

Lesley University  
**DigitalCommons@Lesley**

---

Expressive Therapies Capstone Theses

Graduate School of Arts and Social Sciences  
(GSASS)

---

Spring 5-18-2019

# Trauma-Focused CBT Informed Music Therapy: Connecting Traumatized Youth with Affective Modulation — Developing a Method

Genevieve Kurtzman

Lesley University, [genni.kurtzman@gmail.com](mailto:genni.kurtzman@gmail.com)

Follow this and additional works at: [https://digitalcommons.lesley.edu/expressive\\_theses](https://digitalcommons.lesley.edu/expressive_theses)

Part of the [Social and Behavioral Sciences Commons](#)

---

## Recommended Citation

Kurtzman, Genevieve, "Trauma-Focused CBT Informed Music Therapy: Connecting Traumatized Youth with Affective Modulation — Developing a Method" (2019). *Expressive Therapies Capstone Theses*. 178.  
[https://digitalcommons.lesley.edu/expressive\\_theses/178](https://digitalcommons.lesley.edu/expressive_theses/178)

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Expressive Therapies Capstone Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact [digitalcommons@lesley.edu](mailto:digitalcommons@lesley.edu).

Trauma-Focused CBT Informed Music Therapy:

Connecting Traumatized Youth with Affective Modulation — Developing a Method

Capstone Thesis

Lesley University

April 25, 2019

Genevieve Kurtzman

Music Therapy

Thesis Instructor: Emily Marsick, PhD

### Abstract

Remediating the impact of trauma experienced by children and adolescents is a focus of psychotherapy treatment. Research in neurology suggests brain development of youths who have experienced trauma is impacted in negative ways. One impact noted is a delay of the development of emotional perception and regulation, where youths may demonstrate an inability to perceive and identify feelings within themselves or others and may experience inappropriate emotional outbursts or emotional withdrawal. Evidence-based practices (EBPs) with specific components and protocols are increasingly preferred by consumers and insurance providers due to research-supported results within expedient timeframes. Music therapy is an evidence-based practice, however literature of its use to treat youths who have experienced trauma is sparse. Using a recognized evidence-based framework, Trauma-Focused Cognitive Behavior Therapy (TF-CBT), this capstone thesis explores the use of music therapy interventions within the Affect Modulation Skills component of the framework. Two individual case studies are examined in which participants engaged in individually relevant music therapy activities designed to enhance identification and expression of feelings and emotions. Results included increased awareness and regulation of feelings and improved interpersonal connections with others as observed by the author and as self-reported by the participants.

## Trauma-Focused CBT Informed Music Therapy:

### Connecting Traumatized Youth with Affective Modulation —Developing a Method

#### **Introduction**

Where words fail, music speaks.

— Hans Christian Andersen, Danish writer

Childhood trauma is a topic of focus within psychotherapy. Working with children and adolescents who have experienced trauma is an important aspect of many community mental health centers and private practitioners alike. Effective evidence-based treatments (EBTs) and interventions are needed to help children and their families cope with extreme emotions and behavioral challenges that may arise from the traumatic experiences. Expressive arts therapies provide alternative avenues of expression which may be incorporated to help in the healing process (Malchiodi, 2015).

Trauma is defined as “a disordered psychic or behavioral state resulting from severe mental stress or physical injury” (Merriam-Webster, n.d.). The American Psychological Association (APA, 2019) describes it as “an emotional response to a terrible event like an accident, rape, or natural disaster.” One can think of trauma as simple (one event) or complex (numerous episodes or types). In either case, one should “think of trauma in terms of something so far beyond the ordinary that it will overwhelm one’s resilience and defences (sic)” (Sutton, 2002, p. 23).

Oftentimes, children and adolescents have difficulties giving voice to their trauma (Faulkner, 2017; van der Kolk, 2014). They may be unable to speak, unable to understand, and unable to verbalize what is going on inside them in response to what has

happened to them externally (Music, 2014; van der Kolk, 2014). Recent research in neuroscience indicates the developing brains of children and adolescents are impacted by trauma, creating delays and deficits in executive functions, as well as hyperarousal and hyper-vigilant states (Daniels, Lamke, Gaebler, Walter, & Scheel, 2013; Nooner et al., 2013; van der Kolk, 2014). Whether it is physical abuse, sexual abuse, or domestic violence they have witnessed (Cohen, Mannarino, Kliethermes, & Murray, 2012; Zanders, 2015); involvement in an accident, an act of community violence (Uhlig, Jansen, & Scherder, 2018), or a natural disaster (Mohr, 2014); or experiencing the death of a loved one (McFerran, 2010; Silverman, Smith, & Burns, 2013), traumatized youth find no safety in the world they perceive (Sutton, 2002; van der Kolk, 2014).

This paper will look at literature that supports the use of one commonly used EBT — Trauma-Focused Cognitive Behavior Therapy (TF-CBT) (Cohen, Mannarino, & Deblinger, 2006; Cohen et al., 2012) — and how music therapy interventions can complement work within one of the protocol's components, Affective Identification and Modulation Skills. Research on TF-CBT in numerous instances (Cohen et al., 2012; Deblinger, Mannarino, Cohen, Runyon, & Steer, 2011; Kane et al., 2016) and on music's effects upon emotional regulation (Faulkner, 2017; Sena Moore, 2013; Wood, Ivery, Donovan, & Lambin, 2013; Zanders, 2015) will be examined and discussed. Also included will be a discussion of two case study examples in which this author used music therapy interventions in the Affective Identification and Modulations Skills component of the TF-CBT model and what was observed.

The intention of this thesis is to inform clinical work with children and adolescents who have experienced trauma. EBT practices are preferred by insurance

companies and consumers who want to see improvement in a relatively short time (APA Presidential Task Force on Evidence-Based Practices, 2006). This author will provide interventions which combine verbal and music therapies in treating childhood trauma — to bring a better understanding of how music therapy (and other expressive arts therapies) can be combined with verbal therapies to unlock client insights and help connect them to their feelings and to others, and to provide an example of a scaffold upon which a music therapist can build a treatment plan to help youths who have endured trauma in their care.

### **Literature Review**

Research in neuroscience discusses how trauma affects the development of brain structures (Daniels, et al., 2013; Nooner et al., 2013; Sutton, 2002; van der Kolk, 2014) with a suggestion “that during the traumatic event, there is a sensory overload, which can result in lasting damage to brain processes” (Sutton, 2002, p. 25). In a review and meta-analysis of neurological studies, Daniels et al. (2013) present findings which indicate the white matter of the brain, the fibers which connect groups of neurons together for effective communication within systems, is disrupted, causing “alterations in brain structure and brain function” (p. 207). Music (2014) refers to these changes as what “one might call ‘deficits’, or at least ways in which their development is different from that of others who have not suffered maltreatment” (p.3). Other study results show impacts even among adolescents who report mild to moderate trauma symptoms without a psychiatric diagnosis (Nooner et al., 2013).

These alterations and damage can happen in many areas of the brain. The brain is often presented as being comprised of three major sections, generally recognized as the triune brain (Malchiodi, 2015). These sections include the brainstem, the limbic system,

and the cortex. The brainstem (and cerebellum) regulate basic body functions (e.g., reflexes and autonomic systems). The limbic system is recognized as the “emotional” brain and includes structures such as the amygdala, hypothalamus, and hippocampus. The cortex (and neo-cortex) are considered the “thinking brain,” encompassing the higher-processing portions of the brain involved in executive functions, including working memory, concentration, behavioral inhibition, planning ahead, self-regulation, and areas of interpersonal functioning (Music, 2014; Sena Moore, 2013; van der Kolk, 2014).

Study results indicate the alterations happen in the two upper structures of the triune brain, the limbic system and the cortex (Daniels et al., 2013; Music, 2014; Nooner et al., 2013; Sena Moore, 2013; van der Kolk, 2014). Music (2014) states, “Early life stress is strongly associated with deficits in higher-order brain process, emotional regulation as well as subcortical limbic hypersensitivity” (p. 16). Van der Kolk (2014) observes, “After trauma the world is experienced with a different nervous system. The survivor’s energy now becomes focused on suppressing inner chaos, at the expense of spontaneous involvement in their life” (p. 53).

Neuroimaging technology supports this assertion by mapping connections in vivo, allowing study in real time (Daniels et al., 2013; Music, 2014; Nooner et al., 2014; Sena Moore, 2013; van der Kolk, 2014). Actual brain images show there is reduced connectivity within the cortex area of children and adolescents (Daniels et al., 2013; Music, 2014; van der Kolk, 2014) as well as increased activity within the amygdala (Music, 2014; Nooner et al., 2014, Sena Moore, 2013).

The amygdala has been tied to the “fight, flight, or freeze” response as well as to emotion reactivity (Music, 2014; Nooner et al., 2013; Sena Moore, 2013; van der Kolk, 2014). Increased activity in the amygdala triggers the body to react automatically to a perceived stressor, alerting the lower brain to instinctually prepare to escape (van der Kolk, 2014). This dysregulation in turn cuts off, at least in part, communication to other parts of the upper cortex, which impact the development of the alterations mentioned above.

In experiences of trauma or other stress, children and adolescents’ ability to process emotions can be compromised (Malchiodi, 2015; Music, 2014; Sena Moore, 2013). They may feel helpless and confused (Malchiodi, 2015; Sutton, 2002; van der Kolk, 2014), have “blunted affect and lack a full range of affective vocabulary” (Cohen et al., 2012, p. 534), and feel an inability to trust the world or people within it (Malchiodi, 2015; Sutton, 2002; van der Kolk, 2014; Zanders, 2015). Other perceptions are also impacted, including those of self and others (Cohen et al., 2006; Cohen et al., 2012; Music, 2014; van der Kolk, 2014; Zanders, 2015), presenting as emotional numbness in some cases, explosive emotions in others, and a bewilderment about what these youth feel in general (Malchiodi, 2015; Music, 2014; van der Kolk, 2014). It is imperative to find effective interventions to help promote resiliency and recovery in children and adolescents who have experienced trauma (Cohen et al., 2006; Cohen et al., 2012; Music, 2014; Nooner et al. 2013; van der Kolk, 2014; Wood et al., 2015).

Evidence-based treatments (EBT) are preferred in psychotherapy (APA Presidential Task Force on Evidence-Based Practice, 2006). They provide researched guidelines for therapists to follow to ensure client improvement within a short amount of



time. One EBT protocol this author has been introduced to is TF-CBT (Cohen et al., 2006; Cohen et al., 2012; Deblinger et al., 2011; Kane et al., 2016). TF-CBT is a short-term, family-focused therapy, using principles delivered in a structured component format and has been shown in previous studies to be an effective treatment for children who have experienced trauma. While an in-depth look at the full protocol (Cohen et al., 2006) is beyond the scope of this paper, the components can be remembered with the acronym PRACTICE: Psychoeducation, Parenting skills, Relaxation, Affective modulation skills, Cognitive coping skills, Trauma narrative and processing, In vivo mastery of trauma reminders, Conjoint youth-parent sessions, and Enhancing safety and future developmental trajectory (Cohen et al., 2012, p. 530). There is also a grief component which can be addressed as part of the process (Cohen et al., 2006).

There are no required handouts to use within the protocol; it is the process framework that has been shown to work (Cohen et al., 2006; Cohen et al., 2012; Deblinger et al., 2012; Kane et al., 2015). The steps are fluid, and they may be revisited numerous times as needed by the client and caregiver involved. The practicing therapist may draw from any sources of his/her own choosing to help focus the protocol work for the individual session. Music therapy and other expressive arts therapies would be excellent complements to this work.

The primary focus of this thesis centers on the Affective Modulation Skills component of the TF-CBT protocol. Cohen et al. (2012) state, “TF-CBT includes a wide range of practical strategies for decreasing affective distress...Some specific strategies used for youth with complex trauma include distraction, mindfulness, perceptual bias modification, self-awareness skills, and cognitive coping skills” (p. 534).

As many children and adolescents already use distraction skills to modulate their emotions, such as playing video games, listening to music, as well as texting and talking to peers, adding to the individual toolkits for use in a variety of situations is recommended (Cohen, et al. 2012). Malchiodi (2015) posits expressive art therapies provide “positive sensory experiences, which can then be practiced over time...” (p. 18). These sensory experiences help children and adolescents successfully calm themselves, find an escape from stressors, forget the past, participate in the present, and experience socialization and identity formation as they interact with their peers (d’Ardenne & Kiyendeye, 2015; Zanders, 2015).

Mindfulness, as another strategy identified within the Affective Modulation component, allows children and adolescents to ground themselves (Faulkner, 2017) and connect to their bodies (Sutton, 2002). Cohen et al. (2012) state, “As the youth gains mindfulness, he is increasingly able to observe his feelings without having to react to them” (p. 534). The beat of music (Faulkner, 2017; MacIntosh, 2003; Wood et al., 2013) and the focus of engagement in expressive arts therapies (Malchiodi, 2015; Mohr, 2014; Uhlig et al., 2018; Zanders, 2015) allow participants to engage more safely in the therapeutic process while exploring feelings within themselves, interactions with others, and how to deal with typical life stressors and disruptions.

As children and adolescents use these skills to “decrease affective distress” (Cohen et al. 2012), they are learning emotional regulation. Sena Moore (2013) describes emotional regulation as “using strategies and processes designed to create a new emotional response or change a current one” (p. 200). She continues to say it “is geared towards the specific goal of maintaining a comfortable state of arousal” (p. 201).

Emotional regulation is “a key life skill” (van der Kolk, 2014, p. 113), and is needed to enable self-awareness and self-reflection, which are important to building relational skills (Faulkner, 2018; Malchiodi, 2015; Music, 2014; Wood et al., 2013; Zanders, 2014). In her review on neural effects of music, Sena Moore (2013) reflects upon the brain areas impacted in emotional regulation, stating there is an implied “interplay between frontal lobe areas involved in cognitive control and areas involved in emotional reactivity” (p. 200). Emotional regulation may be assisted by using music to decrease the arousal of the lower portions of the triune brain and allow an increase in the connections of neurons into the higher-processing cortex (Faulkner, 2018; Sena Moore, 2013; Wood et al., 2013), thus creating more favorable conditions to allow for development of other executive functions as well.

The literature seems limited in utilizing music therapy as a solo therapeutic intervention with individual youth who have experienced trauma. Initial investigations of this author showed music therapy work with groups of adolescents (Faulkner, 2018; McFerran, 2010; Uhlig et al., 2018; Wood, et al., 2013), and as part of total expressive arts-based projects (Mohr, 2014; Silverman et al., 2013). Music therapy has also been used for groups of adult survivors of childhood trauma (d’Ardenne & Kiyendeye, 2014; MacIntosh, 2003; Silverman et al., 2018). Zanders (2015) does describe the treatment of one person in his examination of music therapy with foster-care youth, but he mentions at the beginning that he is using a composite profile, generated from numerous therapy cases. Sutton (2002) and Degryse (2010) do present individuals in the context of multiple case studies to help define their work. While the group studies examined primarily used one program as a focus of interventions, it was noted by this author that the studies that

focused on individuals used multiple types of interventions, ones that were relevant and engaging to the individual client.

### **Methods**

The purpose of this paper was to depict interventions that demonstrate how music therapy activities complement and inform work within one area of TF-CBT, the Affective Modulation Skills (Cohen et al., 2012). Trauma often leaves children and adolescents feeling unsafe and untrusting of others (Sutton, 2002; van der Kolk, 2014; Zanders, 2015). Therefore, the therapist must first gain the trust of and help stabilize the client within their care (Zanders, 2015):

...(T)he first and most important of [the youth's] needs was to feel safe — safe with [the therapist], but also in a safe-enough place that he could then begin to explore some of the deeper, underlying issues in his life (p. 98).

It is within the safety of the therapeutic alliance that the client begins to develop an understanding of his or her emotions, how to identify them, and how to regulate them (Cohen et al., 2012; Degryse, 2010; Music, 2014; Malchiodi, 2015; Zanders, 2015).

This author used interventions suggested by Zanders (2015), including using music in relaxation and mindfulness exercises, identifying feelings by using the varying sounds of instruments, analyzing lyrics of songs, composing songs, substituting lyrics to a precomposed song, and improvisation. While Zanders occasionally gives descriptions and identifying information of individual interventions he employed, he notes at the beginning of his article that his client, “John,” is a composite case study and that “...some therapeutic applications and processes about other...youth were used to explain

significant concepts and ideas” (p. 97). This author also chose to use varying applications for each participant, shaped according to the individual’s needs, interests, and preferences.

The two participants included in this paper were clients assigned to the author who was a counseling intern at a local community mental health center. Each participant had experienced a history of trauma, though the traumatic experiences were different in presentation.

The interventions were administered as part of individual therapy sessions within the author’s designated office. The participants and the author used ukuleles, guitars, and small hand percussion instruments, including a djembe, sound shapes, wooden frog guiros, egg shakers, and a harmonica.

The author kept notes of each intervention within a written journal. Pages were created with two unequal columns. The larger side, on the left side of the page, contained the author’s narrative of the session. The right-hand column allowed the author to write follow-up questions and observations as needed.

The choice of music for relaxation and mindfulness activities included the use of both live (performed by this author) as well as recorded music. When performed live, the author chose simple chord progressions on guitar. Recorded music was kept to simple, moderately slow compositions performed upon one instrument, either guitar or piano.

Participants were asked to identify feelings that they wished to explore during the session by first choosing three cards depicting emotions they had experienced during the week or were currently experiencing. Participants were then asked to share what

information they desired about the emotion and demonstrate it on the instrument of their choice. The therapist often mirrored the emotion back to the participant to validate the participant's expression.

Song composition included simple rhythm compositions improvised while chanting words and phrases given by the participant and a short song based upon the 12-bar blues format, also exploring themes generated by the participant. Participants also participated in substituting lyrics to a pre-composed song. The author chose to use "What a Wonderful World," as recorded by Louis Armstrong. Participants were asked to complete a "Happy List" of five items, places, and/or situations which made them content, happy and/or peaceful. Working collaboratively with the author, participants filled in the blanks of the handout, and then performed the "new" song, either singing with or performing on a rhythm instrument while the author sang and performed accompaniment on the guitar.

Improvisation with participants varied in many ways. In some instances, the author would provide a simple chord structure to which the participant would improvise on a preferred instrument. In others, the author would engage in "musical dialogues" with the participants, creating interesting "conversations" on a variety of instruments.

## **Results**

I worked with two participants individually for this thesis. Each presented with a history of extreme anxiety and at least one traumatic event at his or her intake interview, indicating work with the TF-CBT protocol (Cohen et al., 2006). Initial sessions focused on the development and stabilization of a trusting therapeutic relationship (Cohen et al.,

2012; Zanders, 2015). This was accomplished through engagement on instruments, as each had some prior playing experience.

Participant 1, whom I will call Abby (not her real name), acknowledged she was comfortable playing a ukulele, and she was invited to bring it to our first session together. Abby was a quiet, 13-year-old Caucasian female, whose presenting problems included extreme anxiety, which manifested in sleep and eating problems, as well as periods of agitation, worrying, and crying. She reported feeling misunderstood and awkward in peer relationships, and she was having a hard time maintaining relationships, even with long-time friends. Her mother stated Abby was beginning to isolate herself, remaining in her room.

Abby's history included two traumatic events of note. The first was a sexual assault that took place when she was six years old. An older stepbrother, the son of her biological father's wife, had abused her when she was visiting the family as part of a parenting plan between her parents. A court order kept Abby from visiting her father at his home and resulted in a six-month break in their relationship. Her dad was able to reinstate contact with Abby, but visitation was allowed only one time per week in a neutral location.

The trauma was not addressed at that time; however, it was raised at Abby's initial intake interview by her mother as a possible underlying cause to the most recent challenges. Although Abby admitted she wanted "someone to talk to about her problems and concerns", she stated that event was not "something I wanted to talk about."

The second event identified as a potential trauma was the divorce of Abby's mother and her stepfather, which had occurred about two years prior to our meeting. Abby's stepfather had been a part of Abby's life since she was about three years old, and the family grew to four people, as they welcomed Abby's half-sibling a year later. The divorce was difficult for both Abby and her sibling.

Abby stated she "felt suffocated" by her stepsibling, who wanted to do everything Abby did and be with her around the clock when they were together. She wished she was not always required to go to her stepfather's house — there were times she wanted to be alone, be with her mother alone, or do something with a friend. However, she did not know how to express this to her stepfather and went obediently, feeling responsible to keep an eye on her younger sibling.

Abby's self-esteem was low, as evidenced by self-report, during our first meetings, so I engaged her in teaching me how to play ukulele better. This seemed to put her more at ease, and she smiled often as she introduced me to some of her favorite songs, including "Hey Soul Sister" by Train and "Rewrite the Stars" from *The Greatest Showman* soundtrack. Using songs of her choice and allowing Abby to take the lead in early sessions was intentionally employed to create a safe place within music therapy and help instill a feeling of control (Degryse, 2010; Sutton, 2002). Abby's confidence seemed to grow each week as we learned from each other. I learned more about playing the ukulele and about Abby; she learned she had a safe place in which to explore herself and her self-expression (Cohen et al., 2012; Zanders, 2015).

Decreasing symptoms of anxiety was a major focus of our work, and we used relaxation and mindfulness interventions to start many of our sessions (Faulkner, 2018;



Zanders, 2015). There were times I would play a simple chord progression on the guitar, either a combination of I – IV – V – I, or I – vi – IV – V. I often invited Abby to focus on her breath, breathing in for 4 counts, then breathing out for 4 counts. We then went through progressive muscle relaxation and/or had a short script envisioning a happy place involving all the senses. Other times, the music was played from the computer — she would define a tempo that she was feeling, and I would find a selection that was similar, usually performed on either the piano or guitar. These exercises were implemented to center and ground Abby in the session, as well as give her a tool to help regulate feelings out in her real world (Faulkner, 2018; Zanders, 2015).

Abby stated she enjoyed writing songs. Songwriting provides a built-in structure where the composer can express themselves safely and creatively in a flexible way (MacIntosh, 2003). We explored this in two different ways. In an early session, we began talking about Abby’s love of horses. As she spoke, I took a white board and wrote down various phrases she used, especially ones that appeared to have special meaning. This was conveyed through a change in tone of voice — softer when she spoke of wanting to be with them all the time; a quicker tempo and confidence in saying “Fun working/working fun” — or a change in facial expression as she spoke of “riding bareback” and the “bond with a horse.”

We got a steady beat going, and I began to chant words and phrases at different times, leaving space for Abby to join in, echo my words, or even take the lead. While she did smile, she hesitated to join in the verbal play. She did improvise some complicated beat patterns, and I echoed them back in a play of call and response. This “bridge” lasted for a few minutes before we returned to a basic steady beat, ending the song with a

repeated chant of “Riding...I like riding.” Abby may have chimed in once or twice during that final chant. However, her smile showed her pleasure as did her comment that she “enjoyed making a song about horses.”

Another song we wrote followed a “Fill-in-the-Blank” format, as cited in MacIntosh (2013). The basic framework invites participant engagement without creating fears of failure. One substitutes his or her own words within the blanks of a precomposed song lyric, creating a more personal and relevant one for the individual.

The song I chose to work with Abby on was “What a Wonderful World,” as recorded by Louis Armstrong. We sang the song at first as written, with me playing the guitar. I then asked Abby to fill in a “Happy List”, indicating five items that made her feel happy. Not surprisingly, her list included horses and “folks riding horses in the snow” (this intervention was done in December). It also included ice-skating with friends, as well as snowmobiling and dirt bike racing, topics about which she shared interesting anecdotes.

We collaboratively worked to place her words and phrases within the song, adding a little here and there to make it fit within the song’s structure. When we were done, we sang the full song using her words. This time, Abby sang with me. It was in a soft voice, but with a look that reflected a sense of pride in her song.

As part of the Affect Modulation Skills component of TF-CBT (Cohen et al., 2006), I asked Abby at the start of one session to identify three feelings that she had experienced during the week or was currently experiencing. I handed her a pack of cards which depicted various emotions; each card named a feeling and had an illustration of a

person showing that emotion. Abby chose “happy,” “sad,” and “excited.” She was then invited to show how the emotions “sounded” by using an instrument. Choosing the ukulele, she played a Csus4 chord for “happy.” I mirrored the chord back to her on my ukulele and asked her to explain why she had chosen that feeling. She related that her mother had found a new horse barn at which they both could work, and she was happily looking forward to being involved with caring for horses again. She then depicted “sad” with an e minor chord, which I mirrored, after checking the proper fingering with her. She explained she missed spending time with a close friend, who was very involved with a new group activity and did not seem to have time for her. She had experienced awkward moments when encountering this friend at school and was very anxious about what to do. We spent a few moments exploring this topic and examining some strategies she might employ over the next week to reframe her own thinking and engage with this friend.

We returned to the initial task, and she depicted the final feeling, “excited,” alternating between F and G chords four times. This represented her excitement of getting to know and ride new horses at the barn later in the week, which was evident in the animation of her voice, in her smile, and in the shine of her eyes as she shared. The anticipation was palpable, and I observed a marked change in her body posture as well. Instead of just sitting casually, slightly slumped in the chair, she was sitting up straight on the edge of the chair, as if ready to leave at that moment for the adventure.

This intervention became the way we checked in at the beginning of each session. Some sessions, the initial chord would begin a short referential improvisation (Zanders, 2015) based on the word she was depicting. We would then transition to other

interventions to further explore the topics raised within the check-in, reinforce various information and skills that Abby was learning and applying to help decrease her anxiety, and examine new strategies to help her navigate relationship and emotion regulation challenges she encountered along the way. Over time, Abby reported a decrease in the feelings of anxiety and an increase in her feelings of self-worth. Her mother also noted seeing improvement in Abby's mood and actions. Abby's ability to identify and discuss feelings with friends and family improved, and she was able to use her music and other coping skills learned to help regulate her emotions.

Participant 2, whom I will call Tom, experienced trauma in a different way. His history involved physical and emotional abuse perpetrated by his father as well as witnessing domestic violence between his parents. They divorced when Tom was ten years old, and Tom had very little to no contact with his father. Now sixteen, Tom could relate details of incidents matter-of-factly with a flat affect, although he would occasionally wipe a tear away from his eyes. Yet, he claimed he felt “nothing — I feel totally numb about my life.” This statement illustrated to me some common attributes of complex trauma as stated by Cohen et al. (2012): “Complex trauma is characterized by significant problems with attachment security, affect regulation, biological regulation, dissociation, behavioral regulation, cognition, and self-concept” (p. 528).

Tom had been referred to counseling by his physician, who felt recent major flare ups of his asthma might be stress- and anxiety-related. These incidents were impacting his school work and attendance. His mother was also concerned about Tom's lack of friends, as he tended to isolate himself by playing video games in his room.

Near the end of our first session, I mentioned that I was a music therapist. He admitted to noticing the instruments around my office and quietly asked, “Would it be inappropriate to ask for lessons on the guitar?” He said he did have a guitar at home, and some members of his extended family played, but he did not understand the strings nor how to play.

I acknowledged that, while lessons could not be the emphasis of our meetings, I would be glad to support any interest and work he did on his own and would enjoy exploring and playing during our sessions. Learning guitar might encourage self-enhancement and self-expression (Degryse, 2010). I gave him a short tutorial on guitar basics and a few chords and directed him to a few online sites he could check out.

He arrived at the next session with guitar in hand, and our therapeutic relationship stabilized as we spent the next two sessions exploring chords and progressions. He enjoyed 50’s and 60’s rock songs, and he picked up on two popular rock progressions easily: I – vi – IV – V7 and the 12-Bar Blues. We found a list of songs that used the former progression, including Ben E. King’s “Stand by Me,” Dion’s “Runaround Sue,” and Elton John’s “Crocodile Rock,” among others. We played through a few of them, and when his fingers got tired, he sang the words as we found them on an online site.

The 12-bar blues gave us a chance to talk about cognitive reframing — taking negative thoughts and turning them around with a positive emphasis. After playing a few songs based on the progression, including Elvis’ “Hound Dog,” I opened a discussion about how thoughts impact behaviors and feelings. If a person has a negative thought, it will probably create negative feelings and negative behaviors. By changing a negative thought to a positive one, the resulting cycle can become a more positive one.

The three-phrase pattern of the 12-bar blues lends itself to creating a simple song. It provides structure in which to safely work with a successful outcome when writing a song. I invited Tom to join in making a blues song about the time of year: December, winter, holidays. The general idea included taking a negative thought about the topic in the first phrase, restate it in the second phrase, and then turn it into a positive for the final phrase.

I modeled by creating the chorus, “Well, it’s December, and I got those December Blues” (phrase 1); “Yes, it’s December, and I got those December Blues” (phrase 2); “But, in spite of the Blues, there are good things I can choose” (phrase 3). It took some coaxing, but he turned around thoughts about the snow, the cold, and the early darkness to include playing with younger cousins, having hot cocoa, and watching a movie with his family and friends.

Tom was not open to sharing the sounds of feelings as Abby had done — he still stated he “didn’t really feel anything.” Our beginning check-ins were primarily verbal, and then he would pull the latest song he was working up on a guitar tab app he had on his phone. He was successfully using guitar playing as a distraction activity (Cohen et al, 2012), and seemed to find comfort in it. He mentioned one session that he had been playing music with a friend who played piano over FaceTime. They would choose a song and work a small section of the piece independently. Then they would try to play it together through the app. Tom explained this matter-of-factly, as if he had done it forever. To my ears, though, his statement demonstrated important therapeutic growth: music was helping him connect, both with himself and with another person (Faulkner, 2018; Wood et al., 2013).

One session when he had not brought his guitar, I handed him mine without a word, picked up my ukulele, and began a musical dialogue by plucking a couple of chords. At first, Tom hesitated, asking what he should do. I played the chords over again, and he slowly played a couple of notes, which I answered with a few of mine. We went back and forth for quite a few minutes, changing out the stringed instruments for small hand percussion instruments that were in a bin and on the floor between us. It got loud at times, and our dialogue morphed into a game of challenging rhythms and of challenging each other. Non-verbally, with the raise of an eyebrow, a slight change of body posture, or a nod of the head, we challenged each other to match or change the pattern, occasionally playing together for short periods of time. I noticed at one point that he was smiling — really smiling as we continued the encounter. Music was helping him to connect with feelings. As we processed at the end of the session, he stated that he had enjoyed it, and when he left the office, it seemed to be with a bounce in his step.

### **Discussion**

The intent of this capstone thesis is to evaluate whether and how music therapy interventions complement work within the Affect Modulation Skills component of the TF-CBT protocol. Using two individual case studies, this author examined the application of relevant music therapy interventions and the impact on the individual participants. Findings indicated positive outcomes for Abby in connecting to and identifying feelings by using the sensory experience of playing her ukulele and writing and performing songs. For Tom, music therapy interventions provided a way to connect not only to himself, but to others as well — his friend via FaceTime and to myself as his therapist, among others. These initial connections can be used to enhance the continuing

therapeutic work to “identify and understand the different ways [they are] feeling” (Zanders, 2015) and “develop safer and more effective self-regulation skills” (Cohen et al., 2012).

It was found that the use of music therapy in the treatment of these two teenagers who had experienced trauma, allowing them to identify, express, and regulate feelings that may have been difficult to access through traditional verbal therapies, supports previous findings in the literature. These findings posit that music and other expressive arts are effective in accessing both internal and external creative resources and can be used to help with self-regulation of intense feelings (Malchiodi, 2015; Wood et al., 2013; Zanders, 2015). Cohen et al. (2012), in their description of the affective Modulation Skills component of TF-CBT, list music and expressive arts activities among the various “distraction activities that are helpful...to turn down difficult emotional states” (p. 534). However, arts therapists have noted benefits beyond distraction. For example, Malchiodi (2015) goes further to state that benefits of expressive arts activities include “pleasure in making, doing, and inventing; play and imagination; and enhancement of self-worth through self-expression” (p.20). These were all observed in sessions with Abby and Tom. For instance, Abby’s enhanced self-worth was demonstrated by a sense of growing confidence as we worked together. She expressed pleasure in writing simple songs about horses and other activities she shared with family and friends. Likewise, Tom’s pleasure in sharing his songs on the guitar showed in the satisfied smile at the end of a performance.

While this study supports the use of music therapy interventions within the Affective Modulation Skills component of the TF-CBT protocol in treating youths who



have experienced trauma, there are some limitations. In this study, only one protocol, TF-CBT, was focused upon; and within TF-CBT, only the Affect Modulation Skills component was identified and examined. Although there were multiple case studies presented in a qualitative format, the number was small, at only two. Future research could explore numerous topics, including the use of other expressive arts therapies within the Affect Modulation Skills component. Having multiple creative avenues to explore with a client would be advantageous to give clients options for therapeutic participation. Expressive arts researchers could expand the focus within TF-CBT to its other components, providing more information for expressive arts therapists, as could developing a study with an increased number of children and adolescents.

Another area of inquiry could include similar studies within other CBT based protocols. One such protocol, called MATCH (Modular Approach to Therapy for CHildren; Chorpita & Weisz, 2009), has different modules of treatment for depression, anxiety, trauma, and conduct. What would the use of music therapy and other expressive arts therapies look like within each module? What information might a larger systematic study on the benefits of music therapy and expressive arts therapy interventions reveal, and how could it contribute to the validation of expressive arts therapies as evidence-based practices?

More rigorous research is implicated in continuing to establish best practices in integrating expressive arts therapies and more traditional verbal therapies. As helping professionals, we should combine approaches to better use and individualize the many tools in our toolbox. Individual clients will benefit most when we use the right combination for the individual.

## References

- American Psychological Association. (2019). Trauma. [webpage]. Retrieved from <https://www.apa.org/topics/trauma>
- APA Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *American Psychologist*, *61*(4), 271- 285.  
doi: 10.1037/0003-066X.61.4.271
- Chorpita, B., & Weisz, J. (2009). *Modular approach to therapy for children with anxiety, depression, trauma or conduct problems*. Satellite Beach, FL: PracticeWise, LLC
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2006). *Treating trauma and traumatic grief in children and adolescents: A clinician's guide*. Retrieved from <https://ebookcentral-proquest-com.ezproxyles.flo.org>
- Cohen, J., Mannarino, A., Kliethermes, M., & Murray, L. (2012). Trauma-focused CBT for youth with complex trauma. *Child Abuse and Neglect* *36*, 528 – 41.  
doi: 10.1016/j.chiabu.2012.03.007
- d'Ardenne, P., & Kiyendeye, M. (2015). An initial exploration of the therapeutic impact of music on genocide orphans in Rwanda. *British Journal of Guidance & Counselling*, *43*(5), 559 – 569. doi:10.1080/03069885.2014.954237
- Daniels, J., Lamke, J., Gaebler, M., Walter, H., & Scheel, M. (2013). White matter integrity and its relationship to PTSD and childhood trauma – A systematic review and meta-analysis. *Depression and Anxiety*, *30*, 207 – 16.  
doi:10.1002/da.2204

- Deblinger, E., Mannarino, A., Cohen, J., Runyon, M., & Steer, R. (2011). Trauma-focused cognitive behavioral therapy for children: Impact of the trauma narrative and treatment length. *Depression and Anxiety* 28, 67 – 75. doi:10.1002/da20744
- Degryse, M. (2010). Creating a safe place in the midst of aggression: Music therapy in child psychiatry. *Approaches: Music Therapy and Special Music Education*. 2 (2), 48 – 54.
- Faulkner, S. (2017). Rhythm2recovery: A model of practice combining rhythmic music with cognitive reflection for social and emotional health within trauma recovery. *Australian and New Zealand Journal of Family Therapy*, 38, 627 – 636.  
doi: 10.1002/anzf.1268
- Kane, J., Murray, L., Cohen, J., Dorsey, S., van Wyk, S. S., Galloway Henderson, J., ...& Bolton, P. (2016). Moderators of treatment response to trauma-focused cognitive behavioral therapy among youth in Zambia. *Journal of Child Psychology and Psychiatry* 57(10), 1194 -1202. doi: 10.1111/jcpp.12623
- MacIntosh, H.B. (2003). Sounds of healing: Music in group work with survivors of sexual abuse. *The Arts in Psychotherapy*, 30,17-23. doi: 10.1016/S0197-4556(02)00229-0
- Malchiodi, C. (2015). Neurobiology, creative interventions, and childhood trauma. In Perry, B., and Malchiodi, C. (Eds). *Creative Interventions with Traumatized Children, Second Edition*, (pp. 3 – 23). New York: Guilford Press.

- McFerran, K. (2010). Tipping the scales: A substantive theory on the value of group music therapy for supporting grieving teenagers. *Qualitative Inquiries in Music Therapy*, 5, 1 – 42.
- Mohr, E. (2014). Posttraumatic growth in youth survivors of a disaster: An arts-based research project. *Journal of the American Art Therapy Association* 31(4), 155 – 162. doi:10.1080/07421656.2015.963487
- Music, G. (2014). Top down and bottom up: Trauma, executive functioning, emotional regulation, the brain, and child psychotherapy. *Journal of Child Psychotherapy*, 40 (1), 13 – 19. doi: 10.1080/0075417X.2014.883125
- Nooner, K., Mennes, M., Brown, S., Castellanos, F.X., Leventhal, B., Milham, M., & Colcombe, S. (2013). Relationship of trauma symptoms to amygdala-based functional brain changes in adolescents. *Journal of Traumatic Stress*, 26, 784 – 87. doi: 10.1002/jts.21873
- Sena Moore, K. (2013). A systematic review on the neural effects of music on emotion regulation: Implications for music therapy practice. *Journal of Music Therapy*, 50(3), 198–242.
- Silverman, Y., Smith, F., & Burns, M. (2013). Coming together in pain and joy: A multi-cultural and arts-based suicide awareness project. *The Arts in Psychotherapy* 40, 216 – 223. doi: 10.1016/j.aip.2013.02.003
- Sutton, J. P. (2002). Trauma: Trauma in context. In J.P. Sutton (Ed.), *Music, music therapy and trauma: International perspectives*, (pp. 21 – 39). London: Jessica Kingsley Publishers. Retrieved from <http://ebookcentral.proquest.com>

Uhlig, S., Jansen, E., & Scherder, E. (2018). “Being a bully isn’t very cool...”: Rap & Sing music therapy for enhanced emotional self-regulation in an adolescent school setting – a randomized controlled trial. *Psychology of Music* 46(4) 568 – 587. doi:10.1177/0305735617719154

Van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Penguin Books.

Wood, L., Ivery, P., Donovan, R., & Lambin, E. (2013). “To the beat of a different drum”: Improving the social and mental wellbeing of at-risk young people through drumming. *Journal of Public Mental Health*, 12 (2):70 – 79. doi:10.1108/JPMH-09-2012-0002

Zanders, M. (2015). Music therapy practices and processes with foster-care youth: Formulating an approach to clinical work. *Music Therapy Perspectives* 33(2), 97 – 107.

***THESIS APPROVAL FORM***

**Lesley University  
Graduate School of Arts & Social Sciences  
Expressive Therapies Division  
Master of Arts in Clinical Mental Health Counseling: Music Therapy, MA**

**Student's Name:** Genevieve Kurtzman

**Type of Project:** Thesis

**Title:** Trauma-Focused CBT Informed Music Therapy: Connecting Traumatized Youth with Affective Modulation — Developing a Method

**Date of Graduation:** May 18, 2019

In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

**Thesis Advisor:** Emily Marsick, PhD