a questionnaire on an online Zoom meeting (Zoom Video Communications, Inc., 2022). The individual video chat sessions and individual emails were ways to collect more feedback from each participant's lived experiences on how music therapy has helped him or her process their trauma and has been a coping method for their PTSD.

Observations

As reinstated in the Procedures Section, the completed questionnaire was emailed back to me, the facilitator. The other questionnaire was done on a live Zoom chat. The data was collected from a phenomenological approach of personal detailed notes in order to gain better insight on if

music therapy for PTSD works as a good primary treatment. There was a list of generated questions from the Music Therapy Clinical Self-Assessment Scale questionnaire that were created (AMTA Professional Advocacy Committee, 2008). The research on the participants was used to support the data collected from each individual study as well as support the validity of music therapy on PTSD. The duration of the research on the impact of music therapy took place between 1 to 2 weeks. The group session lasted from 20 to 30 minutes in duration. According to Nizamie and Tikka (2014), using a procedure in this format can help the researcher understand the reduction in symptoms of depression over a time period when a schedule is set for collecting data to understand the participant or participants use of music therapy for behavioral intervention.

The goal is to describe each participant's experiences with music therapy on how he or she copes with PTSD symptom. Throughout this phenomenological study, each participant was examined by self-report with the use of a music assessment on how they have begun and maintained a healthy thinking process, replaced negative thinking, and developed an awareness of triggers by realizing how the traumatic experiences has affected their moods (Ellis, 2017). Establishing healthy coping techniques, forgiving self, processing loss, avoiding relapse, practicing better judgement, increased self-esteem and productivity, and the ability to sustain relationships and returning to some enjoyable activities are some of the themes that could be answered from these questionnaires (Ellis, 2017). Rational decision making and thought patterns can be revealed from each participant's answers from their questionnaires (Ellis, 2017). Receiving psychotherapy and learning psychoeducation should be the experiences that the participants have acquired from the use of music therapy (Ellis, 2017).

Data Analysis

Music therapy needs to be explored to understand the science and evidence of using it as a form of a primary treatment for PTSD. Previous research in this study has shown that evidence-based practice of music therapy used in mixed, qualitative, and quantitative research has had some benefits for people suffering from traumatic disorders or experiences (Aigen, 2015). This study covered the effectiveness of music therapy by using a transcendental phenomenological approach to describe the qualitative data that each participant provided from questionnaires based on their lived-experiences, behaviors, and moods. Each participant's answers described how music therapy has helped decrease PTSD symptoms and if music therapy has improved their everyday behavior and moods. Each participant was given insight on how music therapy has been beneficial to their overall quality of life.

A phenomenological study of a collection of previous articles based on music therapy, CBT, and PTSD studies were used to support this research that was collected from the six participants' experiences with music therapy. Music therapy was analyzed to compare the modes based on the findings on common themes from both questionnaires. Themes that were used to gather notes on the participants were based on the regulation of their emotions and grounding techniques that they stated on their questionnaires (Story & Beck, 2017). This new data described the experiences that the participants have had in music therapy sessions during or after their treatment with Board Certified Music Therapists (Story & Beck, 2017).

Previous research was used to back the new data from the questionnaires that were collected and analyzed in order to back the validation of this research. The research questions for this phenomenological study have been constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD. There was a list of nine questions from a mood assessment survey (AMTA

Professional Advocacy Committee, 2008). Once the data was collected from the Music Therapy Clinical Self-Assessment Scale questionnaires on each participant's experiences with music therapy, the data was grouped into themes for a table and chart (AMTA Professional Advocacy Committee, 2008). This bar chart from the qualitative scoreboard on moods in **Error! Reference source not found.** were generated with the use of Microsoft Excel for the sum of each themes' scores (AMTA Professional Advocacy Committee, 2008).

The answers from the list of 22 generated questions from the Music Therapy Clinical Self-Assessment Scale questionnaire created for each participant to answer supported the primary research questions: if music therapy has been effective in decreasing or reducing PTSD symptoms and have music therapy produced healthy behavioral coping methods (AMTA Professional Advocacy Committee, 2008). The qualitative phenomenological answers from each participant created themes that can be used for future researchers.

Trustworthiness

The behavioral themes showed how each participant with PTSD describes their results of the therapy practice treatments with their MT-BC with music therapy. A music assessment tool from an online website at MusicTherapy.org was created to collect data on this phenomenological approach for this study. (AMTA Professional Advocacy Committee, 2008). However, there are other PTSD assessment tools like PTSD Symptom Scale Interview (PSS-I and PSS-I-5), Treatment-Outcome Posttraumatic Stress Disorder Scale (TOP-8), Modified PTSD Symptom Scale (MPSS-SR), PTSD Checklist for DSM-5 (PCL-5), or Short PTSD Rating Interview (SPRINT) that could be used to measure validity (Web Center for Social Research Methods, n.d.).

There were several previous research articles that showed how music therapy has been assessed over the years with trauma patients. These previous research articles exhibited clinical

and outpatient evidence-based music therapy. Further research needs to be made, so that music therapy could be recognized by the government and mental health practitioners as a stand-alone primary treatment for PTSD. The trustworthiness of this study depends on previous research and the experiences from the six participants on the effectiveness of music therapy with MT-BC.

Credibility

Music therapy have been researched over the years by top researchers and Board Certified Music Therapists (American Music Therapy Association, 2019). However, more research can be done to evaluate if MT is an effective practice to understand the benefits for PTSD patients or clients. CAM practices have been shown to be beneficial to promoting MT-BC patients' health with the use of music who have dealt with stress (Schubert et al., 2021). This current research focused on the participants' experiences from local Board Certified Music Therapists (MT-BC). The consensual validation is that music therapy (MT) has been used in prior therapy practices as a mixed or integrated therapy for cognitive and physical healing practices (University of Miami, 2020).

Dependability and Confirmability

Previous research is based on the description of the contributions that the study makes to the knowledge base of both MT and CBT practices and how it has been beneficial to the patients, clients, and trauma survivors. Ho et al. (2011) suggested that a qualitative, descriptive approach is the most appropriate design for lived experiences or transcendental phenomenological study. The reliability from the descriptive research samples were based on the impact that music therapy has made on each participant's social-emotional behavior and lifestyle (Ho et al., 2011). This objective can be confirmed based on the responses of each participant, the tables and the graphs generated to understand how music therapy has been an effective approach for PTSD.

Transferability

Previous research has shown how music therapy and CBT have been integrated into one practice. However, music therapy has been used alone as a behavioral practice, too. This research conducted was based on a qualitative phenomenological design of the independent variable (participant) and a dependent variable (experiences with music therapy). The goal is to demonstrate and verify the success of using music therapy for PTSD. The assessments are a semi-structured interview with open-ended semi-structured questions based on lived experiences and coping methods reported by the six participants in this study. This research collected and evaluated the experiences with music therapy and the long-term benefits it can have on future patients. Other research can be done to determine whether the sample size made a difference in the validity of understanding the effectiveness of music therapy on PTSD.

Ethical Considerations

Ethical consideration has been considered while preparing for this research. A confidentiality agreement and consent form have been prepared for each participant that can be found in the Appendix area of this research. The participants used the pseudonym of Greek alphabet names in order to remain anonymous for this research. The questionnaires, emails, and online meetings were kept private as well as individual emails and phone conversations. Printed documents were filed in a locked cabinet and non-printed documents were stored on a secured USB drive that were placed in a locked cabinet. This research was done in regard to the guidelines of HIPAA laws when gathering and sharing information on each participant.

Summary

The purpose of this phenomenological study is to gather data based on six participants' experiences with music therapy (MT) for post-traumatic stress disorder (PTSD). The settings for this study were solely gathered through email and an online chat meeting. The questionnaires that were used described the lived and learned experiences that the participants applied to their

lives from the use of music therapy. PTSD is a delayed disorder and can happen quickly without warning. The research showed how effective music therapy has been in providing the participants with healthier coping mechanisms, reducing PTSD symptoms, and ways that MT has improved their lives.

CHAPTER FOUR: FINDINGS

Overview

This section goes into details of the six participants who have had music therapy sessions with Board Certified Music Therapists. The participants shared their effectiveness of music therapy on their mental and physical health. Music therapy has been generally defined as a concept for alternative treatment for PTSD. The theory guiding this study is that music therapy is beneficial to the treatment of a trauma client who suffers from reliving memorial traumatic experiences due to the initial processing of their trauma. Studies have shown that audio therapy can be discomforting to some clients who suffer from complex trauma and other stress related issues, however, some researchers have stated that music therapy can be beneficial to trauma survivors (Meztner et al., 2018). This research has been conducted to gather data from the effectiveness of music therapy from participants who suffer from PTSD.

This collected data in this research described the phenomenological themes that the participants have had based on their experience with music therapy. Each person responds to situations differently and this is a main theme in understanding the participants' coping strategy with the use of music therapy. The ABC model was used to give insight to how well the clients description of their lived experiences after their treatment with the use of music therapy has benefited and reduced their PTSD symptoms. Since music therapy can be considered a form of

cognitive therapy, the CBT ABC Model was an effective way of structuring the answers to the participants' questions that was delivered in questionnaire open-ended format.

The research questions for this phenomenological study were constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD. This research expressed the impact and themes music therapy has had on PTSD that effected each participant's moods, physical health, and emotional state. The first questionnaire that was given to each participant was generated from a mood assessment scale available and formed into a Word document as a scoreboard to evaluate individual responses. The themes chart based on each participant's behavioral response were peaceful, calm, happy, reflective angry, anxious, irritable, focused, and energetic. This chart can be found in the Appendix section. This chapter also reflected the results of the theme chart. The collective themes from the information gathered that the participants shared were used to answer two research questions: how has music therapy been effective in decreasing or reducing PTSD symptoms, and in what ways has music therapy produced healthy behavioral coping methods?

The other questionnaire for the participants was created from the Music Therapy Clinical Self-Assessment Scale questionnaire and generated based on the AMTA Professional Advocacy Committee (AMTA Professional Advocacy Committee, 2008). This chapter listed 22 generated questions with the participants' response that were created with use of the Music Therapy Clinical Self-Assessment Scale. This phenomenological approach supported the data analysis of the first questionnaire. In order to test the effectiveness of music therapy, using a phenomenological approach is necessary in order to understand the experiences the participants have had with music therapy.

Participants

This section described each participant who is participating in this study. The participants are presented in pseudonyms Greek names in order to protect their identity. Six participants were picked from a social media recruitment survey that was done online. who have been diagnosed with PTSD and have received music therapy. The participants, labeled with Greek alphabet names (Alpha, Beta, Gamma, Delta, Kappa, Chi), have had some prior music therapy treatment for PTSD related symptoms. The recruitment was based on whether each participant (a) was from a military culture who have served or were currently serving in the military, and (b) have been diagnosed with PTSD and received music therapy to treat PTSD from a Certified Board Music Therapist.

Acceptable participants would each have to be a part of the military culture as a family member, veteran and a civilian or soldier on active-duty military orders. The following lists participants' background information about each participant and their traumatic issue. It also stated the current mood the participant was in at the time of gathering this information for this phenomenological study since receiving music therapy from each of their Board Certified Music Therapists (MT-BC). This questionnaire below was used for the scoreboard for each participant below based on a rating of 1 to 4 with 1 being the least rating and 4 being the highest rating:

1. Do you feel peaceful after you use music therapy?
2. Do you feel calm after listening to music?
3. Does listening to music make you feel happy?
4. Does music help you reflect on positive thoughts?
5. Does listening to music make you feel angry?
6. Does music decrease your anxiety?
7. Do you feel less irritated and more relaxed with music?

8. Do you believe music therapy helps you concentrate?
9. Does listening to music make you energetic?

Alpha

Alpha is a 38 year old black male who lost his military platoon in combat. He stated that he was treated for PTSD related to military combat and unresolved childhood trauma by a Board Certified Music Therapist. He found relief for his PTSD symptoms with jazz music introduced to him as a coping method in his music therapy session. Below is a chart explaining the current mood of Alpha since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Alpha	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
4	Peaceful
4	Calm
4	Happy
3	Reflective
1	Angry
3	Anxious
4	Irritable
3	Focused
4	Energetic

Beta

Beta is a 32 year old white male who stated that he has become distant from his family after serving in the military. He is having adjustment issues back into civilian life after serving in the military. His family convinced him to try music therapy as a way to find peace of mind. Beta was introduced to sound recordings of nature in music therapy sessions from his Board Certified Music Therapist. Below is a chart explaining the current mood of Beta since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Beta	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
4	Peaceful
3	Calm
4	Happy
2	Reflective
1	Angry
4	Anxious
3	Irritable
2	Focused
4	Energetic

Gamma

Gamma is a 39 year old black male with Traumatic Brain Injury who stated that he had been having nightmares about children being blown up after serving military tours overseas. He decided to try music therapy after not having a good experience with Cognitive Behavioral Therapy. He stated that music therapy helped him relieve pain and lessen nightmares. Below is a chart explaining the current mood of Gamma since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Gamma	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
3	Peaceful
2	Calm
3	Happy
3	Reflective
2	Angry
1	Anxious
2	Irritable
2	Focused
4	Energetic

Delta

Delta is a 35 year old divorced white male who was stationed in the military overseas. He felt guilty about not being there for his wife when their son was sick. His wife divorced him while he was stationed overseas after the death of their 6 year old son who died of Cancer. The death of his son, the divorce of his wife and military combat stress have left him with PTSD. Music therapy was suggested for him by the Veteran Affairs to get through depression and traumatic experiences that he has faced while serving in the military. Below is a chart explaining the current mood of Delta since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Delta	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
4	Peaceful
3	Calm
4	Happy
4	Reflective
1	Angry
4	Anxious
4	Irritable
4	Focused
4	Energetic

Kappa

Kappa is a 35 year old black female who is still serving in the U.S. Army. She received music therapy because of intrusive thoughts. She stated that she had prior Cognitive Processing Therapy but needed a therapy that she could use long term as a coping method. Kappa used the music of the 1990s era to cope with her PTSD. Her MT-BC used her preference of music in her music therapy sessions as a coping method to help Kappa process her thoughts and replace them with positive thoughts. Below is a chart explaining the current mood of Kappa since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Kappa	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
4	Peaceful
3	Calm
4	Happy
4	Reflective
1	Angry
4	Anxious
4	Irritable
4	Focused
4	Energetic

Chi

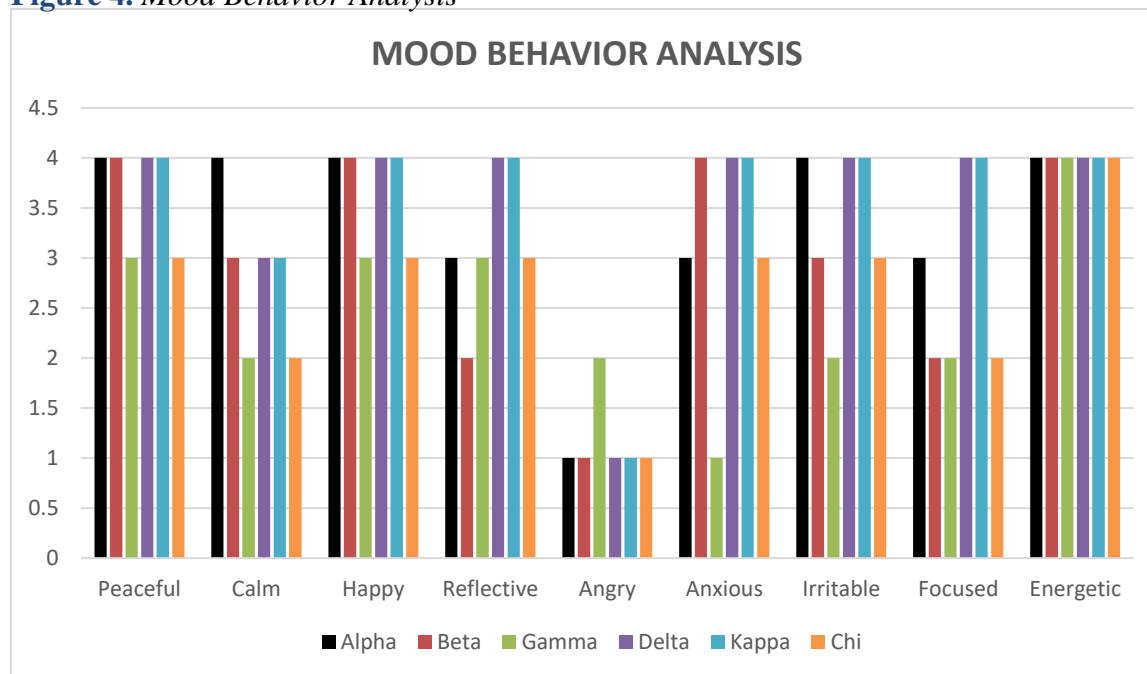
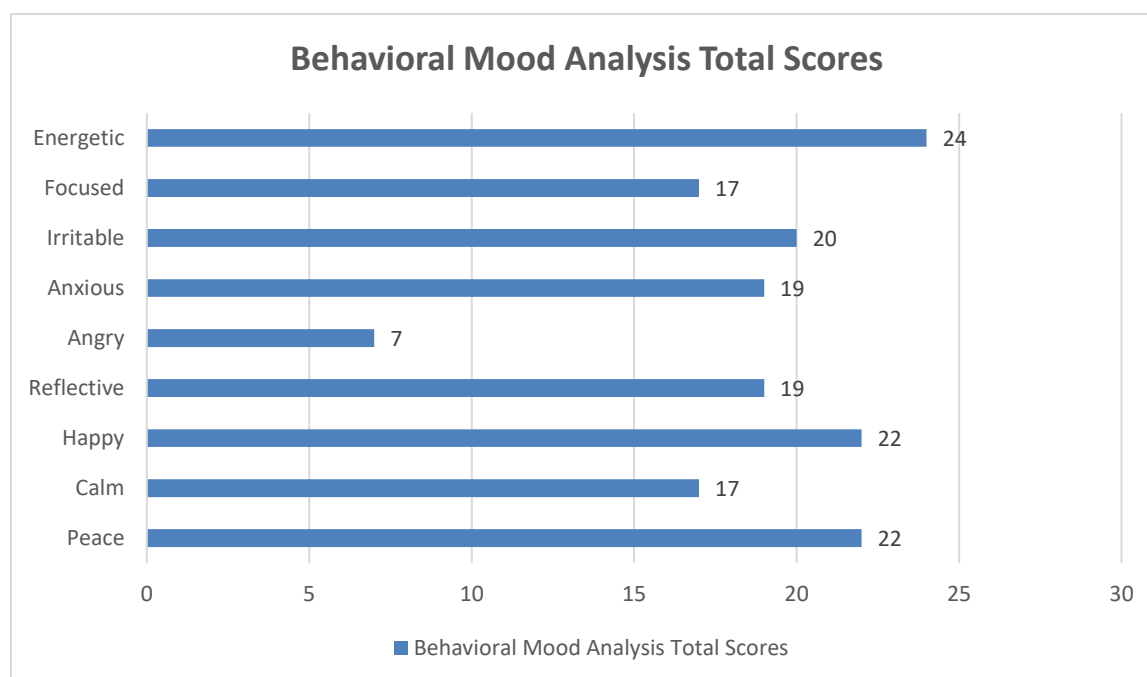
Chi is a 31 year old black divorced female who was married to a U.S. military veteran. He was diagnosed with PTSD and was physically abusive towards Chi. After her divorce, she decided to seek counseling. She was later diagnosed with PTSD from secondhand trauma after receiving counseling from a Board Certified Music Therapist (MT-BC). Chi wanted to find inner peace and forgiveness. Her music therapist helped her seek this with the use of drumming and nature sound recordings during her music therapy sessions. Below is a chart explaining the current mood of Chi since attending music therapy ranging from a scale of 1 to 4 with 1 being the least rating and 4 being the highest rating.

Chi	
<i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
3	Peaceful
2	Calm
3	Happy
3	Reflective
1	Angry
3	Anxious
3	Irritable
2	Focused
4	Energetic

Results

Each participant shared their experiences with music therapy individually on how music therapy reduced their PTSD symptoms and how it has been used as a coping mechanism to offset PTSD triggers. Each participant described his or her individual experiences with music therapy that was administered by Board Certified Music Therapists. The data that was generated to support this phenomenological research design was based on each participants' answers from two questionnaires based on the ABC (adversity, belief, and consequences) model and a generated Music Therapy Assessment Scale questionnaire.

The mood scores were grouped together in a descriptive phenomenological approach since all the subject sampled moods were based on themes from each participants' prior experiences with music therapy. The goal is to describe and verify the success of the use of music therapy from participants who have had prior PTSD treatment from Board Certified Music Therapists. The chart below shows that music therapy has been effective on patients in reducing PTSD symptoms. According to the charts, music therapy produced more healthy behavioral patterns. The themes chart based on each participant's behavioral response were peaceful, calm, happy, reflective angry, anxious, irritable, focused, and energetic. The chart shows that all of the participants' moods were energetic after the use of music therapy. All participants were less angry after the use of music therapy. Four out of six participants rated a high score of four as peaceful and happy after the use of music therapy. Five out of six participants ranked between the scores of 3 to 4 as reflective, anxious, and irritable after the use of music therapy. Three out of six participants ranked between the scores of 3 to 4 as focused after the use of music therapy. Four out of six participants ranked between the scores of 3 to 4 as calm after the use of music therapy.

Figure 4. *Mood Behavior Analysis***Figure 5.** *Behavioral Mood Analysis Total Scores*

Theme Development

After the Mood Behavior Assessment was analyzed from the six participants, the open-ended semi-structured questions supported the phenomenological approach that is related to the

collected research data from each participant. The participants' feedback showed how music therapy has maintained a healthy thinking process, replaced negative thinking, and have developed an awareness of PTSD triggers. The questionnaire was facilitated using an online-structured interview utilizing a descriptive phenomenological approach about each participants lived-experiences with music therapy. The research questions for this phenomenological study were constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD.

Alpha stated that he changed his diet while in music therapy since his music therapist had created muscle strengthening exercises for him during their music therapy sessions. Beta, however, stated that he felt an emotional connection that calmed him with the music therapy, rather than doing physical wellness with music therapy. Gamma claimed to have lost weight after going to music therapy while working out three times a week. Delta stated music therapy didn't have a huge impact on his physical health but did improve his mood. Kappa stated that she worked out more and listened to 90s hip-hop music. Chi stated that she did breathing exercises with meditation and dance. All participants stated that music therapy has improved their mood. This proved that music therapy has been beneficial to all the participants' overall health.

This research was done to understand the impact and themes music therapy has on PTSD that affected each participant's moods, physical health, and emotional state. The participants' responses showed how music therapy has worked to reduce PTSD symptoms and established healthy coping techniques, ability to sustain relationships and the return of some enjoyable activities to each participant's life. Alpha and Chi have been able to have a better social life with their family and friends. Beta, Gamma, and Delta stated that they have become calmer people since the use of music therapy. Gamma has had a reduction of PTSD triggers. Kappa

recommended music therapy to her friends but believed that it didn't have a huge impact on improving his social life. However, music therapy has motivated her to be more focused on her goals and daily responsibilities.

The Impact of Music Therapy as a Coping Method

Chi stated that she has been happier with her life since she has received music therapy. She stated that music therapy has helped motivate her to enjoy life and leave the past of her domestic abuse in the past. Alpha believed that music therapy sessions has motivated him to exercise more after receiving music therapy, since this was a part of his treatment plan with his MT-BC. Beta was motivated to have peaceful conversations; Gamma was motivated to live in the moment; and Delta stated that he was motivated to be present and enjoy life. These responses from the participants prove that music therapy produced healthy behavioral coping methods. The use of music as a coping method made some participants feel confident in expressing thoughts, feelings, needs, wants, and beliefs. Music therapy was shown to create balance in each participant's lifestyle.

Since Alpha has gone to music therapy, he stated that he has been able to sleep better, feel calm and his family sees a calmer person. Beta has been able to express herself and believed that her family sees improvement in her moods and attitude, as well. Gamma and Delta stated that both felt calmer. Delta believes that music therapy has been a good coping method for him and has created balance to his life. Kappa shared that she felt like that she can communicate her feelings since music therapy sessions with her MT-BC. She stated that her music therapist (MT-BC) helped her process a lot of trauma and stress that she was dealing with working in the military. Kappa was able to process information in a peaceful, conflict free mind. She also stated that music therapy helped her become an effective listener and give feedback on subject matters

while at work. Chi said that music therapy strengthened her confidence, feel centered, at peace and able to communicate with others without feeling uncomfortable and unsafe. The most common themes among the participants were better communication and a focused, peace of mind.

The research has shown that music therapy has helped participants feel stress-free in and out of their music therapy sessions. Participants have stated that they have felt inner peace and shared music from their therapy sessions with their family and friends. Alpha shared his progress with music therapy with his wife and it has helped him communicate with her. However, Beta stated that he did not feel comfortable sharing his music therapy sessions, but it helped him open up to his music therapist about having anxiety and she diagnosed him with PTSD. Music therapy has reduced my stress and anxiety. Beta also shared that music therapy helped him feel relaxed throughout the day at work and at home. Gamma stated that music therapy helped relax him and improved his sleep patterns. Delta stated that he felt less stress and has been very relaxed. He stated that he restarted listening to classical music during and after music therapy. Kappa stated that music therapy relieved her intrusive thoughts and stress related to trauma experienced while in the military. However, she stated that she suffers from intrusive thoughts when she is not in a music therapy session. Chi stated that she felt happy and stress free and has improved her spiritual journey as well as confidence in communicating with people. She credited her music therapist with speaking to her in a calm and relaxing manner which made it easier for her to communicate better with her therapists and other people.

Alpha stated that remembering music sound patterns helped him cope and ease the stress from PTSD symptoms or stressful triggers in music therapy. Beta stated that outside of his music therapy sessions, water sounds have helped calm him. Gamma stated that his music

therapist used most Bob Marley and other reggae music in his sessions. The rhythm of the beats is memorable and helped him cope with stress. Kappa uses music as a coping method and made claims that it has helped with his PTSD. He stated that he has had invasive memories and that remembering songs, and music sound patterns has helped him cope through it. Chi learned that music therapy has helped her cope with painful memories. Chi stated that she has found peace and happiness by focusing more on sounds in music that she learned in music therapy.

Music Therapy's Impact on Overall Wellness

This study has found that music therapy interventions promoted participants' wellness and physical rehabilitation, managed stress and pain, enhanced memory, and improved communication skills. The use of music therapy has decreased some participants intake of medication that was prescribed by a clinical psychiatrist or other licensed mental health professional. Five out of the six participants stated that they took medications for PTSD related issues. However, Beta, Kappa and Gamma stated that music therapy has helped both of them decrease their medications. Alpha stated that his medications had decreased since going to music therapy. Beta said that he was prescribed one antidepressant medication. After attending music therapy, Beta was able to decrease his dosage. Gamma stated that he continues to take medication, but his doctor decreased the dosage since his music therapy sessions have decreased some of his symptoms. Delta stated that he continues to take medicine for PTSD symptoms but since starting music therapy, his doctor has lowered the dose since his mental wellness has improved. Kappa reported that she is taking a temporary medication to help her sleep but since her sleep patterns have improved, she will talk to her doctor about not taking them. Chi was never on prescribed medication for PTSD or any mental health issues.

Beta was one participant who had stated that music therapy has helped in in all areas of his life. Two out of six participants stated that they had lost weight while going to music therapy. Alpha also stated that he had lost 50 pounds during the use of music therapy. Alpha stated that after the use of music therapy, his memory improved, and he has been able to communicate better with his family. Three out of six participants stated that their communication skills had improved. These three participants were Alpha, Beta, and Delta. Delta stated that he has “had more good days than bad days” and stated that his stress levels have been managed well after learning positive coping mechanisms in music therapy.

Three out of six participants stated that their memory had improved and had become more focused on positive experiences. Beta, Gamma, and Chi stated that their memory had improved. Chi believed that she learned how to manage her stress levels in music therapy as well. Chi stated that she has felt less stressful after letting go of a lot of painful memories from her past marital issues. All six participants stated that their stress levels have decreased after the use of music therapy. Gamma stated that after treatment his stress levels had decreased, and he felt happier. Five out of six participants stated that they felt happier after music therapy. These five participants who stated that they felt happier after music therapy are Alpha, Beta, Gamma, Chi, and Delta.

Music therapy has helped some participants improve their sleep patterns. Kappa stated that she felt healthier, and her sleep patterns had improved. Five out of six participants stated that their sleep patterns had improved after the use of music therapy. These five participants are Kappa, Beta, Alpha, Gamma, and Chi. Alpha listened to jazz music before going to bed and he stated that he went to bed at a decent time. Beta stated that he was able to sleep longer after attending a music therapy session. Gamma said that he took medication for sleeping but stated

since he has gone to music therapy that MT has decreased intrusive thoughts and bad dreams. Delta said that he didn't have a problem with sleeping, but MT improved his mood when he woke up and started his day. Kappa stated that she had better sleep since music therapy but is not sure if it is because I am on medication or it's the use of music therapy. Chi said that after music therapy that she sleeps between 7 to 8 hours at night.

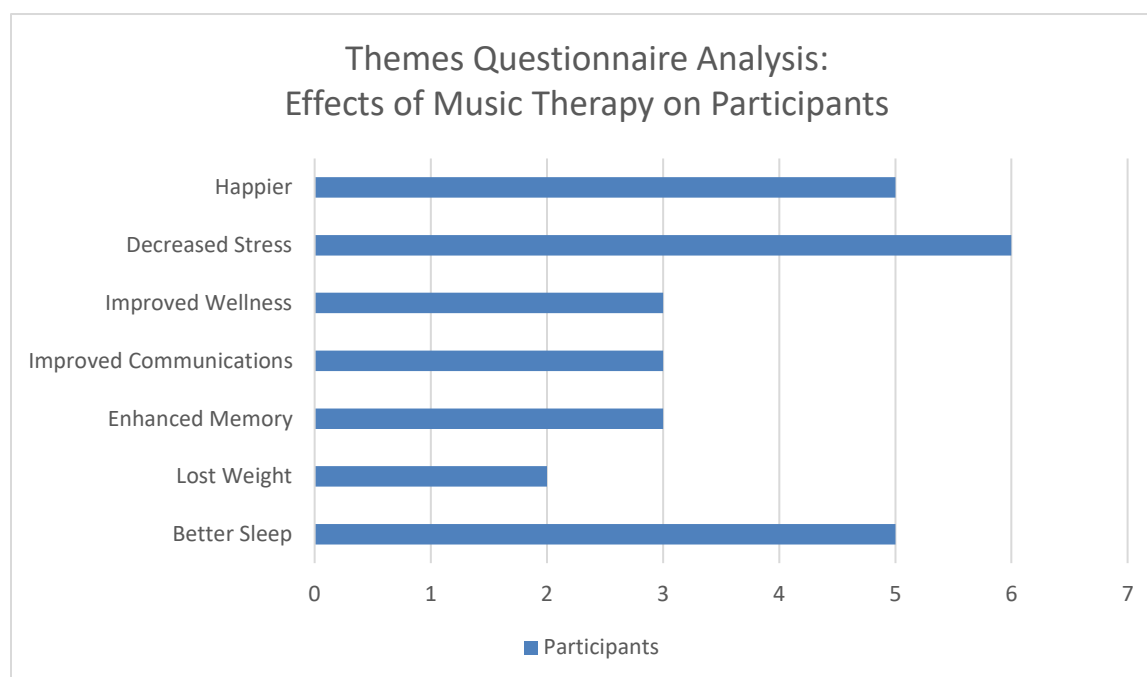
Music Therapy Effectiveness on reducing PTSD Symptoms

Research has found that the use of music therapy helped with PTSD triggers and moods that created relapse prevention. Alpha stated that music therapy has improved his mood, and it has lessened his PTSD triggers. Beta felt happier and at peace once he started going to music therapy. He claimed to feel more in control over his thoughts since he has gone to therapy. Gamma stated that he felt happier since going to music therapy and at peace. Delta stated that he listens to Vivaldi classical music after the MT-BC used it in his music therapy sessions and it has helped him cope with stress and depression. Kappa said that music therapy brought her peace of mind. She stated that she is less stressed and had fewer intrusive thoughts about military deployments. Chi stated that her music therapist introduced her to a mental healing path that led her to enjoy nature more outside after listening to sound recordings of nature and Conga drums. She believed that music therapy had helped her process her traumatic experiences, heal from painful memories from an abusive former marriage and move forward in life.

Figures 4 and 5 discussed the Mood Behavior Analysis themes from each participant's data that reflected the results of the collective themes in Figure 6. Figure 6 data was gathered from the individual questionnaires that were conducted. The main common themes found within the questionnaires were happier, decreased stress, improved wellness, improved communications, enhanced memory, lost weight, and better sleep. The data below in the Themes

Questionnaire Analysis is based on a scale of 1 to 6 representing the six participants who participated in the data. Based on this analysis, this study shows that music therapy has been effective on participants who have been diagnosed with PTSD and received therapy from MT-BC. The themes below are the positive aspects of the data collected that shown benefits for the participants.

Figure 6. *Themes Questionnaire Analysis: Effects of Music Therapy on Participants*



The table below are side by side comparisons of what the Mood Behavioral Analysis revealed in Figure 4 and 5 and the themes data created for the Themes Questionnaire Analysis in Figure 6 that was gathered from the questionnaires. The Mood Behavioral Analysis was explored to gather data before each participant took the questionnaire. The Mood Behavioral Analysis reflects common themes found in the questionnaire data. Since the group was small, I wanted to have more supportive data on how music therapy affected their stress levels before and after

answering the questionnaire. I wanted to see if their answers would change after being presented with a more detail of their experience with music therapy and how it has affected their mood and coping strategies.

Table 2. Themes Data Analysis

Each Participant Mood Behavior Analyzed		Themes Questionnaire Analysis of All Participants
Peaceful		Happier
Calm		Decreased Stress
Happy		Improved Wellness
Reflective		Improved Communications
Angry		Enhanced Memory
Anxious		Lost Weight
Irritable		Better Sleep
Focused		
Energetic		

As this research has shown, music therapy has been proven to decrease PTSD symptoms in participants who have been diagnosed with PTSD and have received treatment from Board Certified Music Therapists (MT-BC). The bar chart above supports the themes that were analyzed to support the effects that music therapy has had on participants with PTSD. Alpha stated that he felt sad about losing his Army platoon in combat, but music therapy has helped him find some peace from intrusive thoughts. Beta stated that music therapy has helped him reduce stress and anxiety. Gamma was diagnosed with Traumatic Brain Injury. He stated that music therapy stopped him from having the same reoccurring nightmares that he was having

about past military missions and the lives that were lost. He stated that the intrusive thoughts had decreased. Delta stated that music therapy helped him fight depression after losing his some from cancer. Kappa stated that music therapy helped her fight anxiety, intrusive thoughts, and stress. Chi stated that music therapy has helped her get through stress, depression, and repetitive memories.

Some participants believed that the use of music daily prevented negative feelings and moods. Alpha stated that he does not have feelings of anger and has had less intrusive thoughts since listening to music daily. Gamma stated that his mood has improved and felt good on most days. Kappa, Delta and Chi stated that they had felt peace and happier since using music therapy and incorporating music therapy into their daily routine. However, Beta stated that he didn't use music daily but used the music his music therapist introduced to him in his therapy sessions when he felt sad or had negative thoughts. All participants stated that they didn't have any PTSD triggers after using music therapy.

Participants' Research Responses

The collective themes from the information gathered in this study from the participants was used to answer two research questions: how has music therapy been effective in decreasing or reducing PTSD symptoms, and in what ways has music therapy produced healthy behavioral coping methods? The participants' views on music therapy from their Board Certified Music Therapists varied. Alpha stated that music therapy has been beneficial to his mental health. He learned to relieve stress through music by meditative listening. Beta stated music therapy was an experience and his music therapist taught him how to reduce stress. Gamma stated that he was told to try music therapy after not having a good experience with Cognitive Behavioral Therapy. He stated that music therapy has helped him take the focus off of his pain and nightmares. Delta

stated that music therapy has been helpful and that his MT-BC was very professional. Kappa stated that music therapy is a great stand-alone therapy that other people who suffer from PTSD and anxiety should consider. Chi stated that music therapy is a great way to seek treatment from someone who has experience with credentials and has done research in the area that the he or she specializes. This research based on the responses of participants has shown that having a therapist specializing in music therapy brings credibility and results to the field of mental health.

Participants discussed how they have used music therapy as a treatment plan with the use of instruments, sound recordings, or music with lyrics. Alpha stated that his music therapist used jazz sound recordings while discussing the trauma that he had experienced. He said that his safe place to process traumatic memories is through the playing of jazz music. He stated that he focused on each ending of music notes to allow his thoughts to flow with the music. Beta stated that his music therapist used music that was sounds of nature from sound recordings. Gamma listened to Bob Marley's music in his music therapy sessions. He stated that the sessions were calming and relaxed him. Delta listened to sound recordings by Antonio Vivaldi called Four Seasons during his music therapy sessions. He stated that classical music was something that he was familiar with but hadn't listened to since he was an undergraduate in college. He discussed issues that he had with his ex-wife and the loss of their child. At the end of the therapy session, he would listen to Vivaldi. She also created a playlist of his music so that I can listen to it at home. Kappa's MT-BC allowed her to pick the music that she liked for her therapy sessions. She picked upbeat tempos with happy sounds and words from sound recordings. Kappa said that her music therapist would ask her how she felt about a song once it was played and then they would discuss thoughts that she was having after listening to it. The therapist was teaching her how to replace negative thoughts with positive upbeat thoughts with the use of music. Chi's music

therapist chose to use live drumming and nature recordings during her music therapy sessions. Chi stated that they discussed finding inner peace and forgiveness to lessen PTSD triggers while incorporating music through listening to nature recordings and live drumming.

All participants stated that music therapy has been helpful to their mental health. Alpha reflected on being able to talk to his therapist while listening to jazz music helped him calmly tell his story about losing his platoon in combat. He also stated that music therapy has helped him process other traumas from the past. Beta reflected on the sounds of music from his music therapy sessions when he felt stressed. He stated that after music therapy he was able to feel comfortable around other people. Gamma stated that his music therapist was very knowledgeable, a great listener and helped him process his reoccurring nightmares that he had been having about things that happened on tours during military combat. Delta said that he felt free and younger after his music therapy sessions. Kappa stated that she has slept better and had less intrusive thoughts. Chi said that she was able to learn how to cope with her stress and process her thoughts in a healthier manner. Even though music therapy has been beneficial to their wellness journey and mental health, Gamma stated that he still takes medication after his music therapy sessions had ended. His music therapist who is also a licensed psychotherapist stated that he should continue to take his meds but at a lower dose.

All the participants believed that their music therapy sessions were great experiences. Chi, Delta, and Alpha believed that longer music therapy sessions would have made the sessions better, however, Gamma believed that the music therapy sessions should have been shorter. The participants also reflected on the music therapy's room setting and the atmosphere in that setting. Most office settings were colors of blue, white, or brown natural tone designs with a couch, desk and chairs. Alpha shared that his space was comfortable and with musical instruments placed on

the wall. Chi stated that her music therapy session was set up in a modern trendy office with artificial flowers on her MT-BC desk. The walls were filled with musical instruments. Djembe and Conga Drums were pushed against the wall. The furniture was light brown natural tones. Chi stated the atmosphere felt welcoming and fun. Delta and Kappa said that their music therapist offices were contemporary, comfortable, and relaxing. Beta's music therapist office setting had pictures of oceans whereas Gamma's MT-BC office setting was very hippy and friendly.

Summary

This chapter focused on theme development to analyze data that was collected from participants used in this study. Research questions were responded to in a manner that were narrative responses to analyze the phenomenological results collected. The participants labeled with Greek alphabet names (Alpha, Beta, Gamma, Delta, Kappa, Chi) were presented in pseudonyms Greek names in order to protect their identity. This chapter went into more detail about each participant that has had some prior music therapy treatment for PTSD related symptoms with Board Certified Music Therapists.

The bar charts represent each participant's data on the effectiveness of music therapy on their mental and physical health. Music therapy has been generally defined as a concept for alternative treatment for PTSD. The theory guiding this study is that music therapy is beneficial to the treatment of a trauma client who suffers from reliving memorial traumatic experiences due to the initial processing of their trauma. The data that was generated to support this phenomenological research design was based on each participants' answers from two questionnaires. One questionnaire was based on the ABC (adversity, belief, and consequences) model and the other questionnaire was generated based on a Music Therapy Assessment Scale. The collective themes from the information gathered in this study from the participants was used

to answer two research questions: How has music therapy been effective in decreasing or reducing PTSD symptoms, and in what ways has music therapy produced healthy behavioral coping methods? This study has shown that music therapy has been effective in decreasing and reducing PTSD symptoms. Music therapy has also produced healthy behavioral coping methods.

Each participant shared their personal experiences with music therapy that was administered by Board Certified Music Therapists on how music therapy reduced their PTSD symptoms and how it has been used as a coping mechanism to offset PTSD triggers. The research questions for this phenomenological study were constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD. This research expressed the impact and themes music therapy has had on PTSD that effected each participant's moods, physical health, and emotional state. The first questionnaire that was given to each participant was generated from a mood assessment scale to evaluate individual responses. The themes chart was based on each participant's behavioral response were peaceful, calm, happy, reflective angry, anxious, irritable, focused, and energetic. This was reflected in the bar chart. After the Mood Behavior Assessment was analyzed from the six participants, the open-ended semi-structured questions supported the phenomenological approach that was related to the collected research data from each participant. The participants' feedback showed how music therapy has maintained a healthy thinking process, replaced negative thinking, and have developed an awareness of PTSD triggers.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this study was to describe how music therapy has been beneficial to the treatment of trauma survivors suffering from post-traumatic stress disorder. This qualitative phenomenological study explored the use of participants who suffer from post-traumatic stress disorder (PTSD) and have used music therapy as a coping skill to treat their PTSD. Music therapy is a coping skills' therapy for people who suffer from post-traumatic stress disorder (PTSD). In prior research studies, music therapy has been used with or without Cognitive Behavioral Therapy (CBT). This phenomenological study and previous research described how music therapy has been effective for PTSD participants who have had treatment from Board Certified Music Therapists.

This study explored how music therapy has been effective in decreasing and reducing PTSD symptoms. This study also focused on different ways the participants have used music therapy to produce healthy behavioral coping methods. The theoretical, empirical, and practical implications supported the results in this study on the effectiveness that music therapy has had on treating PTSD. Limitations in this study based on the size of the study group and the limited focus in demographic of the specified group could be used for recommendations for future research on the effectiveness of music therapy on PTSD. This chapter discussed the findings of the results that were collected from the six participants in this study.

Summary of Findings

Music therapy was analyzed to compare the modes based on the findings among common behavioral themes. This study has shown that music therapy produced healthy behavioral coping methods as well as reduced PTSD triggers in the participants. Each participant shared their

experiences with music therapy on how music therapy reduced their PTSD symptoms and how it was used as a coping mechanism to offset PTSD triggers. Each participant described his or her personal experiences with music therapy that was administered by Board Certified Music Therapists. The data that was generated to support this phenomenological research design was based on each participants' answers from two questionnaires based on the ABC (adversity, belief, and consequences) model and a generated Music Therapy Assessment Scale questionnaire. The mood scores were grouped together in a descriptive phenomenological approach since all the subject sampled moods were based on themes from each participants' prior experiences with music therapy.

This study described and verified the success of the use of music therapy from participants who have had prior PTSD treatment from Board Certified Music Therapists. Data showed that music therapy has been effective on patients in reducing PTSD symptoms and music therapy produced more healthy behavioral patterns. The themes showed that each participant's behavioral responses were peaceful, calm, happy, reflective angry, anxious, irritable, focused, and energetic. The charts displayed in Chapter Four showed that all of the participants' moods were energetic after the use of music therapy. All participants were less angry after the use of music therapy. Four out of six participants rated a high score of four as peaceful and happy after the use of music therapy. Five out of six participants ranked between the scores of 3 to 4 as reflective, anxious, and irritable after the use of music therapy. Three out of six participants ranked between the scores of 3 to 4 as focused after the use of music therapy. Four out of six participants ranked between the scores of 3 to 4 as calm after the use of music therapy. These results confirmed how music therapy sessions have been effective in treating PTSD.

This study has also shown that music therapy has been effective in decreasing or reducing PTSD symptoms. All six participants stated that their stress levels have decreased after the use of music therapy. After the Mood Behavior Assessment was analyzed from the six participants, the open-ended semi-structured questions supported the phenomenological approach that was related to the collected research data from each participant. The participants' feedback showed how music therapy has maintained a healthy thinking process, replaced negative thinking, and have developed an awareness of PTSD triggers. The results were a descriptive phenomenological approach about each participant's lived experiences with music therapy and showed how music therapy impacted each participant's moods and aided as a coping strategy for PTSD.

Some participants in this study shared how receiving music therapy from MT-BC changed their diet and created muscle strengthening exercises for them during their music therapy sessions. One participant claimed to have lost weight after going to music therapy while working out three times a week. All participants stated that music therapy has improved their mood. This proved that music therapy has been beneficial to all the participants' overall health. This research was done to understand the impact and themes music therapy has on PTSD that affect each participant's moods, physical health, and emotional state. The participants' responses showed how music therapy has worked to reduce PTSD symptoms and established healthy coping techniques, ability to sustain relationships and the return of some enjoyable activities to each participant's life. The participants also stated that their social lives had improved since they had attended music therapy. One participant even recommended music therapy to her. However, music therapy has motivated her to be more focused on her goals and daily responsibilities.

Music therapy was shown to create balance in each participant's lifestyle. The use of music as a coping method made some participants feel confident in expressing their thoughts,

feelings, needs, wants, and beliefs. The responses in this study proved that music therapy produced healthy behavioral coping methods, physical rehabilitation, managed stress and pain healthy sleep patterns, peace, enhanced memory, and healthier communication. Three out of six participants stated that their memory had improved and had become more focused on positive experiences. Five out of six participants stated that their sleep patterns had improved after the use of music therapy. Five out of six participants stated that they felt happier after music therapy. The research has shown that music therapy has helped participants feel stress-free in and out of their music therapy sessions. Music sound patterns and the rhythm of the beats were memorable for most participants and helped them cope with their stress. This study also found that music therapy helped participants decrease invasive memories by remembering songs and music sound patterns that helped them cope through PTSD symptoms or triggers. The use of music therapy has also decreased some participants intake of medication that was prescribed by a clinical psychiatrist or other licensed mental health professional.

Five out of the six participants stated that they took medications for PTSD related issues. Beta, Kappa and Gamma stated that music therapy has helped both of them decrease their medications. Alpha stated that his medications had decreased since going to music therapy. Beta said that he was prescribed one antidepressant medication. After attending music therapy, Beta was able to decrease his dosage. Gamma stated that he continues to take medication, but his doctor decreased the dosage since his music therapy sessions have decreased some of his symptoms. Delta stated that he continues to take medicine for PTSD symptoms but since starting music therapy, his doctor has lowered the dose since his mental wellness has improved. Kappa reported that she is taking a temporary medication to help her sleep but since her sleep patterns

have improved, she will talk to her doctor about not taking them. Chi was never on prescribed medication for PTSD or any mental health issues.

This study has proven that music therapy is effective in reducing PTSD symptoms. Research has found that the use of music therapy helped with PTSD triggers and moods that created relapse prevention. Classical music to hip-hop music have been used by MT-BC for music therapy sessions assisting in helping patients cope with stress and depression. Sound recordings of nature and Conga drums are two instruments used in music therapy on participants to help them process their traumatic experiences, heal from painful memories, and move forward in life. As this research has shown, music therapy has been proven to decrease PTSD symptoms in participants who have been diagnosed with PTSD and have received treatment from Board Certified Music Therapists (MT-BC). The collected research data was analyzed, and it supports the effects that music therapy has had on participants with PTSD.

Some participants believed that the use of music daily prevented negative feelings and moods. Gamma stated that he was told to try music therapy after not having a good experience with Cognitive Behavioral Therapy. Kappa stated that music therapy is a great stand-alone therapy that other people who suffer from PTSD and anxiety should consider. All participants stated that they didn't have any PTSD triggers after using music therapy. However, the participants' views on music therapy from their Board Certified Music Therapists varied. Delta was one participant who stated that music therapy has been helpful and that his MT-BC was very professional. Some participants learned to relieve stress through music by meditative listening to reduce stress and taking the focus off of physical pain. Chi stated that music therapy is a great way to seek treatment from someone who has experience with credentials and has done research in the area that the he or she specializes. All participants stated that music therapy has been

helpful to their mental health. Music therapy has helped participants process their traumas from the past. One participant stated that his music therapist was very knowledgeable, a great listener and helped him process his reoccurring nightmares. Even though music therapy has been beneficial to all the participants' wellness journey and mental health, a couple of participants still took medications after their music therapy sessions had ended but at lower doses.

This research has shown that all participants who have used music therapy had been beneficial to their mental health. All the participants believed that their music therapy sessions were great experiences. Some participants believed that music therapy sessions should have been longer, and some participants preferred shorter music therapy sessions. The participants also reflected on the music therapy's room setting and the atmosphere in that setting. Most office settings were colors of blue, white, or brown natural tone designs with a couch, desk, and chairs. Other participants in this study stated that their music therapist offices were contemporary, comfortable, welcoming, fun, friendly and relaxing. Understanding the atmosphere of these sessions shows the approaches that music therapists were taking musically with their patients.

Discussion

This section discussed the study findings in relation to the empirical and theoretical literature that is found in Chapter Two. In Chapter Two, previous research was explored on how the use of music therapy in conjunction with Cognitive Behavioral Therapy (CBT) was a good coping skill for clients or patients who suffer from post-traumatic stress disorder (PTSD). A phenomenological study, two questionnaires, and previous research was explored in previous chapters on how music therapy has been effective as a therapy practice for PTSD participants. Several studies have been done on music therapy as a complementary and alternative treatment but there is a lack of evidence on whether the treatment can stand alone.

The research that was conducted for this study used a phenomenological design method on six participants to gather their experiences with the use of music therapy and its effect on coping with PTSD. The previous research gave a closer look on how CBT and music therapy have benefited people who battle with PTSD symptoms (Trahan et al., 2016). Music therapy is now becoming a popular form of treatment for PTSD with some Board Certified Music Therapists using MT with CBT as an integrated therapy practice. This research study showed that music therapy as a stand-alone practice has helped trauma patients from diverse backgrounds in military culture.

Empirical and Theoretical Similarities to Previous Research

This study included empirical and theoretical previous research that covered topics on CBT, MT, and PTSD. CBT has been known to be a primary therapy method to treat PTSD. Understanding the concept of how therapy works on post-traumatic stress disorder can only be examined by examining the therapy practices that therapists, other mental health providers or researchers decide to study and use. However, this study decided to use the patients and clients instead of mental health professionals to understand the impact that music therapy has had on reducing PTSD. Being able to use previous research with a phenomenological study helped gain an understanding of a more personal and practical approaches to therapy and how the client responds to music therapy without the use of a CBT treatment. In order to understand the beneficial impact of MT (music therapy) on a client or patient, researchers must understand the contextual use of it in ways that it has impacted prior patients or clients who have experienced it (Rolvjord & Stige, 2015). Previous research literature on individuals, refugees, military, family, and community use of music therapy as a physical wellness and relaxation practices were similar to the findings in this study. Understanding the context of the ecological concepts helped explain

how music medicine and therapy practices work among different scenarios, situations (Rolvsjord & Stige, 2015).

Previous research focused on the use of music therapy used alone or with CBT that possibly be beneficial to trauma survivors who were from a military culture. PTSD has been treated with music therapy and some researchers have shown that it can decrease or reduce symptoms in trauma clients (Schouten et al., 2015). This current phenomenological study only focused on the effectiveness of music therapy treatment of PTSD. The similarities of previous research and this new study showed that music therapy has been used and still used as a treatment among a military culture. More research was needed to understand the impact that music therapy has had on a client being treated with a music therapy as a stand-alone practice and this current research supports the theory that MT has been successful on PTSD patients.

Schouten et al. (2015) concluded that music therapy as a practice needs more research to be made from a systematic view. Wellman (2015) stated in research on a veteran that music therapy helped with unsettled moods and decrease social phobias. This previous research in this study supports the Behavioral Mood Analysis that was created for this current study. Wellman (2015) stated that after music therapy treatment on an Army veteran, the soldier's decrease of medication lead to improvement of his mental state. The military's music therapy program at Walter Reed National Military Medical Center has an extended history of using music therapists to rehabilitate wounded soldiers who suffer from PTSD and traumatic brain injury (Ashton, 2017). The military has also been known to use alternative and complementary medicine to treat wounded soldiers physically, spiritually, and mentally. This empirical and theoretical previous research supports the findings that was done for this study on the six participants who are from a military background and were treated with music therapy by Board Certified Music Therapists.

New Research that Extends the Empirical and Theoretical Research

In 1950, the National Association for Music Therapy was the first to explore research after the 1940s advocacy for the effectiveness of music therapy (Gooding & Langston, 2019, p. 316). Music therapy is defined as a clinical, evidence-based therapy practice that a therapist uses to practice intervention methods on their clients and patients (American Music Therapy Association, 2019). It has been successfully used among the military, children and adults suffering from trauma. Much research has gone into the use of music therapy as an intervention tool for military soldiers who suffer from Traumatic Brain Injury (TBI) and post-traumatic stress disorder (PTSD) diagnoses (Gooding & Langston, 2019). The U.S. Department of Veteran Affairs and the U.S. Department of Defense have used music therapy as complementary and alternative medicine (CAM) for treating soldiers with trauma who are not responding well to other cognitive therapies. Gooding and Langston (2019) stated that music intervention has been known to approach whole body needs such as emotional, spiritual, mental, and physical functions.

Therapists who use music as a therapy practice are mainly gifted musicians, but some music therapists with little to no prior music skills use learned musical styles that can work well with meditation, relaxing the physical body and produce healing (Harvard Medical School, 2019). Music therapy has been used to enhance quality of life physically and mentally. Gooding and Langston's (2019) research stated that music therapy has been highly effective in the treatment of clients that suffer from TBI and cognitive as well as physical conditions. Many qualitative studies and research reports have been done to support the effectiveness of music therapy; however, more clinical research needed to be done to support it as a stand-alone treatment for healing patients or clients.

Limited research was on the use of music therapy as a stand-alone practice to treat people from a military culture who were diagnosed with PTSD or stress trauma. This is where research needed to be done so that researchers, therapists, counselors, and other health professionals can have a better understanding of whether music therapy is effective in treating PTSD. This study added an understanding that music therapy has been effective in use for PTSD patients or clients that healed whole body needs such as emotional, spiritual, mental, and physical functions. The descriptive phenomenological approach in this study gave more insight into the impact of music therapy on the six participants instead of the MT-BC notes of evaluation on the PTSD patient. Even though the evaluation of the patient's behavior is important, feedback from the patient is important, too. Now future researchers have some idea on how the effects of music therapy on PTSD has benefited clients from the client's perspective. This could help other patients or clients who want to seek music therapy as a form of treatment for their stress trauma or PTSD because of the research that has been given in this study.

Implications

Several studies have been done on music therapy as a complementary and alternative treatment but there was a lack of evidence on whether the treatment can stand alone. Previous research explored how music therapy and CBT have aided in the healing process for PTSD, and if music therapy is an effective stand-alone therapy practice. A study has shown that a mixed research method can be one appropriate approach to understanding the practice of music therapy (Bradt et al., 2013). Bradt et al. (2013) stated that a mixed method approach can strengthen the validity of the research on MT. However, using a phenomenological approach can help researchers understand the qualitative aspects to how music therapy has been beneficial to the healing of post-traumatic stress disorder (PTSD) clients. This research described highly varying

outcomes and the effects of the personalized treatment of a client or patient who has been diagnosed with PTSD.

Theoretical Evidence

According to previous research, Trahan et al. (2016) showed that a veteran in integrative treatment for PTSD with the use of CBT has been successful to the veteran's sleep habits, eating habits, and physical fitness. Music Therapy could be an experimental factor in integrative wellness for their studies, since music could be a tool used for physical therapy. Theoretically, using music therapy as an integrative wellness therapy and CBT as a behavioral wellness approach to mental therapy can be successful to the balance of the overall wellness for a trauma survivor (Trahan et al., 2016).

Empirical Evidence

In the previous research, there was empirical evidence that integrated therapy works for a veteran who suffered from PTSD or some other trauma related disorder because Trahan et al. (2016) proved that CBT and weight loss management worked to improve the veteran's mental and physical health. If processing CBT needed an integrative therapy, music therapy could be explored on how psychological treatment on trauma survivors with music intervention could be conducted to teach coping skills, develop self-care and resiliency (The National Child Traumatic Stress Network, 2019). The research done on this phenomenological approach examined single qualitative studies on participants who have used music therapy in order to gain a closer look at the impact that it has had on the clients' healing process in and after music therapy treatment.

Practical Evidence

Previous research stated that mental health professionals help trauma survivors identify and manage trauma, promote adaptive coping skills, and avoid negative approaching

maladaptive skills such as abuse of drugs, food, alcohol, etc. (The National Child Traumatic Stress Network, 2019). Theoretically and empirically, prior research shows how integrative therapy has promoted a patient or client's healthy lifestyle and taught them healthy coping skills. Music has been used to enhance breathing skills associated with therapeutic practices. The first step to helping trauma survivors cope with PTSD is to talk with them and let them know that there are positive and negative ways of coping with stress and adversity. Address highly negative emotions with questions that the survivor can answer to help them process the feelings that he or she is having (The National Child Traumatic Stress Network, 2019). This was a practical way of using music as a music therapy associated with meditation and reflective, prolonged exposure that can help a patient or client gain control over their life with cognitive processing of music notes as a coping method.

This new research conducted in this study showed the impact that music therapy has had on patients or clients as a stand-alone practice. This descriptive phenomenological study aided in a closer look at the behavioral outcome of the six participants' experiences with Board Certified Music Therapists. Gathering individual studies on participants' experiences with music therapy provided more information on the impact that the treatment had on each participant's behavior, moods, and social interactive coping strategies.

Recommendations for Mental Health Professionals

Previous research stated that the music therapist's goal is to use plan and prepare for practical and psychological issues that the trauma survivor has experienced in order to create a state of calmness and peace within and providing a social coping skill that could benefit the healing process during and after treatment (Centers for Disease Control and Prevention, 2019; Stebnicki, 2017). Music is universal and music therapy as a treatment could possibly be used in the aiding of developing self-care and create resilience in trauma survivors. The use of music

therapy as a long-term exposure treatment for PTSD is what participants can share about their experience using it. Mental Health Professionals should consider becoming a Board Certified Music Therapist or/and use MT-BC as referred therapy for patients who are having a hard time adjusting to CBT treatments.

Christian Worldview of Music Therapy

One participant stated that during and after music therapy, MT was used as coping method with meditation practices. Connecting with inner self through the use of music therapy as a meditation practice was used with all participants to process traumatic experiences. Other participants stated that meditation with music had been very therapeutic physically and mentally. Using nature sound recordings can possibly put a patient on a spiritual path closer to God. Patients or clients can use music therapy as a reflection of peace and calmness that can soothe the mind, help interpret and redirect thoughts to forgiveness, and let go of past traumas. Even though this study focused more on secular music therapy, the sessions could easily be considered a transformational and missional experience for the patient who is receiving the treatment. The creative works of God is in everything. The speed of sound, the sounds of nature, instrumental music and sound recordings are all ways to reach the inner Spirit of God whether it is secular or a nonsecular session. Music therapy is a form of healing and healing methods are the business of God.

Delimitations and Limitations

This study was limited to participants who have lived in a military culture who were over the age of 18 years old. This research described how music therapy has been beneficial to the treatment of trauma survivors suffering from post-traumatic stress disorder. The research in this study consisted of six participants and previous research to show how music therapy has been effective in treating PTSD. The six participants were individually interviewed based on their

prior experiences with music therapy from each of their individual Board Certified Music Therapist. A phenomenological approach was used to gain an understanding of the effectiveness of music therapy on PTSD. The phenomenological design was used to describe the participants' experiences with music therapy with Board Certified Music Therapists and analyze each participants' mood behavior. Other limitations in this study were the size of the sampled participants. The evaluation made on a small or a large group of participants could have given different results or findings.

Recommendations for Future Research

The qualitative phenomenological findings from this study created data to use for future research. There had been limited research on the use of music therapy on civilians or citizens outside of the military demographic to treat stress trauma or PTSD. More research can be done so that researchers, therapists, counselors, and other health professionals can have a better understanding of music therapy's effectiveness in treating PTSD. Wolf et al. (2016) stated in their research that patients who have experienced PTSD from abuse or violence, stated that the use of music as an intervention needs to be modified based because it could lead to re-traumatization. A larger sample group could be used to analyze whether participants diagnosed with PTSD have been retraumatized or benefited from the use of music therapy.

Summary

Participants stated that music therapy had been beneficial to their mental health. The mind protects a trauma victim from immediate danger in order to self-preserve from traumatic events such as automobile accident, natural disasters, sexual abuse, airplane crash, torture, physical assault, terrorist attack, witnessing the death of another person, etc. when it causes the effects of trauma or PTSD. There are many ways to treat trauma and live a healthy life. Music

therapy (MT) is one natural therapy approach that this phenomenological study showed was effective with six participants who had been diagnosed with PTSD. Other studies had shown that music therapy has been used with CBT to address trauma or PTSD in patients who suffer from processing intrusive thoughts or memories. The purpose of this qualitative phenomenological study was to understand the effectiveness that music therapy has had on participants with PTSD. The participants shared their experiences of music therapy that they have received from Board Certified Music Therapists. The theory guiding this study showed that music therapy has been beneficial to the treatment of trauma survivors who suffer from reliving memorial traumatic experiences due to the initial processing of trauma. Researchers on previous studies have supported the findings in this study that music therapy as a practice can impact positively on patients or clients' wellbeing, social lives, self-awareness, positive reflection, and improved behavioral patterns (Millar & Warwick, 2019).

Millar and Warwick (2019) stated that teaching trauma clients with the use of music practice can have a positive impact on personal and social health that can break communication barriers in different environmental settings. Teaching a trauma survivor or client good coping skills can be greatly beneficial to the healing process of the client and could possibly be used as a long-term nonmedical treatment to reduce or stop PTSD symptoms (American Association of Christian Counselors, 2017). The participants in this study have shown that music therapy can be used as a long term, beneficial, safe, and adaptive approach to treating PTSD. This study confirmed that music therapy can stabilize physical, behavioral, mental, and emotional wellness.

In this study, the results have shown that music therapy is an effective and efficient treatment that can be viewed as a major therapy practice instead of an alternative therapy practice. Previous research has shown that clinicians throughout the years have used music

therapy to approach some behavioral and other wellness issues. This qualitative phenomenological study on six participants exhibited the benefits of music therapy and that it can be used as a traditional and major therapy practice alone. This current phenomenological study in the findings and results contributed to previous research that the experiences with music therapy to treat trauma or post-traumatic stress disorder are valid. In order to understand the validity of therapy on PTSD treatments, the researcher must examine the strengths and weaknesses of the practices.

The purpose of this phenomenological study was to gather data based on six participants' experiences with music therapy (MT) for post-traumatic stress disorder (PTSD). PTSD is a delayed disorder and can happen quickly without warning. The research showed how effective music therapy has been in providing the participants with healthier coping mechanisms, reducing PTSD symptoms, and ways that MT has improved their lives. Behavioral mood themes were used to analyze data that was collected from each participant in this study. Research questions were responded to in a manner that were narrative responses to analyze the phenomenological results collected. The participants labeled with Greek alphabet names (Alpha, Beta, Gamma, Delta, Kappa, Chi) were presented in pseudonyms Greek names in order to protect their identity.

Music therapy has been defined as a concept for alternative treatment for PTSD. Participants discussed how they have used music therapy as a treatment plan with the use of instruments, sound recordings, or music with lyrics. Each participant shared their individual experiences with music therapy that was administered by Board Certified Music Therapists on how music therapy reduced their PTSD symptoms and how it has been used as a coping mechanism to offset PTSD triggers. The data that was generated to support this phenomenological research design was based on each participants' answers from two

questionnaires. One questionnaire was based on the ABC (adversity, belief, and consequences) model and the other questionnaire was generated based on a Music Therapy Assessment Scale. The collective themes from the information gathered in this study from the participants was used to answer two research questions: How has music therapy been effective in decreasing or reducing PTSD symptoms, and in what ways has music therapy produced healthy behavioral coping methods? This study has shown that music therapy has been effective in decreasing and reducing PTSD symptoms.

In conclusion, music therapy has also produced healthy behavioral coping methods. The research questions for this phenomenological study were constructed to provide an instrument to gain an understanding on how music therapy impacts each participant's moods and aid as a coping strategy for PTSD. This research expressed the impact and themes music therapy has had on PTSD that effected each participant's moods, physical health, and emotional state. Theoretical, empirical, and practical previous research covered topics on CBT, MT, and PTSD in order to understand the approach of the effectiveness of music therapy on PTSD. The participants' feedback showed how music therapy has maintained a healthy thinking process, replaced negative thinking, and have developed an awareness of PTSD triggers. This research has shown that all participants who have used music therapy had been beneficial to their mental health. However, there were some limitations in this study based on the size of the study group and the limited focus in demographic that focused on participants who were a part of the military culture. Recommendations for future research should include civilians who do not have a military background and have been diagnosed with PTSD who have received music therapy.

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APPENDICES

Appendix A

Recruitment Survey Questions

- (a) Are you from a military culture (meaning you have served or are currently serving in the military)?
- (b) Have you been diagnosed with PTSD and received music therapy to treat PTSD from a Certified Board Music Therapist?

Appendix B

Participant Consent Form

Participant Consent Form

Title of the Project: A Qualitative Study of Music Therapy's Effectiveness on Treating PTSD

Principal Investigator: Shariee Jones, Doctoral Candidate in School of Behavioral Sciences, Doctor of Education at Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years of age or older, have served or be currently serving in the military, have been diagnosed with PTSD, and have had music therapy from a Certified Board Music Therapist. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of my research is to describe how music therapy has been beneficial to the treatment of trauma survivors suffering from post-traumatic stress disorder.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Complete the Music Therapy Clinical Self-Assessment Scale questionnaire. Each participant will be emailed a questionnaire that will take about 30 minutes to an hour to complete.
2. Participate in a virtual individual Zoom interview that should take between 20 and 30 minutes to complete.
3. Complete a second questionnaire via Zoom. This questionnaire will take about 30 minutes to an hour to complete.

How could you or others benefit from this study?

The direct benefits participants may receive from taking part in this study include learning how music therapy has been effective in treating their post-traumatic stress disorder (PTSD). Benefits to society include music therapy's effectiveness on treating PTSD and how other people who have experienced trauma can benefit from music therapy.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life. The risks involved in this study include the possibility of psychological stress from being asked to recall and discuss prior trauma. To reduce risk, the researcher will provide referral information for counseling services.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.
- Data gathered will be stored on a USB drive and in a locked file cabinet. After three years, all electronic records will be deleted, and all hardcopy records will be shredded.

How will you be compensated for being part of the study?

Participants will be compensated for participating in this study. At the conclusion of the assessment, participants will receive a \$50 Visa gift card.

Is study participation voluntary?

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

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Shariee Jones. You may also contact the researcher's faculty sponsor, Dr. Marston.

Whom do you contact if you have questions about your rights as a research participant?

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 IRB.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

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

Printed Subject Name

Signature & Date

Appendix C

Instruments for A Qualitative Study of Music Therapy's Effectiveness on Treating PTSD Questionnaires

Mood Assessment

A mood assessment questionnaire has been created from the Music Therapy Clinical Self-Assessment Scale that was used in order to collect more data from each participant. It was formed into a Word document as a scoreboard to evaluate individual responses. The participants scored their present moods from 1 to 4 on the scoreboard on how well their prior music therapy has helped them overcome PTSD symptoms. This instrument that was used in this phenomenological study will not need permission for usage according to page 14 of The American Music Therapy Association Clinical Self Assessment Guide (AMTA Professional Advocacy Committee, 2008). You can find this noted in the resource at <http://www.musictherapy.org/assets/1/7/selfassessmentguide.pdf>

A bar chart was made into themes and the questions listed below were used for that scoreboard based on a **rating of 1 to 4**:

1. Do you feel peaceful after you use music therapy?
2. Do you feel calm after listening to music?
3. Does listening to music make you feel happy?
4. Does music help you reflect on positive thoughts?
5. Does listening to music make you feel angry?
6. Does music decrease your anxiety?
7. Do you feel less irritated and more relaxed with music?
8. Do you believe music therapy helps you concentrate?
9. Does listening to music make you energetic?

Table 3. <i>For Sample Mood Comparison Results for Phenomenological Study</i>	
Points scoring from (1-4)	
Individual Study	Client's Behavior Chart
	Peaceful
	Calm
	Happy
	Reflective
	Angry
	Anxious
	Irritable
	Focused
	Energetic

Interview Questions

These open-ended semi-structured questions were emailed back to me. The questions are listed below.

1. What are your views on music therapy from your Board Certified Music Therapist?
2. In what ways have your physical health helped you benefit from music therapy?
3. How was music used in your music therapy treatment plan? Did you experience instruments, sound recordings, or music with lyrics?
4. In what ways has music therapy improved your social life?

5. How has music therapy helped motivate you?
6. How has music therapy helped you feel stress-free in your sessions with your music therapist?
7. How has music therapy helped you relieve stress outside of your therapy sessions?
8. What are some of your typical symptoms of PTSD that music therapy has decreased?
9. How has the use of music in your prior music therapy sessions helped you cope with PTSD?
10. How has the use of music daily prevented negative feelings or moods?
11. What PTSD triggers did you have after using music therapy?
12. How has using music as a coping method made you feel confident, in expressing thoughts, feelings, needs, wants, and beliefs?
13. In what ways has music therapy created a balance between your personal needs and the demand of others' needs in your life or relationship?
14. How does remembering music sound patterns help you cope and ease the stress from PTSD symptoms or stressful triggers in music therapy?
15. In what ways has music therapy improved your sleep patterns?
16. How have music therapy interventions promoted wellness and physical rehabilitation, managed stress and pain, enhanced your memory, and improved your communication skills?
17. How did the use of music therapy help with PTSD triggers and moods that created relapse prevention?

18. How has the use of music therapy decreased your intake of medication that was prescription medication by a clinical psychiatrist or other licensed mental health professional? (Jongsma & Paleg 2005).
19. What was helpful in music therapy?
20. What was unhelpful in music therapy?
21. How was the music therapy's room setting and atmosphere in that setting?
22. What would have made music therapy a better experience for you?

Other Test/Assessment Material

The questions below were used to understand the overall main collective themes from the information gathered that the participants shared.

RQ1: How has music therapy been effective in decreasing or reducing PTSD symptoms?

RQ2: In what ways has music therapy produced healthy behavioral coping methods?