

# THESIS

## GROUP MUSIC THERAPY FOR COLLEGE-AGED SURVIVORS OF SEXUAL VIOLENCE: A MIXED METHODS EVALUATION OF PARTICIPANT PERCEPTIONS AND SYMPTOM REDUCTION

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## ABSTRACT

### GROUP MUSIC THERAPY FOR COLLEGE-AGED SURVIVORS OF SEXUAL VIOLENCE: A MIXED METHODS EVALUATION OF PARTICIPANT PERCEPTIONS AND SYMPTOM REDUCTION

Previous research suggests that music therapy intervention may be helpful in the healing journey of survivors of sexual violence. The purpose of this study was to determine: 1. What symptom changes did participants experience as a result of an eight-week music therapy group? 2. How did participants perceive their experiences in an eight-week music therapy group?

This mixed methods study was conducted using a one group pretest-posttest concurrent triangulation design. Participants ( $N=5$ ) completed pretest measures of the TSC-40 and an initial interview before completing an eight-week music therapy group. Upon conclusion of the program, participants ( $n=4$ ) completed the posttest measures of TSC-40, posttest questionnaire, and semi-structured interview.

Participants ( $n=4$ ) demonstrated overall improvement in TSC-40 full scale and subsets from pretest to posttest suggesting efficacy of music therapy intervention. Furthermore, participants ( $N=5$ ) reported positive perceptions of the music therapy group. An analysis of qualitative data revealed the eight coded themes of mood modulation, drumming, sense of community, emotional processing, vulnerability/opening, music therapy process, increased comfort, and coping skills. These eight coded subthemes overlapped to reveal the four broader themes of music, exploration and expression of trauma-associated feelings, formation of trust, and perceived positive change.

Clinician-delivered interventions in the context of group music therapy have the potential to effect positive change for survivors of sexual violence. Future research should focus on replication of existing studies to address effectiveness of music therapy intervention across specific survivor subset populations with the goal of determining dosage, optimal program length, and most effective music therapy interventions. As individuals continue to be victimized and survivors continue to come forward, the music therapy field requires the creation and implementation of additional trauma-specific groups to meet the ongoing needs of college-aged survivors of sexual violence.

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## CHAPTER 1

### INTRODUCTION

Sexual violence is “a sexual act that is committed or attempted by another person without freely given consent of the victim” (Basile et al., 2014, p.10) and is a predominant public health concern (Rizeq et al., 2018). 43.9% of women and 23.4% of men have experienced sexual violence (Breiding et al., 2014) while 47% of transgender individuals have been sexually assaulted during their lifetimes (James et al., 2016).

In a survey of college students in the United States, 11.7% of students indicated an experience of “nonconsensual penetration or sexual touching by force or incapacitation” following enrollment (Cantor et al., 2017, p. 13). Rates among undergraduate students were 23.1% for women, 5.4% for men, and 24.1% for “transgender, genderqueer or gender nonconforming, questioning, or not listed” individuals (Cantor et al., 2017, p. 13). According to Pugh and Becker (2018), “campus sexual assault is a pervasive problem disrupting both the education and quality of life for all students” (p. 16). Furthermore, beginning college may act as a significant life event or major stressor that can contribute to reawakening effects of traumatic experiences encountered earlier in life (Herman, 2015).

Victims of sexual violence are at increased risk to experience trauma, defined as “debilitating symptoms that many people suffer in the aftermath of perceived life-threatening or overwhelming experiences” (Levine, 2005, p. 7). The severity of a trauma can be measured by the psychological impact of the event (Herman, 2015) and depends on individual internal, external, physiological, and neurological contributing factors. The effects of trauma are characterized by an all-encompassing loss of connection to oneself and the surrounding world



(Levine, 2005), and ensuing feelings of powerlessness and loss of identity (Herman, 2015).

Trauma may manifest in a host of neurophysiological, physical, and psychological means with different behavioral presentations. Anxiety, depression, dissociation, interpersonal problems, and sleep disturbance are common among survivors of sexual violence.

Talk therapy is the most common intervention for survivors, during which time pharmacological intervention can be used to manage symptoms (van der Kolk, 2014). The overarching goal of trauma treatment is to fully integrate the trauma to obtain resolution. The survivor must acknowledge what has happened, reconstruct belief systems, re-establish sense of identity, and work to make sense of the world in the aftermath of the traumatic event (Herman, 2015). Resolution of trauma can be distinguished, in part, by the ability of the individual to evoke the traumatic memory while maintaining concurrent focus on other stimuli (van der Kolk, 2014). Talk-based therapies can be supplemented with additional forms of therapy including music therapy (van der Kolk, 2014).

Music therapists have effectively addressed trauma-related goals through use of drumming, improvisation, songwriting, song discussion (lyric analysis), music listening, and vocal and instrumental music re-creation. Clinicians use music therapy intervention to facilitate client interaction with the music and with each other, and to create group unity through shared goals. Music therapists select appropriate music to address goal areas including identification and expression of emotions to heighten self-awareness, relaxation, socialization, self-esteem, and generation of coping skills. Previous researchers have found potential benefits of music therapy in addressing the needs of victims of sexual violence; however, a larger body research is necessary to prove effectiveness with this population (Hernández-Ruiz, 2005).

In the most current survey of members of the American Music Therapy Association (AMTA), 8.81% of respondents indicated that they work with abused/sexually abused clients (AMTA, 2018). Survivors of sexual violence represent an underserved population in the music therapy community in clinical practice and in research. There has been little or no research conducted specifically with college-aged populations who have experienced sexual violence. Non-music therapy research with victims of sexual violence, music therapy research with general mental health populations, and limited music therapy research with victims of sexual violence indicate the potential of music therapy to address trauma-specific goals with college-aged survivors of sexual violence.

To address this need, the clinician-researcher created an eight-week music therapy group for college-aged survivors of sexual violence currently experiencing trauma symptoms. The theoretical framework for this study integrated feminist theory (Worell & Remer, 2003), feminist-informed music therapy (Curtis, 2019; Hadley & Hahna, 2016), group therapy (Yalom & Leszcz, 2005), and trauma theory (Herman, 2015). Treatment goals were informed by best-available research and participant-determined areas of need. Music therapy methods were selected by the clinician-researcher using best-available research, while client preference and feminist-informed music therapy guided musical selection. In order to investigate the comprehensive effects of music therapy, the clinician-researcher collected quantitative data measuring symptoms and qualitative data exploring participants' experiences. The purpose of this study was to determine:

1. What symptom changes did participants experience as a result of an eight-week music therapy group?

2. How did participants perceive their experiences in an eight-week music therapy group?

## CHAPTER 2

### LITERATURE REVIEW

#### **Sexual Violence and Trauma**

Sexual violence is defined by the Centers for Disease Control and Prevention (CDC) as “a sexual act that is committed or attempted by another person without freely given consent of the victim” (Basile et al., 2014, p.10). Sexual violence includes:

- completed or attempted forced penetration of a victim;
- completed or attempted alcohol/drug-facilitated penetration of a victim;
- completed or attempted forced acts in which a victim is made to penetrate a perpetrator or someone else;
- completed or attempted alcohol/drug-facilitated acts in which a victim is made to penetrate a perpetrator or someone else;
- non-physically forced penetration which occurs after a person is pressured verbally or through intimidation or misuse of authority to consent or acquiesce;
- unwanted sexual contact;
- non-contact unwanted sexual experiences (Basile et al., 2014, p. 11)

The CDC estimates that 19.3% of women and 1.7% of men have been raped (Breiding et al., 2014) and further study indicates that 79.6% of these women were first raped before reaching 25 years of age (Black et al., 2011). 43.9% of women and 23.4% of men have experienced sexual violence (Breiding et al., 2014) while 47% of transgender individuals have been sexually assaulted during their lifetimes (James et al., 2016). Residual effects from these victimizations may threaten health and safety, making sexual violence a predominant public health concern (Rizeq et al., 2018).

Sexually violent acts can result in trauma, defined as “debilitating symptoms that many people suffer in the aftermath of perceived life-threatening or overwhelming experiences” (Levine, 2005, p. 7). “Trauma inflicted by another human being is high on the continuum of severity, and sexual trauma is at the top of that list” (Scaer, 2001, p. 140). Previous researchers

have used a variety of terminology to represent trauma as a result of sexual violence including trauma (Ahonen, 2016; Bensimon et al., 2008; Borczon, 2015; Herman, 2015; Rothschild, 2000; Scaer, 2001; Sutton, 2002), childhood trauma (Miller, 1990; Terr, 1990), sexual trauma (Scaer, 2001), complex trauma (Hussey et al., 2008), traumatic experiences (Elliot & Briere, 1992), abuse (American Music Therapy Association [AMTA], 2018; Curtis, 2016; Elliot & Briere, 1992; Herman, 2015), sexual abuse (AMTA, 2018; Amir, 2004; Briere, 1996; Elliot & Briere, 1992; MacIntosh, 2003), childhood sexual abuse (Amir, 2004; Curtis & Harrison, 2006; Elliot & Briere, 1992; Neal & Nagle, 2013; Scaer, 2001; Volkman, 1993), childhood physical abuse (Neal & Nagle, 2013), domestic violence (Curtis, 2016; de Juan, 2016; York & Curtis, 2015), intimate partner violence (IPV; Curtis, 2016; de Juan, 2016; Hernández-Ruiz, 2005; Sylaska & Edwards, 2013; Teague et al., 2006; York & Curtis, 2015), violence (Curtis, 2019), and sexual assault (James et al., 2016). Researchers interchangeably used the terms “victim” and “survivor” to describe those who have experienced sexual violence; this terminology is a matter of personal preference (Curtis, 2019; RAINN, n.d.).

### **Psychological Impact**

A traumatic event initially occurs to the physical body but repercussions compound to affect the mind, emotions, and sense of being (Levine, 2005). Psychological effects have the potential to create “an intensity that defies description...many traumatized people feel that they live in a personal hell in which no other human could possibly share” (Levine, 1997, p. 47). Sutton (2002) found the impact to result not from the event itself, but in the individual’s internal attempts to integrate the event with the irreversible aftermath. Researchers found that the effects of trauma are characterized by an all-encompassing loss of connection to oneself and the world around them (Levine, 2005) and ensuing feelings of powerlessness and loss of identity (de Juan,

2016; Herman, 2015). This psychological impact varies between individuals; some experience immediate effects, delayed effects, continuing effects, no lasting effects, or an aggregate (van der Kolk, 1987). This psychological impact is the severity of the trauma itself (Herman, 2015) and can be examined through contributing internal, external, physiological, and neurological factors.

### *Internal Factors*

Internal factors include genetics, personality (Levine, 1997; van der Kolk, 2014), coping strategies (van der Kolk, 2014), inner resources (Levine, 2005), sources of marginalized identity (Curtis, 2016), secure attachment during early childhood, and developmental stage (van der Kolk, 2014). Some personality traits and characteristics of an individual can be attributed to genetics (Levine, 1997). Individuals with stress-resistant or resilient personalities may experience a less severe outcome after a traumatic stressor (Terr, 1991). Individuals with these personality traits tend to be less susceptible to learned helplessness, the inability to link their personal actions with future outcomes (van der Kolk, 2006). Coping skills may be adaptive or maladaptive, the most common of which is suppression (Terr, 1990). Internal resources fall within functional, physical, psychological, and spiritual domains; a greater number of available resources leads to a better prognosis (Rothschild, 2000).

Repeated experiences of sexual violence in childhood may damage attachment and lead to changes in cognition and perception, the effects of which are most serious when the perpetrator is a caretaker (Scaer, 2001). Such a disruption in child development may also affect the ability to self-regulate and control behavior, can lead to dissociation and skewed self-concept (Hussey et al., 2008), and can interrupt creation of identity (Herman, 2015; van der Kolk, 2014). Children who have experienced abuse are likely to display decreased resilience, skewed empathy, and are likely to receive diagnoses that fail to encapsulate the full breadth of trauma

symptoms (van der Kolk, 2014). These multidimensional effects compound as one ages, potentially contributing to a greater psychological impact than that of events experienced in adulthood (Terr, 1990).

### *External Factors*

Previous trauma history (Herman, 2015), singular or repeated nature of the event (Levine, 1997; MacIntosh, 2003; Terr, 1991), outside resources (Levine, 2005), and social network (Curtis, 2016; Herman, 2015; Levine, 1997; van der Kolk, 2014) are external factors that contribute to the psychological impact of a traumatic event. If an individual has previously experienced one or more episodes of sexual violence, an acute incident can re-activate associated trauma to intensify the effects (Ahonen, 2016). Repeated episodes of sexual violence can lead to psychological degrading and loss of resolve to live, often rendering the episodes more damaging than singular events (Herman, 2015). Due to sensitization, survivors of previous traumatic events tend to be more vulnerable to new traumatic experiences (Herman, 2015).

External resources may be interpersonal in nature and can include a survivor's social support system (Rothschild, 2000). A victim may be hesitant to disclose an incident of sexual violence for reasons including guilt, depression, anxiety (Carr et al., 2012), shame (Black et al., 2011; Carr et al., 2012), fear of the perpetrator, fear of not being believed and supported (Black et al., 2011; Herman, 2015), fear of being blamed, and societal and political climate (Curtis, 2016). Children are often reticent to disclose; the "fear of fear itself" or uncertainty of the future may seem more frightening than the predictable and cyclical abuse (Terr, 1990, p.37). Over 50% of victims of sexual violence on college campuses did not report to authorities for reasons including feeling ashamed, believing the incident was not severe enough, and believing no further action would be taken (Cantor et al., 2017). Survivors of IPV typically disclose to at least

one individual (Sylaska & Edwards, 2013), and disclosures are more common among white females of higher socioeconomic status (Curtis, 2019; Sylaska & Edwards, 2013). Receiving positive support following a disclosure is associated with more favorable outcomes (Herman, 2015; Sylaska & Edwards, 2013); however, psychological effects can diffuse as family members, friends, and community members become secondary survivors (Sutton, 2002).

### *Physiological Factors*

During the event, instinctual responses (Swallow, 2002) and physical ability of the victim to take action (Herman, 2015; Levine, 1997) play roles in potential psychological impact. A traumatic event will trigger the body's instinctual fight, flight, or freeze response (Levine, 2005). The freeze response protects the body from pain in the moment but can create lasting difficulties in achieving normalization after the event (Levine, 2005). This physiological inability to act further damages the individual's sense of control which can create an enduring feeling of helplessness (van der Kolk, 2014). Constriction, the ability to enter a trance state, contrasts with the freeze response and fosters engagement rather than learned helplessness (Herman, 2015). After the traumatic event, the uncontrollable symptoms experienced by survivors can lead to the predominant feeling of shame (van der Kolk, 2014).

### *Neurological Factors*

Neurological factors regarding formation of memory (Ahonen, 2016) and the victim's relationship to the perpetrator (MacIntosh, 2003) play a role in determining psychological impact. Traumatic events can be remembered in detail, disjointed, distorted, or repressed; associated fear may decrease with a clearer memory of the event, while partial memories can feel more threatening (Ahonen, 2016). Due to brain activation during traumatic events, the memory of the event is more commonly stored in implicit (unconscious and emotional memory) than



explicit memory (conscious and declarative memory; Rothschild, 2000). Stress-induced release of cortisol can suppress hippocampal activity and formation of explicit memory, leaving the amygdala unimpacted to store these memories in implicit form. Overactivation of the hypothalamic-pituitary-adrenal (HPA) axis caused by repeated stressors holds the potential to irreversibly harm hippocampal neurons and further impair memory encoding (Scaer, 2001). In addition, memories of traumatic events can be stored as part of the somatic nervous system (SNS) and accessed instantaneously when similar bodily positions or movements are initiated (Rothschild, 2000). These potential abnormal encodings may render memories unavailable to conscious awareness and cognitive processes, preventing verbal access to these experiences (MacIntosh, 2003).

Sexual violence is interpersonal in nature and involves boundary infringements. The victim experiences a loss of autonomy and self-governance (van der Kolk, 2006) and may claim responsibility for the violence, therefore regarding themselves as bad or evil (Herman, 2015). Within IPV, Walker (1979) found that the relationship between perpetrator and victim cycles through the three stages of tension building, violent episode, and loving phase (as cited in York & Curtis, 2015). Endorphins released throughout this process engage the endogenous opioid system to encourage bonding (Scaer, 2001), create a system of reward, and operantly condition the behavior to further confuse the victim and damage sense of self (Scaer, 2001; van der Kolk, 2014).

## **Manifestations**

A victim's brain may remain in survival mode after a traumatic event, potentially resulting in diminished access to cognitive processes and a variety of symptomatic presentations (Herman, 2015). A traumatic event “changes the brain, which therefore changes the body”

(Scaer, 2001, p. 84). Symptoms of trauma resulting from events of sexual violence share similarities with those of non-sexually based traumatic events (Herman, 2015; van der Kolk, 2014). It is possible that manifestations may display a delayed presentation, arising after the survivor believes they are functioning as normal (Borcson, 2015). Anniversaries of the traumatic event (Scaer, 2001), significant life events, and major stressors hold the potential to activate new symptoms, worsen current symptoms, or reactivate formerly resolved symptoms (Herman, 2015). Manifestations of trauma may be neurophysiological, physical, and/or psychological in nature, but are interconnected in behavioral presentation.

### *Neurophysiological*

Neurophysiological manifestations can be divided into the three categories of hyperarousal, intrusion, and constriction (Herman, 2015). Hyperarousal is ever-present while symptoms commonly oscillate between intrusive and constrictive presentations. Hyperarousal refers to the overactive survival state in which the individual experiences racing thoughts and displays a variety of physical symptoms (Levine, 2005). Intrusion manifests in flashbacks and intrusive memories, which force the individual to relive the traumatic event (Herman, 2015). The difference between flashbacks and intrusive memories are their respective exaggerated or accurate representations of the traumatic event (Scaer, 2001). Intrusive symptoms arise when an internal or external stimulus directly activates the hippocampal-amygdala pathway of the nervous system (Rothschild, 2000). These experiences may occur at any time, without clear provocation, and may last for unpredictable amounts of time (van der Kolk, 2014).

Constriction includes numbing, dissociation, hypoarousal, and depersonalization (Herman, 2015). Numbing may occur due to a narrowing of awareness that affects perceptions of emotions and events (Levine, 2005; Scaer, 2001). Dissociation, an element of the freeze

response, acts as a mechanism to escape fear during a traumatic event (Scaer, 2001). When the body is unable to flee, the mind divides awareness (Rothschild, 2000) and endorphins are released to protect the body (Levine, 2005). Dissociation can occur in response to an event or in response to an intrusive episode for, due to the hypervigilant state and automatic neurobiological responses, there is no distinction between the two (van der Kolk, 2006). Hypoarousal, common in child survivors of prolonged abuse, results in freezing while depersonalization refers to an out-of-body experience (Scaer, 2001). Depersonalization can occur so completely that a survivor may not recognize themselves in the mirror and may experience lack of sensation in certain areas of the body (van der Kolk, 2014).

### *Psychological*

Psychological manifestations of trauma can affect cognition, emotional processing, and personality. Cognitive symptoms include difficulty with concentration and memory (Ogden, Minton, & Pain, 2006; van der Kolk, 2006) and distorted sense of time (Scaer, 2001). General cognitive processing may be inhibited, resulting in abnormal interpretations of sensory input and alexithymia, the inability to identify and verbally express emotion (Ogden et al., 2006). Emotional processing requires the integration of corresponding somatic sensation and emotion, a capacity that can be damaged in the aftermath of a traumatic event (Rothschild, 2000). Denial can cause further separation of self from feelings (Levine, 2005) and may prevent an individual from experiencing the full effect of the traumatic event (Scaer, 2001). Survivors may experience a limited range of emotion and anhedonia (Ogden et al., 2006) or may feel intense emotions such as anger (Herman, 2015; Levine, 2005; Rothschild, 2000), fear (Borczone, 2015; Herman, 2015; Levine, 2005), powerlessness (Herman, 2015; Sutton, 2002), helplessness (Borczone, 2015; Herman, 2015; Scaer, 2001), hopelessness (Borczone, 2015), worthlessness (Scaer, 2001), and

profound sadness (Borczone, 2015). Typical experienced emotions contain a beginning, middle, and end; those associated with trauma may lack an ending point and feel illimitable (Ogden et al., 2006).

The loss of control (Herman, 2015; van der Kolk, 2014) and loss of security (Sutton, 2002) experienced during a traumatic event can create an altered sense of self, affecting self-esteem, self-worth, respect for self, respect for one's own feelings, and body image (Herman, 2015). The survivor's personality may change as they learn to cope with ongoing hyperarousal and other manifestations of trauma (Herman, 2015). Victims often experience depression, anxiety (Black et al., 2011; Scaer, 2001), lowered self-esteem (Black et al., 2011), a felt sense of being damaged (Levine, 2005), self-criticism (Herman, 2015), guilt (Borczone, 2015; Herman, 2015; Scaer, 2001; Terr, 1990), and shame (Herman, 2015; Rothschild, 2000; Terr, 1990). Guilt is often associated with self-blame (Herman, 2015; Terr, 1990) and shame can result in feeling subhuman (Terr, 1990). Shame, inherently more complex than other emotions, manifests and liberates differently (Rothschild, 2000). Anger often gives way into grief which often indicates that healing has begun (Herman, 2015; Rothschild, 2000; Terr, 1990).

### *Physical*

Physical symptoms that arise due to a traumatic event may be acute or chronic in nature. A survivor of sexual violence may be in immediate risk of physical injury, sexually transmitted infections, pregnancy, gynecological issues, and gastrointestinal distress (Black et al., 2011). Emotions that arise in response to a traumatic event can be stored in the body regardless of conscious memory of the event (Amir, 2004). Particular body postures or somatic sensations can cause intrusion; this phenomenon is referred to as state dependent recall (Rothschild, 2000). Individuals may experience alexisoma, the difficulty in experiencing and identifying bodily

feelings which arises from the interrupted functioning of five-sense perception (Ogden et al., 2006). Conversely, it is possible that an individual may be overwhelmed by sensation due to an inability to separate somatic sensation from consciously perceived emotional feelings (Ogden et al., 2006).

Emotions that are stored in the body often present in the form of physical pain. Chronic pain frequently delineates a dissociated part of the body (Levine, 2005) and is highly correlated with childhood sexual abuse (Scaer, 2001). Survivors of sexual violence often experience psychosomatic headaches (Herman, 2015) and/or piriformis syndrome, a typically rare form of sciatica in the buttocks (Scaer, 2001). Trauma may present in an array of additional physical symptoms including autoimmune diseases, fibromyalgia, asthma attacks, digestive problems, and chronic fatigue (van der Kolk, 2014). In addition to increased rates of illness, survivors have increased mortality rates (Scaer, 2001).

### *Behavioral*

Due to a survivor's altered perception of self and the world in the aftermath of a traumatic event, it is no longer possible to function normally (Sutton, 2002). When traumatic experiences remain unintegrated and unresolved, pathology can become enmeshed into daily life (MacIntosh, 2003). Maladaptive behaviors are often inflexible which Ogden et al. (2006) attributed to the obstruction of top-down cognitive processing. An individual may display behaviors that are polarized in nature including aggression/hypersensitivity to aggression or actively seeking connection/withdrawing (Herman, 2015). Hyperarousal of the nervous system commonly results in a survivor's altered ability to modulate affect and regulate arousal (van der Kolk, 2014). Nonthreatening stimuli may be interpreted as a threat, resulting in automatic survival responses such as overreactions (van der Kolk, 2006), bouts of rage (Levine, 1997),

hypersensitivity, irritability (van der Kolk, 2014), and anxiety attacks (Rothschild, 2000).

Hypoarousal of the nervous systems may result in shut down and withdrawn behaviors (van der Kolk, 2014).

Additional prevalent behaviors in survivors of trauma include maladaptive coping strategies related to trauma re-enactments and relationships. Maladaptive coping strategies are often repetitive destructive behaviors (Levine, 1997) which can include eating disorders (Herman, 2015), substance use (Black et al., 2011), aggressive sensation-seeking (van der Kolk, 2014), self-harm (Herman, 2015; van der Kolk, 2014), and suicidal ideation (Black et al., 2011; Herman, 2015; van der Kolk, 2014). Trauma re-enactments occur due to an unconscious compulsion to repeat the traumatic event (Levine, 2005) and can become a form of addiction (van der Kolk, 2014). Researchers posit that trauma re-enactments may be a subconscious attempt to elicit full expression of repressed material in order to integrate and heal (van der Kolk, 2014; Volkman, 1993), may provide relief from anxiety due to endorphin release (van der Kolk, 2014), or may be a conditioned behavior due to the endogenous opioid system (Scaer, 2001).

Trauma re-enactment can carry over into relationships, specifically regarding roles of dominance and submission (Herman, 2015). Individuals may experience difficulties in social functioning (Scaer, 2001), withdrawal and isolation (Borczone, 2015; Herman, 2015), overdependence on others (Herman, 2015), lack of trust (Borczone, 2015; van der Kolk, 2014), inability to relate to others (Borczone, 2015), and expectation of rejection (Herman, 2015). Individuals often have difficulty forming meaningful relationships (Levine, 2005) and engaging in social reciprocity which may be due to fear, distrust (van der Kolk, 2014), or perception that their only value to another person is sexual in nature (Herman, 2015). Within romantic relationships, individuals may display intimacy issues and sexual dysfunction (Herman, 2015).

The lasting effects of sexual violence are most evident in intimate relationships, but exist within every interpersonal interaction (Herman, 2015; van der Kolk, 2014).

### **Common Diagnoses**

Due to survivors' myriad symptomatic and behavioral presentations following a traumatic event, there is no ubiquitous diagnosis to categorize the complexity of symptoms (Herman, 2015; van der Kolk, 2014). Symptoms of depression, anxiety, and dissociation are common but not always severe enough in presentation to merit a diagnosis of depression, anxiety, or dissociative disorder (Black et al., 2011; Scaer, 2001). Severe dissociative symptoms in the aftermath of a traumatic event, particularly in childhood sexual abuse, can lead to personality disorders (Terr, 1990). Other possible diagnoses include Post Traumatic Stress Disorder (PTSD), Acute Stress Disorder (ASD), and Complex Post Traumatic Stress Disorder (CPTSD; Herman, 2015; Hyland et al., 2017; Scaer, 2001; Sutton, 2002). The likelihood of developing PTSD has been linked to the level of dissociation experienced during the traumatic event and is more prevalent in women, specifically female victims of rape (Scaer, 2001). While sharing similarities to symptoms of PTSD, symptoms of ASD are shorter-lasting (Sutton, 2002) and symptoms of CPTSD include more severe difficulties with interpersonal relationships (Hyland et al., 2017).

### **Treatment Processes**

#### *Goals*

The overarching goal of trauma treatment is to fully integrate the trauma to obtain resolution. The survivor must acknowledge what has happened, reconstruct belief systems, re-establish sense of identity, and work to make sense of the world in the aftermath of the traumatic event (Herman, 2015). Resolution can be distinguished, in part, by the ability of the individual to

evoke the traumatic memory while maintaining concurrent focus on other stimuli (van der Kolk, 2014). Another hallmark of resolution is the ability of the survivor to fully participate in life and have fulfilling relationships with others (Herman, 2015). Progressive treatment goals include identity reconstruction, creation of community/connection, emotional identification and expression, empowerment (Herman, 2015), psychoeducation (Rothschild, 2000; Scaer, 2001), generation of adaptive coping skills (Borczone, 2015; van der Kolk, 2014), self-awareness (van der Kolk, 2014), bodily awareness, subduing of hyperarousal symptoms (Rothschild, 2000; van der Kolk, 2014), and reduction of dissociative symptoms (Levine, 2010).

### *Theory*

Researchers have utilized a number of underlying theories in trauma treatment including group therapy (Yalom & Leszcz, 2005), trauma theory (Herman, 2015), phase-oriented treatment (Janet, 1889), somatic marker theory (Damasio et al., 1996), and the Sensation Image Behavior Affect and Meaning (SIBAM) model (Levine, 2010). Victims customarily commence with individual therapy, supplementing with or transferring to group therapy after approximately 6-12 months (Herman, 2015). Group therapy allows the individual to look outside of themselves to connect with others (Levine, 1997). The community established within a group setting can help an individual rediscover their personal identity and is essential for healing (Herman, 2015; Levine, 1997). Pharmacological intervention may be used to manage symptoms throughout the therapeutic process; however, medications do not resolve underlying symptom causes (van der Kolk, 2014).

In trauma theory, Herman (2015) built upon the group therapy model to outline three stages of recovery: “establishment of safety...remembrance and mourning...[and] reconnection with ordinary life” (p. 155). A relationship between the therapist and client must be firmly



established before it is possible to address the trauma (Herman, 2015; Rothschild, 2000) and, while progressing through the stages, attention is focused on the individual's demonstrated ability to survive (van der Kolk, 2006). Phase-oriented treatment, another three-stage model first proposed by Janet in 1889, has gained popularity in treating symptoms of PTSD and includes (1) stabilization and symptom reduction, (2) trauma memory treatment, and (3) integration for full involvement in life (as cited in Ogden et al., 2006). The somatic marker theory proposes that bodily sensations cue emotional awareness to form the basis of cognition (Damasio et al., 1996). In the SIBAM model, developed specifically to address dissociative symptoms, therapist and client work to establish a relationship between the macro-categories of dissociative elements: sensation; image; behavior; affect; and meaning (Levine, 2010).

### *Approach*

Therapy for trauma survivors is an extended process that can include psychodynamic (Miller, 1990), cognitive (Scaer, 2001), cognitive-behavioral (Scaer, 2001; van der Kolk, 2014), psycho-educative (Rothschild, 2000; Scaer, 2001; van der Kolk, 1987), Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 2013), "power therapy" (Scaer, 2001), body-focused (Ogden et al., 2006; Scaer, 2001; van der Kolk, 2014), and mind-altering substance approaches (van der Kolk, 2014). Within psychodynamic approaches, theorists posit that transference-elicited traumatic re-enactment allows processing to begin (Miller, 1990). Through attachment, the therapist may assist the client in maintaining a sense of safety and regulating affect during this process. Cognitive-based talk therapies have been proven effective in achieving integration, which Scaer (2001) attributed to increased left hemispheric activation in speech processes. Cognitive-behavioral approaches have often been used to diminish arousal and fear response (Scaer, 2001) but have shown limitations in treatment of PTSD (van der Kolk, 2014).

Psychoeducation includes the generation of four main coping skills: (1) personal control; (2) task involvement; (3) lifestyle choices; and (4) social supports (van der Kolk, 1987). Positive coping skills help the client self-regulate and work towards achieving a sense of normalcy in their new reality (Borczone, 2015). MBSR (Kabat-Zinn, 2013) incorporates the use of mindfulness meditation to target treatment of disorders; the therapy has led to changes in bodily awareness and fear responses, decreased depressive symptoms, and helped alleviate chronic pain (van der Kolk, 2014).

Scaer (2001) identified four “power” therapies that are associated with an expedited reduction of symptoms: (1) Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 1989); (2) Visual/Kinesthetic Disassociation (VKD; Bandler, 1985); (3) Traumatic Incident Reduction (TIR; Gerbode, 1989); and (4) Thought Field Therapy (TFT; Callahan & Stancliffe, 1985). All four therapies use verbal processing while EMDR adds bilateral eye movements and TFT incorporates acupuncture (Scaer, 2001). Body-focused therapies arose due to the considerable role of the body in storing and releasing trauma (Rothschild, 2000; Scaer, 2001; van der Kolk, 2014). Levine (1997) theorized the healing of trauma as a bodily process and proposed Somatic Experiencing (SE), a treatment in which individuals draw attention inward to internally rewrite the event. Another body-focused form of therapy, sensorimotor psychotherapy, addresses information processing at the sensorimotor level before integrating with emotional and cognitive processing (Ogden et al., 2006). The use of mind-altering substances including 3, 4-methylenedioxy-methamphetamine (MDMA or ecstasy) to treat individuals with PTSD has shown promise in reducing autonomic fear responses and creating heightened self-awareness (van der Kolk, 2014).

## *Barriers*

The first barrier in the treatment of trauma is acknowledging the need for intervention. This may be caused by denial, the societal stigma that reaching out for help implies weakness (Levine, 1997), or the individual's potential unawareness of past trauma (van der Kolk, 2014). Treatment may seem overwhelming and it is possible that unawareness of trauma, inaccurate diagnosis, or rejection of diagnosis can result in inadequate treatment (Herman, 2015). Trauma treatment itself, a long and arduous process that involves recounting what one may rather forget (Herman, 2015), can re-traumatize a victim and destabilize the often fragile foundation upon which they are functioning (Rothschild, 2000; Scaer, 2001). Verbal processing of the traumatic event may provoke strong emotional responses, challenge feelings of safety, and create a sense of reliance on the therapist (van der Kolk, 2006). Transference may cause the client to view the therapist as a protector or rescuer, potentially leading to strong emotional responses when the therapist inevitably fails to fulfill that role (Herman, 2015). Conversely, survivors may not have verbal access to trauma-associated memories (MacIntosh, 2003; Rothschild, 2000; van der Kolk, 2014). The greatest barrier remains that "resolution of the trauma is never final; recovery is never complete" (Herman, 2015, p. 211).

## **Music Therapy**

Researchers have found music therapy interventions effective in addressing the mental health goals of therapeutic attendance and engagement (Gold et al., 2009; Hussey et al., 2008; Silverman, 2009), establishment of relationships (Ahonen, 2016; Amir, 2004; Borczon, 2015; Carr et al., 2012; de l'Etoile, 2002; Eyre & Lee, 2015; Hussey et al., 2008; Legge, 2015; Orth, 2005; Volkman, 1993), communication (Carr et al., 2012; de l'Etoile, 2002; Eyre & Lee, 2015; Orth, 2005), and affective response modification (Andsell et al., 2010; Carr et al., 2012; de

l'Etoile, 2002; Legge, 2015; Swallow, 2002; van der Kolk, 2006). In comparing a lyric analysis-based music therapy group with a psychoeducational group, Silverman (2009) found higher attendance rates in the music therapy group and overall increased participant satisfaction. Gold et al. (2009) conducted a meta-analysis of music therapy intervention within mental health populations and found increased patient engagement with music. Researchers posited that the intrinsically rewarding qualities of music-making encouraged engagement and participation (Carr et al., 2012; Eyre & Lee, 2015). Researchers found that group music-making through playing instruments created a unique intimacy (Amir, 2004) and an opportunity for socialization (Eyre & Lee, 2015; Orth, 2005). Legge (2015) found that receptive music listening stimulated the biochemical release of oxytocin and vasopressin, hormones associated with trust and connection that assisted in building therapeutic rapport and group cohesion. Researchers found that improvisation in music therapy empowered clients to communicate nonverbally (Carr et al., 2012; Eyre & Lee, 2015; Orth, 2005), demonstrating the potential of the intervention for those with limited verbal skills or other limitations in talk therapy (de l'Etoile, 2002). Additionally, researchers found that music listening and re-creation stimulated endorphin release to alter mood (Swallow, 2002) and elicit behavioral changes (de l'Etoile, 2002).

Clinicians have used music therapy interventions to aid in emotional processing (Ahonen, 2016; Amir, 2004; Bensimon et al., 2008; Borczon, 2015; de l'Etoile, 2002; Herman, 2015; Legge, 2015; Orth, 2005; Volkman, 1993), formation of positive sense of self (Baker et al., 2008; Bensimon et al., 2008; de Juan, 2016; Eyre & Lee, 2015; MacIntosh, 2003; Orth, 2005), and relaxation (Orth, 2005). Bensimon et al. (2008) posited that the structure of music in instrumental music-making created a sense of safety in which group members were able to experience bodily sensations and express emotions. Researchers found that instrumental music

improvisation activated areas of the brain like those engaged in psychoanalytic free association and that depth of emotional awareness was increased by pairing music with an extramusical reference (Legge, 2015). Researchers used instrumental music improvisation to access the unconscious (Amir, 2004), allowing uncovered material to be evaluated and experienced (de l'Etoile, 2002). Researchers found that improvisation and songwriting in music therapy encouraged positive sense of self by improving self-awareness (Orth, 2005), self-esteem (Baker et al., 2008; Eyre & Lee, 2015), self-confidence, sense of mastery (Baker et al., 2008), and autonomy (Carr et al., 2012). Additionally, Orth (2005) found musical improvisation and musical listening to promote relaxation.

Music therapists have demonstrated effectiveness of music therapy intervention in improving symptoms of depression (Aalbers et al., 2017; Carr et al., 2012; de l'Etoile, 2002; de Juan, 2016; Teague et al., 2006), symptoms of anxiety (Aalbers et al., 2017; Borczon, 2015; de Juan, 2016; Gold et al., 2009; Hernández-Ruiz, 2005; Teague et al., 2006), self-regulation (Bensimon et al., 2008; Borczon, 2015; Carr et al., 2012; Eyre & Lee, 2015; MacIntosh, 2003; Swallow, 2002; van der Kolk, 2006), level of functioning (Carr et al., 2012; Gold et al., 2009), concentration (Carr et al., 2012), and symptoms of PTSD (Carr et al., 2012; Orth, 2005). A meta-analysis by Gold et al. (2009) found music therapy to elicit a positive change in depression, anxiety, and general functioning. The effects correlated with the quantity of sessions and occurred regardless of specific diagnosis. Aalbers et al. (2017) found that improvements in depression were short-term when music therapy was used in isolation and found that music therapy as a supplemental treatment yielded greater symptom reduction than treatment as usual. Clients demonstrated increased self-regulation through drumming and improvisation, which provided a grounding focus in the present moment (Bensimon et al., 2008; Eyre & Lee, 2015;

Volkman, 1993). Through receptive listening, researchers found that music mediated brain structures to modulate traumatic responses and increase self-regulation (Swallow, 2002; van der Kolk, 2006). Researchers found that playing an instrument provided immediate auditory feedback and a point of focus for clients which aided in concentration, addressed avoidant behaviors (Carr et al., 2012), and addressed detachment behaviors (Orth, 2005). After music therapy with receptive listening and instrumental improvisation interventions, individuals with PTSD showed a reduction in symptoms including hyperarousal, avoidance, re-experiencing, and depression (Carr et al., 2012).

### *Music Therapy and Trauma*

Borczon (2015) reviewed the literature to examine current uses of music therapy with survivors of general trauma. Through improvisation and composition, therapeutic drumming was shown to increase breath awareness, help release bodily tension through associated movements, and express feelings without reliance on words. When used in a group setting, these interventions supported a positive atmosphere of hope and healing within the therapeutically established community and were found beneficial by the participants. In further study of music therapy with adult trauma populations, group improvisation and music listening were especially constructive with groups of fixed members that met for longer session times (Ahonen, 2016). Music therapy guided by trauma theory (Herman, 2015) was shown to help individuals connect with themselves by bridging inner and outer factors, outwardly express emotions, and connect with others (Ahonen, 2016).

### *Music Therapy with Survivors of Sexual Violence*

Sexual violence survivor populations in the music therapy literature include victims of sexual abuse (Amir, 2004; MacIntosh, 2003), childhood sexual abuse (Curtis & Harrison, 2006;

Volkman, 1993), and IPV (de Juan, 2016; Hernández-Ruiz, 2005; Teague et al., 2006; York & Curtis, 2015). MacIntosh (2003) examined the effects of music therapy interventions with survivors of sexual abuse and found drumming, singing, and songwriting effective in connecting the body and mind, enhancing inner creativity to create feelings of mastery, and creating opportunities to confront intense feelings. In a case study using music therapy with a survivor of sexual abuse, Amir (2004) found instrumental music improvisation to assist in the creation of safety which allowed the client to explore and express her traumatic experience. The researcher posited that improvisation assisted in processing feelings associated with the event, helped to facilitate the acknowledgement and integration of negative emotions, and enabled healing to occur.

In addressing the needs of adult female survivors of childhood sexual abuse, Curtis & Harrison (2006) implemented a joint music therapy-social work program made of 14 weekly two-hour long sessions. The five participants engaged in various music therapy interventions including song discussion and songwriting and reported increased self-esteem and problem-solving ability upon conclusion of the program. Volkman (1993) also worked with adult survivors of childhood sexual abuse and used instrumental music improvisation to address dissociative symptoms. The researcher found that instrumental music-making grounded victims in the present while simultaneously facilitating the exploration of the past, and posited that grounding is necessary to establish the sense of safety required for thorough exploration. Regarding improvisation and somatic sensation, Volkman (1993) stated, “music seems to be a gentle yet extremely powerful means of connecting with that sense without having to focus direction on the body, which can be threatening to a victim of trauma” (p. 250).

In working with survivors of IPV in a music therapy setting, researchers found that group work was integral for an individual to regain a sense of connection (York & Curtis, 2015). York and Curtis (2015) suggested that music itself acted as the impetus for change when utilizing songwriting and relaxation methods. Hernández-Ruiz (2005) paired music therapy with progressive muscle relaxation, effectively reducing anxiety levels and increasing quality of sleep for female victims of IPV. de Juan (2016) examined the effects of 13 two-hour weekly music therapy sessions for 17 adult female survivors of domestic violence. In this study, instrumental improvisation and singing lessened depression and anxiety, raised self-esteem, and assisted in reclaiming lost identity. When integrating music therapy with creative arts therapies with seven female survivors of IPV living in transitional housing, Teague et al. (2006) found a statistically significant reduction in symptoms of depression and a statistically non-significant reduction in symptoms of anxiety.

### **Theoretical Framework**

The theoretical framework for this study integrated feminist theory (Worell & Remer, 2003), feminist-informed music therapy (Curtis, 2019; Hadley & Hahna, 2016), group therapy (Yalom & Leszcz, 2005), and trauma theory (Herman, 2015). The ensuing philosophy is one that acknowledges the importance of individual experiences within a social context, sense of hope fostered within community, empowerment, and agency.

#### *Feminist Theory*

Feminist theory, which arose due to the gender-based power structures that perpetuate inequality between men and women or other marginalized groups, served as the overarching perspective for this study (Worell & Remer, 2003). “Gender-role stereotyping of both women and men and of institutionalized sexism are most clearly reflected in the violence against women,



which is so prevalent in contemporary society” (Worell & Remer, 2003, p. 204). Perpetrators of sexual violence are most often men and victims are most often women (Black et al., 2011; Breiding et al., 2014; Cantor et al., 2017; Pugh & Becker, 2018). Transgender individuals also experience high rates of victimization (James et al., 2016).

Feminist practice is a call for societal change (Worell & Remer, 2003). The benefit of achieving therapeutic goals cannot be reached when society itself, in promoting oppression and marginalization, is dysfunctional. Worell and Remer (2003) define the four central principles of feminist practice as: “(1) attention to the diversity of women’s personal and social identities...(2) a consciousness-raising approach...(3) an egalitarian relationship between client and therapist...[and] (4) a woman-valuing and self-validating process” (p. 23). Within the therapeutic process, clients are encouraged to examine power differentials within privilege and marginalization and are empowered with agency throughout the course of their treatment.

#### *Feminist-Informed Music Therapy*

Feminist theory merges with music therapy in feminist-informed music therapy (Curtis, 2019; Hadley & Hahna, 2016). Here, feminist principles are implemented within the music therapy setting and analysis of power carries over into the chosen musical selections (Curtis, 2016; Hadley & Hahna, 2016). Essential in reflecting the diversity of clients and therapists, the exact implementation of feminist-informed music therapy varies between clinicians (Curtis, 2019). Curtis (2019) outlined the four principle goals of feminist-informed music therapy practice:

- (1) to increase understanding of the sociopolitical underpinnings of the lives and experiences of women, men, and nonbinary individuals;
- (2) to empower those who are marginalized;
- (3) to support individual recovery from the harms of oppression and

marginalization; and (4) to work toward personal change and societal change (pp. 141-142)

In acknowledging the all-encompassing damaging effects of patriarchal culture, feminist-informed music therapy holds utility for individuals regardless of gender identity or expression (Curtis, 2019).

### *Group Therapy*

Yalom's model of group therapy stands as the most comprehensive and influential in informing practice in a group setting (Yalom & Leszcz, 2005). The primary elements of the group therapy process are: "(1) installation of hope; (2) universality; (3) imparting information; (4) altruism; (5) recapitulation of the primary family group; (6) development of socialization; (7) imitative behavior; (8) interpersonal learning; (9) group cohesiveness; (10) catharsis; [and] (11) existential factors" (Yalom & Leszcz, 2005, p.1-2). Researchers found these components unique to the group setting and essential in the survivor's healing process. A group can serve to normalize a client's individual history and foster interactions with others who share similar experiences. Group members can demonstrate mastery as they assist each other and can develop meaningful relationships in the process. Roark & Sharah (1989) found that group cohesion generates a positive feedback loop: trust enables self-disclosure; self-disclosure fosters empathy and acceptance; and empathy and acceptance enhance trust (as cited in Yalom & Leszcz, 2005).

### *Trauma Theory*

In trauma theory, Herman (2015) integrated group therapy into a three-stage, trauma-specific recovery framework stating, "recovery...is based upon empowerment of the survivor and the creation of new connections" (p. 133). The three stages of recovery are divided into "establishment of safety...remembrance and mourning... [and] reconnection with ordinary life"

(Herman, 2015, p. 155). Establishment of safety begins with a feeling of control over the body and moves toward a sense of control over external factors. The stage of remembrance and mourning includes the most difficult therapeutic work and is accomplished when an individual “reclaims her own history and feels renewed hope and energy for engagement with life”

(Herman, 2015, p. 195). Individuals create connections with others and shift focus from the past to the future in the reconnection stage. It is during reconnection with ordinary life that group therapy can be most beneficial. In all stages, trauma theory includes holistic awareness of the individual and attention to the power differential between client and therapist. Successful recovery includes “a gradual shift from unpredictable danger to reliable safety, from dissociated trauma to acknowledged memory, and from stigmatized isolation to restored social connection” (Herman, 2015, p. 155).

### **Purpose of Research**

Survivors of sexual violence remain an underserved population in the music therapy community. In the most current national survey of members of the AMTA, 8.81% of respondents indicated that they work with abused/sexually abused clients (AMTA, 2018). “Campus sexual assault is a pervasive problem disrupting both the education and quality of life for all students” (Pugh & Becker, 2018, p. 16) and beginning college may constitute a significant life event or major stressor that can contribute to reawakening effects of traumatic experiences encountered earlier in life (Herman, 2015). In a survey of college students in the United States, 11.7% of students indicated an experience of “nonconsensual penetration or sexual touching by force or incapacitation” following enrollment (Cantor et al., 2017, p. 13). There was no found research studying the use of music therapy with college-aged victims of sexual violence.

The current study was influenced by the three primary factors determining the helpfulness of music therapy: (1) decrease in symptoms; (2) judgment by clients that the therapy is valuable; and (3) increased likeliness that clients will continue treatment (de l'Etoile, 2002). In order to investigate the comprehensive effects of music therapy interventions during an eight-week period, the clinician-researcher collected quantitative data measuring symptoms and qualitative data exploring participants' experiences. As such, the purpose of this study was to determine:

1. What symptom changes did participants experience as a result of an eight-week music therapy group?
2. How did participants perceive their experiences in an eight-week music therapy group?

## CHAPTER 3

### METHOD

#### **Study Design**

This mixed methods study was conducted using a one group pretest-posttest concurrent triangulation design in which quantitative and qualitative data were equal contributors (Creswell & Clark, 2007). The clinician-researcher collected quantitative data measuring participants' symptoms and qualitative data examining participants' experiences within the music therapy group through use of questionnaires and in-depth semi-structured interviews. Participants completed both quantitative and qualitative measures prior to beginning and within a week of completing eight 50-minute music therapy sessions. The eight sessions took place over the course of nine weeks due to university schedule. Only one participant attended the seventh session and declined an individual music therapy session, effectively reducing the length of the study to seven sessions. Using a mixed methods approach allowed for a comprehensive investigation, as the qualitative and quantitative data informed each other and worked in concert to address questions inaccessible by one solitary method.

#### **Setting**

This study was conducted at a midwestern university with a student population of approximately 33,000. In a survey of college students in the United States, 11.7% of students indicated an experience of “nonconsensual penetration or sexual touching by force or incapacitation” following enrollment (Cantor et al., 2017, p. 13). Rates among undergraduate students were 23.1% for women, 5.4% for men, and 24.1% for “transgender, genderqueer or gender nonconforming, questioning, or not listed” individuals (Cantor et al., 2017, p. 13). In

response to this need, the university gender resource center employs advocates who are trained to help students navigate the academic, legal, medical, and emotional aftermath of sexual violence. An advocate from the university gender resource center, a university-sanctioned employee who leads trainings for employees and volunteers, acted as a co-facilitator during weekly group sessions. The clinician-researcher completed a 40-hour sensitivity training to serve as a volunteer on the university hotline for survivors of sexual assault, dating violence, and stalking.

### **Participants**

The clinician-researcher set the sample size at eight participants to help mitigate the potential of possible attrition, to allow for larger variation in participant experiences prior to attending the group, and to create a desired balance of individual versus group focus. Advocates provided a flyer with further information regarding the specifics of the study to those who met the criteria and expressed interest. Due to time constraints and other unanticipated limitations, five participants were recruited for this study through staff referral and print advertisement at the university gender resource center. The five participants completed the pretest measures, group sessions, and weekly reflections; however, one participant did not complete the posttest measures. All participants were included in the data analysis. Figure 1 illustrates the flow of participants throughout the study.

Participants were current university students and at least 18 years old with a history of trauma resulting from sexual violence. Participants were not required to disclose the nature of their trauma to participate in the study but, in accordance with the delineation between Acute Stress Disorder and chronic symptomology by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), were excluded if the traumatic event had occurred less than a month prior to beginning weekly groups (American Psychiatric Association, 2013). To minimize interference

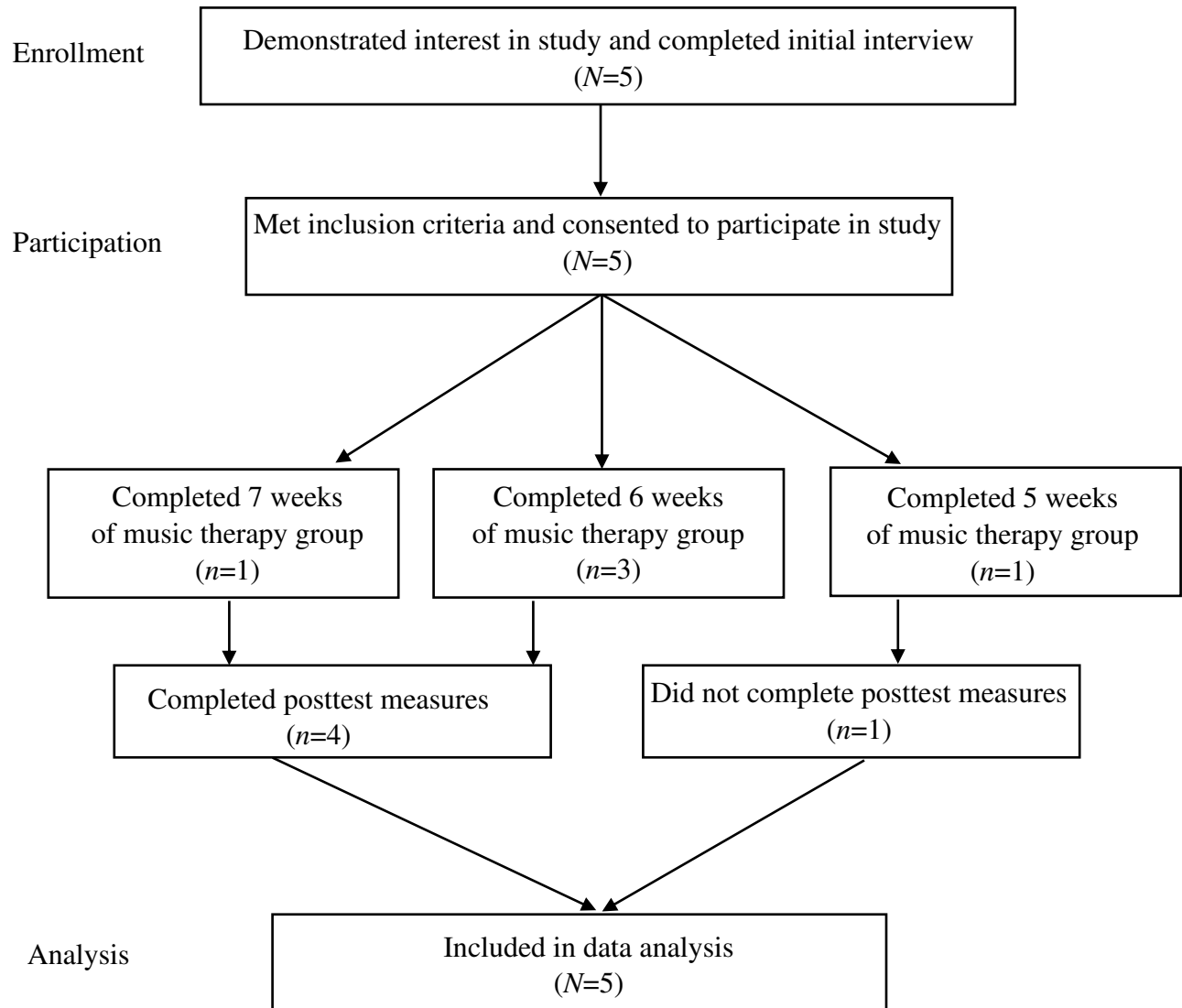


FIGURE 1.  
Flow of participants throughout study.

with ongoing treatment, participants were excluded if they were in active treatment for mental health hospitalizations occurring less than a month prior to beginning weekly groups. Participant profiles are presented in Table 1.

## **Data Collection**

### *Quantitative Data*

The Trauma Symptom Checklist (TSC-40) was administered pretest and posttest to assess severity of trauma-associated symptoms (Appendix A; Briere & Runtz, 1989). The TSC-40 is commonly used by researchers as a cost-effective and easily administered research tool to assess trauma symptomatology in adults (Rizeq et al., 2018). This checklist evaluates symptoms in the six major areas of dissociation, anxiety, depression, sexual abuse trauma index, sleep disturbance, and sexual problems through participant self-report. In 2017, The World Health Organization (WHO) revised the *International Classification of Diseases* (ICD-11) to differentiate between posttraumatic stress disorder (PTSD) and complex posttraumatic stress disorder (CPTSD); this supports the addition of a seventh subscale to the TCS-40 to incorporate interpersonal problems (Hyland et al., 2017).

In assessing the TSC-40 for reliability, Briere (1996) found a range of .89 to .91 in alpha values measuring reliability of the full TSC-40 and a range of .66 to .77 in alpha values measuring reliability of the six subsets. Additional researchers found predictive validity for a variety of traumatic experiences (Elliot & Briere, 1992), ability to distinguish between individuals with and without a history of abuse, and corroborated the reliability and internal consistency of the TSC-40 and subscales (Elliot & Briere, 1992; Neal & Nagle, 2013). A confirmatory factor analysis by Rizeq et al. (2018) supported the dimensional construction of the TSC-40 and use of seven subset analysis in future research.



Table 1

*Participant Profile*

<u>Pseudonym</u>	<u>Age</u>	<u>Race</u>	<u>Gender Identity</u>	<u>Sexuality</u>	<u>Nature of Traumatic Event(s)</u>	<u>Time Elapsed Since First Event</u>	<u>Self-Identified Goal Areas</u>	<u>Current Symptoms</u>
Charlie	26	White	Female	Bisexual	Repeated	Over 3 years	Community, coping skills	Panic attacks, flashbacks, nightmares
Emma	19	Hispanic	Female	Straight	Single, Repeated	Over 3 years	Coping, helping others	Anxiety, panic attacks, physical symptoms
Sioban	27	Asian	Female	Straight/Bi-curious	Repeated	1-3 years	Let out fears	Undisclosed
Georgina	22	White	Female	Queer	Repeated	Undisclosed	Comfort engaging sexually, self-care, decrease triggers	Anxiety, dissociation, anger
Evelyn	22	Filipino/Hawaiian	Female	Heterosexual	Repeated	10-12 months	Community	Overwhelming emotion, isolation, triggers, physical symptoms

### *Qualitative Data*

Prior to beginning the group, participants completed an intake interview (Appendix B) and pretest questionnaire (Appendix C) gathering demographic information, current applicable diagnoses and treatments, musical experience/preference, and goals. After each music therapy session, participants completed a worksheet reflecting on what stood out most from the session, current emotional state, and what they would like to address in subsequent sessions. Following the seven sessions, four of the five participants completed a posttest questionnaire and an in-depth semi-structured interview to evaluate perceived outcomes (Appendix D). The fifth participant did not attend the arranged interview and could not be reached via phone or email to reschedule. Both pretest and posttest interviews were conducted by the clinician-researcher and group co-facilitator. The dual role of interventionist and interviewer was supported by Yalom and Leszcz (2005) who stated, “to the degree that the therapist is able to suppress personal bias and avoid influencing the client’s responses, he or she becomes the ideal questioner: the therapist is trusted and understands more than anyone else the inner world of the client” (p.4).

### **Procedure**

Informed consent was obtained during the individual intake interview, at which point participants completed pretest measures. Participants engaged in seven 50-minute music therapy sessions over the course of nine weeks. The group was co-led by the clinician-researcher and co-facilitator to ensure optimal support for each participant. Herman (2015) recommended shared leadership in trauma group therapy. An interdisciplinary team approach to group music therapy has been demonstrated beneficial for both clients and therapists (Curtis & Harrison, 2006; Eyre & Lee, 2015).

Researchers found varied music therapy interventions equally effective in meeting client goals and objectives in mental health settings (Silverman, 2015). In a direct comparison of interventions, researchers found equivocal positive emotional change with songwriting and lyric analysis/song discussion (Jones, 2005), and a parallel decrease in negative emotion following sessions of movement to music and rhythmic activities (Cevasco et al., 2005). Clinicians used songwriting to express and explore thoughts and feelings, boost self-confidence, gain insight, reduce anxiety, and develop coping strategies (Baker et al., 2008). When comparing songwriting to improvisation, researchers found that the looser structure of improvisation elicited more personal narratives, encouraged group collaboration (Eyre & Lee, 2015), and brought unconscious feeling into consciousness (Amir, 2004). Researchers used therapeutic drumming as another means of expression and found that combining music and movement helped release bodily tension (Borcson, 2015), increase awareness of bodily sensations, and approach traumatic memories in a safe environment (Bensimon et al., 2008).

In the current study, the clinician-researcher utilized a mix of pre-selected songs chosen by clinician-researcher and participants. The clinician-researcher provided music live via piano, guitar, and/or voice or via recording. In active music-making interventions, participants chose between instruments including tubanos, djembes, ashikos, bongos, xylophones, tambourines, rain sticks, ocean drums, vibraslaps, wood blocks, castanets, piano, and Hapi drum. Within the session, therapeutic interventions focused on identification and expression of emotions to heighten self-awareness, increase relaxation, foster socialization, increase self-esteem, and generate coping skills. Interventions included songwriting, instrumental improvisation, therapeutic drumming, song discussion (lyric analysis), music listening, and vocal and instrumental musical re-creation. Initial sessions focused primarily on development of group

cohesion and establishment of safety while later sessions encouraged enhanced use of creativity for an in-depth exploration of emotion. An outline of the music therapy sessions is presented in Table 2.

Each session began with vocal re-creation of “Good as Hell” by Lizzo accompanied by clinician-researcher on piano. The clinician-researcher modified the lyrics to encourage participant self-report of current emotional states. In songwriting interventions, participants modified lyrics and musical elements of existing songs to personalize or change the song’s message, or generated novel lyrics when provided with a chord progression and song topic. The clinician-researcher guided improvisations through provision of concrete or emotional referents to musically experiment, reflect, and express. In therapeutic drumming interventions, participants played percussive instruments as a full group or as a featured soloist, interacted with each other through musical call and response, or improvised. In song discussion, participants explored song elements including lyrics, musical features, and social context. In musical re-creation interventions, participants selected instruments, sang, and worked together to play a pre-composed song. After musical interventions, the clinician-researcher and co-facilitator led participants in verbal processing to draw attention to both somatic and emotional responses. Each session concluded with an ending relaxation intervention to provide session closure.

### **Data Analysis**

The clinician-researcher visually analyzed quantitative data from the TSC-40 in the full-scale measure and by each of the seven subsets. The small sample size did not allow for the manipulation of data to test for statistical significance. Participant interviews were transcribed before being taken through a process of open coding, axial coding, and selective coding to form a conditional matrix (Strauss & Corbin, 1998). These coding processes required that the data be

Table 2

*Music Therapy Session Outline*

<u>Week</u>	<u>Primary Session Focus</u>	<u>Session Summary</u>
1	Establishment of safety and sense of community	Creation of group guidelines; welcome vocal recreation (“Good as Hell” by Lizzo); therapeutic drumming; vocal and instrumental recreation (“Shake it Out” by Florence + The Machine); closing relaxation: musical meditation with script and Hapi drum
2	Establishment of safety and sense of community, Coping Skills	Individual song share; discussion: music as a coping skill; closing relaxation: musical meditation with script and Hapi drum
3	Emotional identification and expression	Song discussion (“I am Not a Robot” by Marina and the Diamonds); songwriting using lyric substitution; toning with Hapi drum
4	Emotional identification and expression	Song share of lyrics written in session 3; therapeutic drumming: “Weather Report”; blues composition and song share; closing relaxation: toning with Hapi drum
5	In-depth emotional exploration	Song recreation and discussion (“Be OK” by Ingrid Michaelson); songwriting: past-how trauma first affected you; closing relaxation: Hapi drum improvisation
6	In-depth emotional expression	Song discussion (“Praying” by Kesha); therapeutic drumming: “Weather Report”; songwriting: present-how trauma currently affects you; closing relaxation: Hapi drum improvisation
7	Coping skills, Termination	Group was not held due to lack of participant attendance
8	Self-Reflection, Termination	Therapeutic drumming: group improvisation, “Weather Report,” group improvisation: mood modulation; verbal processing: songwriting process; session closing: presentation of group playlist; closing relaxation: improvisation using Hapi drum

broken down into base units and classified before examining relationships between classifications and forming theories. Using grounded theory methods, the clinician-researcher alternated between coding types, refined categories to identify themes, and generated theory throughout the coding process. The clinician-researcher then employed triangulation, combining and comparing the data from all quantitative and qualitative measures to generate a summative theory of participants' experiences.

## CHAPTER 4

### RESULTS

#### **Quantitative Data**

Pretest and posttest TSC-40 full scale and subset scores are presented in Table 3 with lower scores indicating less severity of symptoms. All participants who completed both pretest and posttest measures ( $n=4$ ) demonstrated a decrease in sleep disturbance. Three participants displayed a decrease in full scale measures and subsets of dissociation, depression, and sexual problems. Two participants demonstrated a decrease in interpersonal problems while two participants displayed no change. In examination of the anxiety and sexual abuse trauma index subsets, two participants showed no change, one participant showed a decrease, and one participant showed an increase in associated symptoms. When examined as a group ( $n=4$ ), overall improvement was greatest in the subset of sleep disturbance, followed by depression and dissociation subsets. Participants ( $n=4$ ) demonstrated improvement in full scale and all subset measures except sexual abuse trauma index which showed no change.

Additional quantitative data were collected in posttest semi-structured participant interviews. Here, participants rated music therapy interventions on a 1-10 Likert-type scale to identify and compare perceived comfort and perceived value. A visual analysis of these data is presented in Table 4. When compared as a group, participants identified the greatest sense of comfort and greatest sense of value in group drumming music therapy interventions. Participants rated the lowest sense of comfort in trauma songwriting and lowest sense of value in song discussion. Participants identified a higher sense of perceived value than perceived comfort in all music therapy interventions except blues songwriting in which participants rated comfort and value equally.

Table 3

*Pretest and Posttest TSC-40 and Subset Scores*

<u>Subset</u>	<u>Participant</u>	<u>Pretest</u>	<u>Posttest</u>	<u>Change from Pretest to Posttest</u>
	Charlie			
Full Scale		1.55	1.13	<b>-0.42</b>
Dissociation		1.20	0.60	<b>-0.60</b>
Anxiety		1.63	1.25	<b>-0.38</b>
Depression		1.86	1.14	<b>-0.72</b>
SATI		1.67	1.67	0
Sleep Disturbance		2.00	1.50	<b>-0.50</b>
Sexual Problems		1.00	0.63	<b>-0.37</b>
Interpersonal Problems		1.50	1.50	0
	Emma			
Full Scale		1.95	2.15	+0.20
Dissociation		1.80	1.70	<b>-0.10</b>
Anxiety		2.00	2.06	+0.06
Depression		2.50	2.57	+0.07
SATI		2.17	2.67	+0.50
Sleep Disturbance		2.83	2.67	<b>-0.16</b>
Sexual Problems		0.38	1.19	+0.81
Interpersonal Problems		1.63	1.50	<b>-0.13</b>
	Sioban			
Full Scale		1.01	0.60	<b>-0.41</b>
Dissociation		2.00	1.00	<b>-1.00</b>
Anxiety		0.38	0.38	0
Depression		1.00	0.57	<b>-0.43</b>
SATI		0.67	0.67	0
Sleep Disturbance		1.17	0.17	<b>-1.00</b>
Sexual Problems		1.25	0.50	<b>-0.75</b>
Interpersonal Problems		0.75	0.75	0
	Georgina			
Full Scale		0.78	0.43	<b>-0.35</b>
Dissociation		0.60	0.80	+0.20
Anxiety		0.38	0.38	0
Depression		0.71	0.14	<b>-0.57</b>
SATI		2.17	1.67	<b>-1.50</b>
Sleep Disturbance		1.00	0.17	<b>-0.83</b>
Sexual Problems		0.94	0.50	<b>-0.44</b>
Interpersonal Problems		0.75	0.25	<b>-0.50</b>
	Evelyn			
Full Scale		1.95	Data unavailable	Data unavailable
Dissociation		2.20		
Anxiety		1.63		
Depression		2.00		
SATI		2.00		
Sleep Disturbance		3.00		
Sexual Problems		1.25		
Interpersonal Problems		2.25		

*Note.* Positive outcomes, indicated by a decrease in scores from pretest to posttest, are shown in bold. Participant Evelyn did not complete posttest measures.



Table 4				
<i>Visual Analysis of Perceived Comfort/Value of Music Therapy Intervention</i>				
<u>Music Therapy Intervention</u>	<u>Charlie</u>	<u>Emma</u>	<u>Sioban</u>	<u>Georgina</u>
	<u>Comfort</u>	<u>Comfort</u>	<u>Comfort</u>	<u>Comfort</u>
Group Drumming	10	6.5	10	7.5
Song Discussion	7	4	7	6
Writing Song Lyrics	5	7	7	3
Blues Songwriting	6	10	N/A	N/A
Trauma Songwriting	6	6	5	4
<u>Most comfortable</u>	Song Sharing	Blues Songwriting	Drumming	Drumming
	<u>Value</u>	<u>Value</u>	<u>Value</u>	<u>Value</u>
Group Drumming	8	8.5	10	9
Song Discussion	6	8.5	6	4
Writing Song Lyrics	8	7.5	6	6
Blues Songwriting	8	8	N/A	N/A
Trauma Songwriting	8	7	5	7
<u>Most valuable</u>	Drumming	“Weather Report”	Song Sharing	Drumming, Trauma Songwriting

*Note.* Participants self-reported comfort and value on a Likert-type scale of 1-10 as experienced at the end of the eight-week music therapy program. Participants Sioban and Georgina did not attend the blues songwriting music therapy session.

## Qualitative Data

Analysis of qualitative data in the form of participant weekly reflections ( $N=5$ ), clinician-researcher journal, and posttest in-depth semi-structured participant interviews ( $n=4$ ) revealed the eight coded subthemes of mood modulation, drumming, sense of community, emotional processing, vulnerability/opening, music therapy process, increased comfort, and coping skills. Select participant quotes corresponding to coded subthemes are presented in Table 5.

### *Mood Modulation*

All participants identified instances where mood/affect changed as a result of the music therapy session. Participants ( $N=5$ ) reported music therapy interventions including singing, toning, and drumming to generate positive feelings such as “peace,” “calm,” and “happiness.” In

Table 5
<i>Select Participant Quotes Corresponding to Coded Themes</i>
<b>Mood Modulation (Coded 36 times)</b>
<ul style="list-style-type: none"> <li>• “I do have to admit that I always left in a good mood...even when I really didn’t want to go...I always left in a decent good mood or good mood.” (Charlie)</li> </ul>
<ul style="list-style-type: none"> <li>• “I feel a lot better. That was fun. I might do that in my free time.” (Emma)</li> </ul>
<ul style="list-style-type: none"> <li>• “Singing blues was cool. [It] made me happy because [my] day was terrible.” (Evelyn)</li> </ul>
<ul style="list-style-type: none"> <li>• “I didn’t enjoy the songwriting, but I felt like I was good at the beginning and then I felt really heavy at the end.” (Georgina)</li> </ul>
<b>Drumming (Coded 30 times)</b>
<ul style="list-style-type: none"> <li>• “[I] really like playing in a group...[I’m] sad this is ending.” (Evelyn)</li> </ul>
<ul style="list-style-type: none"> <li>• “I liked the Hapi drum...I don’t know, it’s magical....it made me so happy listening to it.” (Sioban)</li> </ul>
<ul style="list-style-type: none"> <li>• “I was trying to pinpoint what made me in a good mood...maybe [it was] the drumming.” (Charlie)</li> </ul>
<b>Sense of Community (Coded 27 times)</b>
<ul style="list-style-type: none"> <li>• “What stood out to me was as a group everyone did some activity together.” (Sioban)</li> </ul>
<ul style="list-style-type: none"> <li>• “I thought it was interesting...how feelings that they had were also feelings that I’ve had...it’s just we were on the same page with things.” (Charlie)</li> </ul>
<ul style="list-style-type: none"> <li>• “I feel like everybody just came out of that with super good energy. I think we just connected all of our experiences and made a really cool tune.” (Emma)</li> </ul>
<ul style="list-style-type: none"> <li>• “Connecting through certain songs and stuff made it easier to connect in a way...I really wanted to get to know them more.” (Georgina)</li> </ul>
<b>Vulnerability/Opening (Coded 23 times)</b>
<ul style="list-style-type: none"> <li>• “[In] sharing music, the vulnerability was helpful.” (Georgina)</li> </ul>
<ul style="list-style-type: none"> <li>• “I think talking about the lyrics...really opened up a window to talk about certain things.” (Emma)</li> </ul>
<ul style="list-style-type: none"> <li>• “I think most of it was pretty outside of all our comfort zones and it was a time to be pretty vulnerable.” (Emma)</li> </ul>
<b>Emotional Processing (Coded 21 times)</b>
<ul style="list-style-type: none"> <li>• “[The music therapy experience] was less direct. [It] got you to talk about your feelings without asking, ‘how does that make you feel?’.” (Charlie)</li> </ul>
<ul style="list-style-type: none"> <li>• “It was cool to think about an emotion and work through it via music. I thought that was really interesting and then resolve that emotion and get to an end goal.” (Emma)</li> </ul>
<b>Music Therapy Process (Coded 11 times)</b>
<ul style="list-style-type: none"> <li>• “It was pretty powerful. It was hard to tie back to my trauma though. How do I apply?” (Emma)</li> </ul>
<ul style="list-style-type: none"> <li>• “[I] was not sure how it works...I would like to understand how it consciously works.” (Sioban)</li> </ul>
<ul style="list-style-type: none"> <li>• “What can you take from music therapy to help you calm down when that happens?” (Emma)</li> </ul>
<b>Increased Comfort (Coded 10 times)</b>
<ul style="list-style-type: none"> <li>• “Pretty much I was comfortable towards the end. It didn’t feel like I had to be perfect or I should know things. It was just okay to do whatever you want. That comfort was there.” (Sioban)</li> </ul>
<ul style="list-style-type: none"> <li>• “In the beginning I was very uncomfortable with [group drumming] and then by the end I got a lot more comfortable with it.” (Georgina)</li> </ul>
<b>Coping Skills (Coded 10 times)</b>
<ul style="list-style-type: none"> <li>• “Going over the list of coping reasons gave a different perspective of how music can be used.” (Sioban)</li> </ul>
<ul style="list-style-type: none"> <li>• “It was interesting how you could do things through music like...coping mechanisms...finding new ones.” (Emma)</li> </ul>

posttest interviews, four participants contributed positive modulation of affective state to a specific therapeutic drumming intervention. Conversely, three participants reported instances of negative modulation in affective state. These participants identified emotions including “upset,” “heavy,” “tired,” and “anxious” after a multi-session and trauma-specific songwriting intervention. In other examples of mood modulation cited by participants ( $N=5$ ), a specific intervention or clear cause could not be identified.

### *Drumming*

Participants ( $N=5$ ) identified the Hapi drum, a steel drum which creates the tones of the pentatonic scale when struck with mallet or fingers, as a prominent session element and associated the instrument with a sense of calm. Participants ( $n=4$ ) identified group drumming as the music therapy intervention that stood out most throughout the sessions and that brought the most comfort and value to the group. Participants ( $n=4$ ) found a specific drumming intervention, the “Weather Report,” helpful in grounding in the present, bringing some “quick peace,” or unhelpful.

### *Sense of Community*

Participants ( $N=5$ ) acknowledged many session elements that helped build community including shared vulnerability, personal disclosure (i.e., sharing songs, experiences, and feelings), and the knowledge of similar shared experiences of sexual violence. Four participants reported a higher sense of community as they shared musical experiences and feelings with each other, especially when they found commonalities. Two participants reported a deep sense of connection to other group members, while two participants cited personality differences and inadequate time as barriers in building connection.

### *Vulnerability/Opening*

Participants ( $N=5$ ) found that the overall music therapy experience provided opportunities to practice vulnerability. Some participants ( $n=3$ ) identified blockages surrounding creativity and a desire to do things well/correctly; this may have contributed to feeling exposed. As sessions progressed, participants ( $N=5$ ) began to disclose personal information including preferred music, emotions, experience with trauma, and personal coping skills. Opening up to each other via disclosure of personal experience/feelings was cited by participants ( $n=4$ ) as a key factor in building community.

### *Emotional Processing*

Although emotional processing arose as a coded subtheme, participants ( $n=4$ ) had varied experiences of emotional processing through musical and verbal means. Two participants reported that experiencing music on its own allowed for emotional processing, specifically citing the song share intervention. Three participants identified the occurrence of emotional processing primarily by verbal means. Charlie and Georgina identified song discussion as an indirect and accessible gateway into verbal emotional processing; Charlie appreciated the indirect nature while Georgina identified preference for a more direct discussion. Two participants reported inadequate session time dedicated to processing the intense emotions that arose and an overall lack of focus on processing trauma-specific emotions throughout the course of the group, while two participants reported overall adequate session time devoted to emotional processing.

### *Music Therapy Process*

Participants ( $N=5$ ) had limited musical backgrounds, no prior music therapy experience, and unclear expectations for the music therapy group. Participants ( $n=3$ ) identified curiosity about the music therapy process, questioned working mechanisms, and wondered how to

generalize interventions outside of the music therapy session. Participants ( $n=2$ ) found that music therapy interventions did not always have a trauma-specific focus and requested more connection between music therapy and trauma. Additionally, one participant desired specific music therapy interventions to elicit specific nonmusical outcomes.

### *Increased Comfort*

Participants ( $n=4$ ) expressed a sense of discomfort at the beginning of the music therapy group and self-reported increased comfort with group members and the music therapy process as the weeks progressed. Participants ( $n=4$ ) identified varying degrees of comfort during specific music therapy interventions, with the greatest overall sense of comfort in group drumming. These same participants identified the lowest overall sense of comfort in trauma songwriting.

### *Coping Skills*

Participants ( $n=3$ ) cited growth of musical coping skills throughout the eight-week music therapy program. Sioban attributed increased control of her emotions to the week two discussion of music as a coping skill. Participants ( $n=2$ ) reported increased mindfulness in their musical selection outside of session and identified instances of choosing specific music to compliment/modulate a current affective state. During sessions, participants ( $N=5$ ) disclosed individual experiences in using music listening as a trauma-specific coping skill. Evelyn stated that listening to a specific album helped her heal in the immediate aftermath of sexual violence. At the time of the group, she could not listen to the album without reverting to a similar negative emotional state. Participants ( $n=4$ ) cited that these disclosures helped to promote a sense of community and illuminated new musical coping skills.

### *Larger Themes Generated from Subthemes*

Qualitative data indicate the interconnectedness of the eight coded subthemes in generating the summative group music therapy experience. As presented in Figure 2, the subthemes integrate to reveal the four broader themes of music, exploration and expression of trauma-associated feelings, formation of trust, and perceived positive change. Within the music therapy process, participants exercised vulnerability. This opening up enhanced individual comfort and sense of community as trust was formed over time. With a foundation of trust, participants were able to explore and express emotions to modulate mood. Participants used these techniques as coping skills outside of the music therapy session. With increased awareness of utilization of music to modulate mood and increased musical coping skills, participants perceived positive change both in and outside of the music therapy group.

### **Integration of Quantitative and Qualitative Data**

#### *Change in Symptoms*

Data triangulation was achieved through a combination of quantitative TSC-40 and Likert-type scale data; and qualitative questionnaires, semi-structured interviews, post-session reflections, and clinician-researcher journal. The quantitative and qualitative data supported each other in measuring participant symptom change. Three participants experienced an overall decrease in symptoms while one participant experienced an overall increase in symptoms. Sioban attributed a decrease in symptoms to gaining more control of emotion. Emma attributed an increase in symptoms to repression of trauma-associated symptoms prior to attending group and increased life stressors as the group progressed. These two participant experiences support symptom change as part of the coping skills and emotional processing subthemes. Remaining participants ( $n=2$ ) did not disclose a self-perceived reason for change in symptoms.

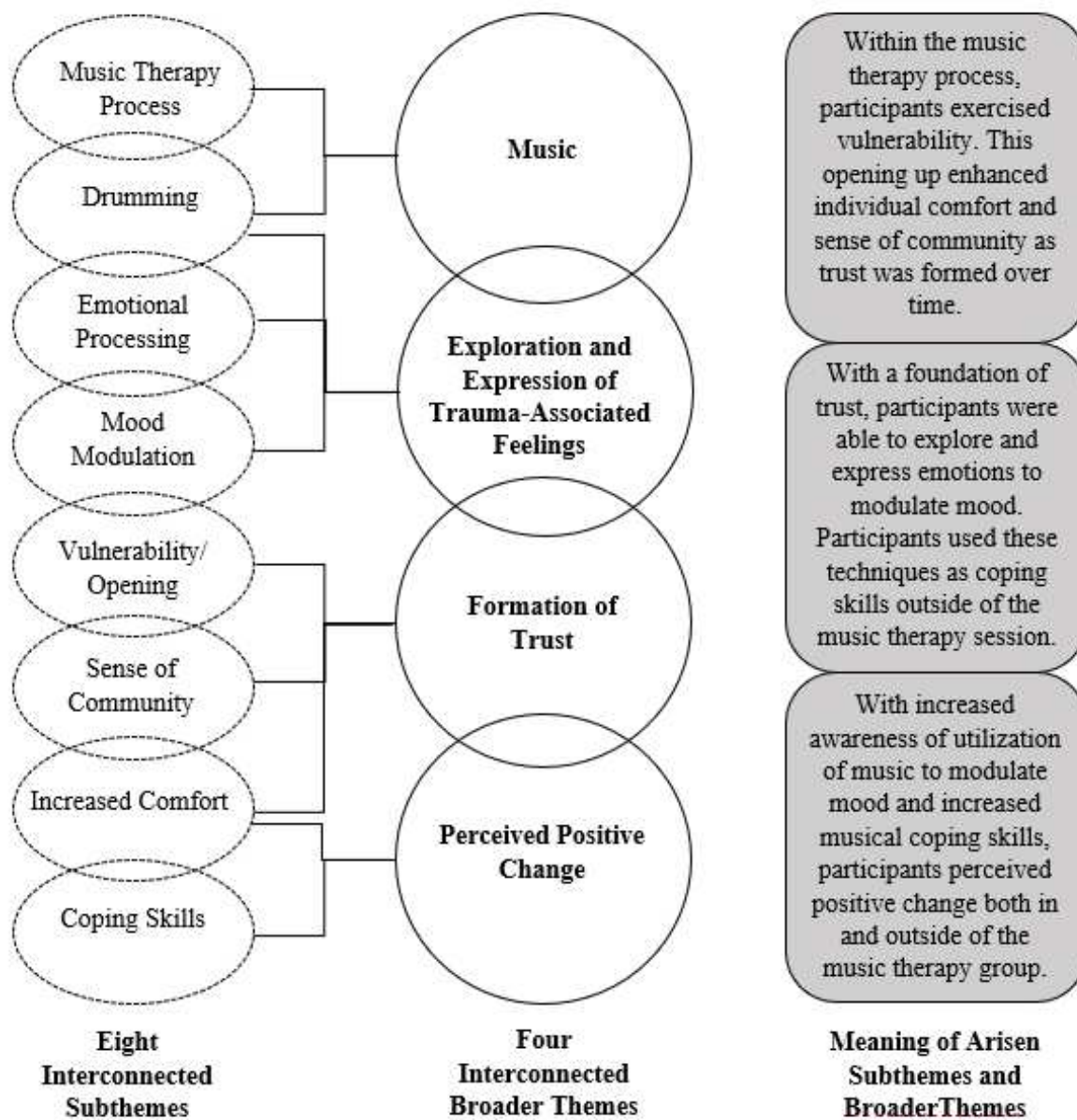


FIGURE 2.  
Relationship between eight coded subthemes and identification of broader themes

### *Participant Perceptions*

Regardless of symptom change, participants ( $N=5$ ) perceived the music therapy group as a positive experience. In weekly reflections, participants ( $N=5$ ) described notable moments from sessions as “fun,” “amazing,” “cool,” and “wonderful.” In examining perceptions of specific music therapy interventions, participants ( $n=4$ ) assigned different value to each intervention; however, drumming remained the most frequently cited intervention. The high occurrence of drumming (coded 30 times in analysis of qualitative data) corroborated quantitative data where participants ranked drumming high in perceived comfort and value. Participant responses to select posttest questionnaire questions are presented in Table 6.



Table 6

*Participant Perceptions of Music Therapy Experience*

<u>Question</u>	<u>Charlie</u>	<u>Emma</u>	<u>Sioban</u>	<u>Georgina</u>
What did you like about the music therapy experience?	"The people. It was less direct. Got you to talk about your feelings without asking, 'how does that make you feel?' "	"I enjoyed finding new coping mechanisms and also connecting with others through this vulnerable experience."	"Everything."	"Being."
What did you dislike about the music therapy experience?	"Honestly, nothing."	"The sessions were very short. I wish they were longer. Also, I feel like I didn't get a lot of closure and that it reopened some wounds."	"Was not sure how it works."	"Writing about trauma even though it was helpful. I wish we processed through more of these feelings."
What did you gain, if anything, from the music therapy experience?	"Comradery. Not that I thought I was alone, but it was nice to have evidence that I wasn't alone."	"I enjoyed finding new coping mechanisms and also connecting with others through this vulnerable experience."	"Control. More control of my emotions and more choice to change my emotions."	"I gained an understanding of how much I still need to work through."
What would you change, if anything, about the music therapy experience?	[blank]	"Sessions would be long and more productive as far as growth from trauma goes."	"Like to understand how it consciously works."	"More time to connect outside of music with members or finding more ways to talk through trauma experience in the music."

## CHAPTER 5

### DISCUSSION

The purpose of this study was to examine participants' change in symptoms and explore participants' perceptions of their experience in an eight-week music therapy group focusing on recovery from trauma as a result of sexual violence. Overall, participants reported a reduction in symptoms and reported positive perceptions of the music therapy experience. Participants derived greater personal value from different music therapy experiences, indicating their different group expectations, different musical backgrounds, and different individual needs in trauma recovery. These data suggest that music therapy interventions and group nature of treatment worked in conjunction to effect change, as sense of community was a theme that arose in participant interviews ( $n=4$ ) and clinician-researcher journal. This corroborates what is already known in trauma recovery: building relationships with self and others acts as a hallmark of treatment (Herman, 2015).

#### **What symptom changes did participants experience as a result of an eight-week music therapy group?**

Although participant symptoms changed from pretest to posttest, symptom change was not a theme that arose in the analysis of qualitative data. This may indicate that participants do not measure healing solely by change in symptoms. Through participation in the music therapy group, individuals gained increased musical coping skills which may have helped manage acute symptoms. This theory was further corroborated by participants citing use of music as a coping skill in modulating emotion outside of the music therapy session. The differences in symptom presentation between individuals in the current study do not support a correlation between

participant symptoms and age, nature of traumatic event, or time elapsed since first traumatic event. This aligns with previous research outlining the myriad factors that influence presentation of trauma symptomology following episodes of sexual violence and the subsequent manifestations of these symptoms (Herman, 2015; van der Kolk, 2014).

Participant Emma experienced an overall increase in symptoms as measured by the TSC-40 and self-report on qualitative posttest measures. In the posttest interview, Emma stated that her “life started to slip away” prior to beginning the music therapy group. She believed that revisiting trauma-associated feelings on a weekly basis combined with additional life stressors caused negative feelings and symptoms to resurface. Herman (2015) described this experience and stated, “new conflicts and challenges at each new stage of the lifecycle will inevitably reawaken the trauma and bring some new aspect of the experience to light” (p. 195). When asked how the music therapy group could have been improved, Emma requested an increased number of sessions that were longer than 50 minutes in length. This suggests that, while the music therapy group may have contributed to uncovering symptoms, a more intensive and/or frequent music therapy group may have provided increased strategies for symptom management.

Occurrences of acute symptoms arose during the eight-week treatment period. Evelyn experienced suicidal ideation and was evaluated at the university crisis counseling center prior to attending the music therapy group in week four. The clinician-researcher noted in her journal that Evelyn appeared distraught when she entered the room with negative facial affect, decreased verbalizations, and shaky speaking voice. After engaging in a group improvisation on the Hapi drum, she displayed a near immediate change in affect as she sat up straighter, smiled, and laughed. Evelyn was hospitalized later that week but returned to music therapy in week five. Evelyn’s attendance in week four illustrates her perceived value of the music therapy experience

in managing acute symptoms. This was later corroborated by her statement to the co-facilitator that the group helped her “make it through the day.” Evelyn’s experience illustrates the varying presentation of trauma symptoms, the perceived value of music therapy intervention, and the potential of music therapy intervention in addressing and abating symptoms.

This study, which relied on the integration of various music therapy methods, supported the findings of previous researchers in the positive symptom benefits of music therapy for survivors of sexual violence. Participants’ improvement in sleep, as shown by a reduction in TSC-40 sleep subscale, corroborated positive results yielded by Hernández-Ruiz (2005) in working with female survivors of intimate partner violence (IPV). Reduction in depression and anxiety subscales supported results of de Juan (2016) and Teague et al. (2006) where researchers found decreased depression and anxiety among female victims of domestic violence and IPV.

### **How did participants perceive their experiences in an eight-week music therapy group?**

Participants reported overall positive perceptions of their music therapy group experiences. Participants stated that they gained “comradery,” increased coping mechanisms, increased control, and increased self-awareness through participation in the music therapy group. Participants often requested more specific information regarding mechanisms of change and direct instruction to better implement interventions outside of session. Some participants desired a specific music therapy intervention to elicit a specific desired outcome. Other participants understood that music therapy intervention is personalized, meaning a specific music therapy intervention may not elicit the same outcome for each person or even for the same individual at different times. Participant perceptions of two specific music therapy interventions stood out prominently in the data analysis: mood modulating drumming and trauma songwriting.

Participants perceived drumming interventions most positively as evidenced by self-reported value and the emergence of drumming as a coded subtheme. One specific intervention cited by participants and clinician-researcher was a mood modulating drumming intervention. In this intervention, participants first identified negative emotions that occur in daily life and potential positive counterparts. Participants then improvised for three minutes as a group: one minute playing the negative emotion, one minute transmuting the negative emotion into the positive emotion, and a final minute playing the positive emotion. The group chose the themes of isolated → community, lost → knowing, and angry → powerful. Participants imaged the words as they played and commented on feeling a shift in internal and external energy during the exercise. This powerful intervention required improvisation on an extramusical referent which has been linked to increased depth of emotional awareness (Legge, 2015). Charlie stated that this intervention was “the best one yet” on her post-session reflection and participants later cited this specific intervention as helpful in controlling emotions outside of the music therapy session.

Another specific example of mood modulation occurred in weeks five and six during a trauma-specific songwriting intervention. Here, participants engaged in self-reflection directly related to their experiences of sexual violence. Using songwriting and the chord structure provided by Borczon (2015), participants worked as a group to identify how they were first affected by trauma (Stanza 1) and their present experiences due to the traumatic event (Stanza 2).

*First there was a before, then an after nobody wished for  
Trying to make things work, feeling angry, small and alone  
There was betrayal, distrust, shame until I was numb  
Never felt so powerless, who could I trust?*

*Thinking about today, how things have changed  
Friends are enemies, I'm finding new connections  
Feeling on the edge, fired up/tired out, self-confidence/self-doubt  
It's all confusing, I just want to feel fine*

Participant lack of attendance in week seven prevented the group from creating a third stanza containing hopes for the future. Additionally, the 50-minute session allowed for the composition of one stanza each week, requiring that the intervention carry over into subsequent weeks. As such, it is possible that participants did not experience an adequate sense of closure in the intervention and the session. In processing the songwriting experience, participants identified difficulty in revisiting intense emotions related directly to their experiences of sexual violence. On weekly reflection sheets filled out after the sessions, participants identified feeling negative emotions including heaviness, flashbacks, and anxiety after engaging in these songwriting-focused sessions. Participants' willingness to engage in the intervention despite these intense negative feelings may be a testament to the sense of safety they felt in the space and with each other.

The music therapy intervention was effective in eliciting trauma-associated emotions from participants, but time limitations and depth of feeling may not have allowed participants to return to baseline before leaving the music therapy space. Even though negative feelings arose, participants found the intervention helpful in cultivating self-awareness of the current impact of past experiences of sexual violence. The intervention led to disclosure of trauma-specific feelings and emotions, which participants found helpful in increasing interpersonal bonding and strengthening community. Participants requested that more session time be dedicated to these feelings, indicating the perception that the music therapy intervention was helpful in addressing treatment needs.

Additional observations by the clinician-researcher further support positive participant perceptions of the music therapy group. During each session, participants were observed smiling and laughing at varying points, regardless of session focus. This occurred primarily during active

music-making, and most often during therapeutic drumming interventions. The clinician-researcher also observed that participants opened up to each other musically before opening up to each other emotionally. A specific example of this occurred in a therapeutic drumming intervention in the first session. Prior to the intervention, group members appeared hesitant to answer questions posed by clinician-researcher and co-facilitator as evidenced by responding in short phrases without furthering conversation. The clinician-researcher introduced the intervention and participants began to play drums, focusing attention on the drum in front of them or looking to the clinician-researcher for guidance. They gradually began to expand their focus outward by looking at each other, making eye contact, and modulating their rhythmic patterns based on what other group members were playing. Afterwards, participants appeared more at ease as they responded to questions in full sentences, shared personal experiences, and furthered conversation to include other group members.

Participant experiences and perceptions of music therapy intervention in the current study supported past music therapy research. The coded subtheme of sense of community in this study backed findings of York and Curtis (2015) who found that songwriting and relaxation interventions fostered interpersonal connection within a group setting. Participants reported improvisational therapeutic drumming interventions as beneficial, supporting research with survivors of sexual abuse/trauma by Amir (2004), Volkman (1993), and Borczon (2015). Overall, the study confirmed Curtis's (2019) statement: "Music and music therapy hold incredible potential as catalysts for change" (p. 134).

### **Limitations and Recommendations**

The current study was limited by time constraints. Participants stated that the 50-minute sessions were often too short and did not allow for proper closure. This had a particularly

negative effect when sessions targeted trauma processing. Participants experienced negative emotions and symptoms that may have persisted after leaving the session. Additionally, longer sessions would have allowed for more time dedicated to self-disclosure; participants believed this would have fostered deeper interpersonal connections. A two-hour long session model, as used by other researchers, may have circumvented these issues (Curtis & Harrison, 2006; Curtis, 2019; de Juan, 2016). The eight-week group framework, which allowed for only two sessions allocated to in-depth exploration of trauma, was also deemed insufficient by participants and clinician-researcher. Herman (2015) found twelve weeks inadequate in making significant progress, while de Juan (2016) and Curtis and Harrison (2006) experienced results with respective 13- and 14-week programs. It is therefore recommended that individual sessions are longer than 50 minutes in length and that the music therapy sessions number greater than twelve. It is also possible that survivors of sexual violence may benefit from an ongoing drop-in group; however, inconsistent membership may act as an additional limitation in building a foundation of trust and sense of community.

Small sample size, lack of consistent participant attendance, and demands as university students acted as additional limitations. The small sample size did not allow for manipulation of data to test for statistical significance and all participants identified as female, leaving a potential lack of knowledge of the effects of group music therapy with survivors of differing gender identities. Participant lack of attendance may be attributed to the intense nature of trauma processing or educational, social, and vocational demands of university attendance. Only one participant attended all sessions and no additional participants attended group in week seven. Week seven served as the third week of exploration of trauma-specific emotion via songwriting. Participant-cited reasons for unattendance included upcoming exams, increased volume of



schoolwork, and no reason provided. Additionally, the study took place during the school semester and ended one week prior to final exams. Participants were under increasing amounts of stress as the university semester progressed, making it difficult to gauge the full impact of the music therapy group on participant symptoms.

To better identify the effects of music therapy intervention, it is proposed that the music therapy group be held during summer session or early in the semester to avoid overlap with final exam preparation. To best suit the needs of college-aged survivors of sexual violence, it is recommended that the group be available to members throughout the semester at times of increased stress. Programs should be designed with the intent that membership will remain constant; however, the interventionist(s) must understand potential for lack of attendance and modify session plans accordingly. Interventionist flexibility must be ongoing, as participants may experience acute symptoms and may not benefit from planned intervention. It may be more effective to process trauma-specific emotions in interventions that can be completed within one session to avoid carry-over between weeks and to allow for a sense of closure. It is also recommended that trauma-specific emotional processing is followed with increased interventions and ample time to assist participants in returning to baseline before leaving the space. To further help mitigate the potential for harm, it is recommended the interventionist(s) communicate with the current treatment team and connect survivors with additional resources when applicable.

In the current study, group members may have benefited from more specific session goals and clearer communication to participants from clinician-researcher, as power differentials between interventionist(s) and clients should be minimized to the greatest possible extent (Curtis, 2019; Herman, 2015; Worell & Remer, 2003). It is recommended that the interventionist(s) demonstrate transparency in setting realistic goals and expectations for group participants so that

highest levels of mastery can be achieved. In accordance with feminist-informed music therapy, participants should act as decision-makers in setting these group goals and objectives (Curtis, 2019). Participants in the current study agreed that future trauma-specific music therapy groups should focus on emotional processing and community-building, and should include therapeutic drumming interventions. It is also suggested that a variety of music therapy interventions be used in future trauma-specific music therapy groups. Engaging in cohesive activities appeared to foster connection, varied interventions allowed for continued vulnerable experiences, and different interventions appeared to reach different participants.

### **Implications for Clinical Practice**

In this study, most participants did not know each other prior to beginning the group and music therapy was a novel experience for all. Participation in the music therapy group required that participants engage in cohesive activities such as singing and drumming together; the mere act of engaging in synchronous activity fosters connection (van der Kolk, 2014). Over time, participants gained comfort in completing music therapy interventions and gained comfort with each other as they engaged in increased self-disclosures and shared experiences. The clinician-researcher noted many times during group sessions when members offered support to each other, indicating that a sense of community was being strengthened. Participants would offer tissues to each other, offer additional support outside of the group setting, and offer words of “I’m here for you.” Music therapy intervention appeared to act as a nonthreatening and effective way of bringing individuals together. Music therapy groups may work to combat the potential isolation and difficulties with interpersonal relationships often experienced by survivors of sexual violence.

In this study, as participants gained comfort with each other and with music therapy intervention, participants displayed increased participation in music therapy sessions and increased perception of positive change. Per Herman (2015), a sense of safety is essential before intervention can safely take place. Once a foundation of safety and comfort was established, participants experienced periods of creating mastery through music intervention which may have helped build self-esteem and self-confidence. Curtis (2019) stated, “self-esteem and confidence are linked to emotional well-being, independence, success, and happiness” (p. 52). Participants may have carried these positive experiences with them upon leaving session, potentially leading to positive personal outcomes and positive perceptions of the music therapy experience. Therefore, music therapy intervention appeared to result in increased positive self-perception both in and outside of group session, rendering it effective in meeting the needs of survivors of sexual violence.

In this study, participants perceived drumming as the prominent music therapy intervention. Drumming was often referenced along with the subthemes of mood modulation, emotional processing, and sense of community. The proposed mechanism of change, as noted by clinician-researcher and expressed by participants, was facilitation of emotional release. The physical movement required in drumming may have connected the body and mind to release tension and express feelings (Borczone, 2015). Drumming brought a sense of fun to the group and it was during these interventions that participants were most often observed smiling and laughing. Two such interventions were the “Weather Report” drumming intervention and closing improvisational relaxation. The “Weather Report” provided participants with an opportunity to check-in with their internal state and was used within session as needed during trauma-specific emotional processing. The Hapi drum was often used in closing improvisational relaxation with

the goal of returning members to baseline before leaving the music therapy space. It is recommended that future music therapy groups for survivors of sexual violence include frequent and varied drumming interventions.

The problem remains that people, particularly women and transgender individuals, experience sexual violence in alarming numbers. Trauma treatment is limited by myriad individual and environmental factors that contribute to the psychological impact of the event (Herman, 2015). Additionally, the process of healing from trauma is a long and arduous journey that is never truly complete (Herman, 2015). In designing and implementing this eight-week music therapy program, the clinician-researcher used music therapy intervention to address the complex needs of survivors of sexual violence. These data suggested that participants benefited from the music therapy group, experienced overall symptom reduction, and perceived the music therapy program favorably. Future research should focus on replication of existing studies to address effectiveness of music therapy intervention across specific survivor subset populations with the goal of determining dosage, optimal program length, and most effective music therapy interventions. As individuals continue to be victimized and survivors continue to come forward, the music therapy field requires the creation and implementation of additional trauma-specific groups to meet the ongoing needs of college-aged survivors of sexual violence.

## REFERENCES

- Aalbers, S., Fusar-Poli, L., Freeman, R. E., Spreen, M., Ket, J. C., Vink, A. C., Maratos, A., Crawford, M., Chen, X. J., & Gold, C. (2017). Music therapy for depression. *Cochrane Database of Systematic Reviews*, 2017(11).  
<https://doi.org/10.1002/14651858.CD004517.pub3>
- Ahonen, H. (2016). Adult trauma work in music therapy. In J. Edwards (Ed.), *The Oxford Handbook of Music Therapy*. Oxford University Press.
- American Music Therapy Association. (2018). *A descriptive statistical profile of the 2018 AMTA membership and music therapy community*.  
<https://www.musictherapy.org/assets/1/7/18WorkforceAnalysis.pdf>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5<sup>th</sup> ed.). American Psychiatric Publishing.
- Amir, D. (2004). Giving trauma a voice: The role of improvisational music therapy in exposing, dealing with and healing a traumatic experience of sexual abuse. *Music Therapy Perspectives*, 22(2), 96-103. <https://doi.org/10.1093/mtp/22.2.96>
- Andsell, G., Davidson, J., Magee, W. L., Meehan, J., & Procter, S. (2010). From “this f\*\*ing life” to “that’s better” ...in four minutes: An interdisciplinary study of music therapy’s “present moments” and their potential for affect modulation. *Nordic Journal of Music Therapy*, 19(1), 3-28. <https://doi.org/10.1080/08098130903407774>
- Baker, F., Wigram, T., Stott, D., & McFerran, K. (2008). Therapeutic songwriting in music therapy: Part I: Who are the therapists, who are the clients, and why is songwriting used?

- Nordic Journal of Music Therapy*, 17(2), 105-123.  
<https://doi.org/10.1080/08098130809478203>
- Bandler, R. (1985). *Using your brain for a change*. Real People Press.
- Basile, K. C., Smith, S. G., Breiding, M. J., Black, M. C., & Mahendra, R. (2014). Sexual violence surveillance: Uniform definitions and recommended data elements, version 2.0. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.  
[https://www.cdc.gov/violenceprevention/pdf/sv\\_surveillance\\_definitions1-2009-a.pdf](https://www.cdc.gov/violenceprevention/pdf/sv_surveillance_definitions1-2009-a.pdf)
- Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *The Arts in Psychotherapy*, 35(1), 34-48.  
<https://doi.org/10.1016/j.aip.2007.09.002>
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen, J., & Stevens, M. R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.  
[https://www.cdc.gov/violenceprevention/pdf/nisvs\\_executive\\_summary-a.pdf](https://www.cdc.gov/violenceprevention/pdf/nisvs_executive_summary-a.pdf)
- Borczon, R. M. (2015). Music therapy for survivors of traumatic events. In B. Wheeler (Ed.), *Music therapy handbook* (pp. 390-400). Guilford Press.
- Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization – National Intimate Partner and Sexual Violence Survey, United States, 2011. *Morbidity and Mortality Weekly Report: Surveillance Summaries*, 63(8), 1-18.  
<https://doi.org/10.2105/AJPH.2015.302634>

- Briere, J. N. (1996). Psychometric review of the Trauma Symptom Checklist-40. In B. Stamm (Ed.), *Measurement of stress, trauma, and adaptation*. Sidran Press.
- Briere, J. N., & Runtz, M. G. (1989). The Trauma Symptom Checklist (TSC-33): Early data on a new scale. *Journal of Interpersonal Violence*, 4(2), 151-163.  
<https://doi.org/10.1177/088626089004002002>
- Callahan, R., & Stancliffe, R. J. (1985). *Five minute phobia cure: Dr. Callahan's treatment for fears, phobias and self-sabotage*. Enterprise Publishing.
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2017). Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct: Revised version. Westat. <https://www.aau.edu/sites/default/files/AAU-Files/Key-Issues/Campus-Safety/AAU-Campus-Climate-Survey-FINAL-10-20-17.pdf>
- Carr, C., d'Ardenne, P., Sloboda, A., Scott, C., Wang, D., & Priebe, S. (2012). Group music therapy for patients with persistent post-traumatic stress disorder – an exploratory randomized controlled trial with mixed methods evaluation. *Psychology and Psychotherapy: Theory, Research and Practice*, 85(2), 179-202.  
<https://doi.org/10.1111/j.2044-8341.2011.02026.x>
- Cevasco, A. M., Kennedy, R., & Generally, N. R. (2005). Comparison of movement-to-music, rhythm activities, and competitive games on depression, stress, anxiety, and anger of females in substance abuse rehabilitation. *Journal of Music Therapy*, 42(1), 64-80.  
<https://doi.org/10.1093/jmt/42.1.64>
- Creswell, J. W., & Clark, V. L. (2007). *Designing and conducting mixed methods research*. Sage Publications, Inc.

- Curtis, S. L. (2016). Music therapy for women who have experienced domestic violence. In J. Edwards (Ed.), *The Oxford Handbook of Music Therapy*. Oxford University Press.
- Curtis, S. L. (2019). *Music for women (survivors of violence): A feminist music therapy interactive eBook*. Barcelona Publishers.
- Curtis, S. L., & Harrison, G. C. (2006). Empowering women survivors of childhood sexual abuse: A collaborative music therapy-social work approach. In S. L. Brooke (Ed.), *Creative arts therapies manual: A guide to the history, theoretical approaches, assessment, and work with special populations of art, play, dance, music, drama, and poetry therapies* (pp. 195-204). Charles C Thomas.
- Damasio, A. R., Everitt, B. J., & Bishop, D. (1996). The Somatic Marker Hypothesis and the possible functions of the prefrontal cortex [and discussion]. *Philosophical Transactions: Biological Sciences*, 351(1346), 1413-1420. <https://doi.org/10.1098/rstb.1996.0125>
- de l'Etoile, S. K. (2002). The effectiveness of music therapy in group psychotherapy for adults with mental illness. *The Arts in Psychotherapy* 29(2), 69-78.  
[https://doi.org/10.1016/S0197-4556\(02\)00139-9](https://doi.org/10.1016/S0197-4556(02)00139-9)
- de Juan, T. F. (2016). Music therapy for women survivors of intimate partner violence: An intercultural experience from a feminist perspective. *The Arts in Psychotherapy*, 48, 19-27. <https://doi.org/10.1016/j.aip.2015.12.007>
- Elliott, D. M., & Briere, J. (1992). Sexual abuse trauma among professional women: Validating the Trauma Symptom Checklist-40 (TSC-40). *Child Abuse and Neglect: The International Journal*, 16(3), 391-398. [https://doi.org/10.1016/0145-2134\(92\)90048-V](https://doi.org/10.1016/0145-2134(92)90048-V)



- Eyre, L., & Lee, J. H. (2015). Mixed-methods survey of professional perspectives of music therapy practice in mental health. *Music Therapy Perspectives*, 33(2), 162-181.  
<https://doi.org/10.1093/mtp/miv034>
- Gerbode, F. (1989). *Beyond psychology: An introduction to metapsychology*. IRM Press.
- Gold, C., Solli, H. P., Krüger, V., & Lie, S. A. (2009). Dose-response relationship in music therapy for people with serious mental disorders: Systematic review and meta-analysis. *Clinical Psychology Review*, 29(3), 193-207. <https://doi.org/10.1016/j.cpr.2009.01.001>
- Hadley, S., & Hahna, N. (2016). Feminist perspectives in music therapy. In J. Edwards (Ed.), *The Oxford Handbook of Music Therapy*. Oxford University Press.
- Herman, J. (2015). *Trauma and recovery* (Rev. ed.). BasicBooks.
- Hernández-Ruiz., E. (2005). Effect of music therapy on the anxiety levels and sleep patterns of abused women in shelters. *Journal of Music Therapy*, 42(2), 140-158.  
<https://doi.org/10.1093/jmt/42.2.140>
- Hussey, D. L., Reed, A. M., Layman, D. L., & Pasiali, V. (2008). Music therapy and complex trauma: A protocol for developing social reciprocity. *Residential Treatment for Children & Youth*, 24(1), 111-129. <https://doi.org/10.1080/08865710802147547>
- Hyland, P., Shevlin, M., Elklit, A., Murphy, J., Vallières, F., Garvert, D. W., & Cloitre, M. (2017). An assessment of the construct validity of the ICD-11 proposal for complex posttraumatic stress disorder. *Psychological Trauma: Therapy, Research, Practice, and Policy*, 9(1), 1-9. <https://doi.org/10.1037/tra0000114>
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality.  
<https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF>

- Janet, P. (1889). *L'automatisme psychologique* [Psychological automatism]. Félix Alcan.
- Jones, J. D. (2005). A comparison of songwriting and lyric analysis techniques to evoke emotional change in a single session with people who are chemically dependent. *Journal of Music Therapy*, 42(2), 94-110. <https://doi.org/10.1093/jmt/42.2.94>
- Kabat-Zinn, J. (2013). *Full catastrophe living: How to cope with stress, pain and illness using mindfulness meditation* (Rev. ed.). Bantam Books.
- Legge, A. W. (2015). On the neural mechanisms of music therapy in mental health care: Literature review and clinical implications. *Music Therapy Perspectives*, 33(2), 128-141. doi:10.1093/mtp/miv025
- Levine, P. (1997). *Waking the tiger: Healing trauma*. North Atlantic Books.
- Levine, P. (2005). *Healing trauma: A pioneering program for restoring the wisdom of your body*. Sounds True, Inc.
- Levine, P. (2010). *In an unspoken voice: How the body releases trauma and restores goodness*. North Atlantic Books.
- MacIntosh, H. B. (2003). Sounds of healing: Music in group work with survivors of sexual abuse. *The Arts in Psychotherapy*, 30(1), 17-23. [https://doi.org/10.1016/S0197-4556\(02\)00229-0](https://doi.org/10.1016/S0197-4556(02)00229-0)
- Miller, A. (1990). *Thou shalt not be aware: Society's betrayal of the child*. Meridian.
- Neal, T. M., & Nagle, J. E. (2013). Measuring abuse sequelae: Validating and extending the Trauma Symptom Checklist-40. *Journal of Aggression, Maltreatment & Trauma*, 22(3), 231-247. <https://doi.org/10.1080/10926771.2013.764953>
- Ogden, P., Minton, K., & Pain, C. (2006). *Trauma and the body: A sensorimotor approach to psychotherapy*. W.W. Norton & Company.

- Orth, J. (2005). Music therapy with traumatized refugees in a clinical setting. *Voices: A World Forum for Music Therapy*, 5(2). <https://doi.org/10.15845/voices.v5i2.227>
- Pugh, B., & Becker, P. (2018). Exploring definitions and prevalence of verbal sexual coercion and its relationship to consent to unwanted sex: Implications for affirmative consent standards on college campuses. *Behavioral Sciences*, 8(8), 69. <https://doi.org/10.3390/bs8080069>
- RAINN (Rape, Abuse & Incest National Network). (n.d). *Key terms and phrases*. <https://www.rainn.org/articles/key-terms-and-phrases>
- Rizeq, J., Flora., D. B., & McCann, D. (2018). Construct validation of the Trauma Symptom Checklist-40 total and subscale scores. *Assessment*. <https://doi.org/10.1177/1073191118791042>
- Roark, A. E., & Sharah, H. S. (1989). Factors related to group cohesiveness. *Small Group Research*, 20(1), 62-69. <https://doi.org/10.1177/104649648902000105>
- Rothschild, B. (2000). *The body remembers: The psychophysiology of trauma and trauma treatment*. W.W. Norton & Company.
- Scaer, R. C. (2001). *The body bears the burden: Trauma, dissociation, and disease*. The Haworth Medical Press.
- Silverman, M. J. (2009). The effect of single-session psychoeducational music therapy on verbalizations and perceptions in psychiatric patients. *Journal of Music Therapy*, 46(2), 105-131. <https://doi.org/10.1093/jmt/46.2.105>
- Silverman, M. J. (2015). *Music therapy in mental health for illness management and recovery*. Oxford University Press.

- Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, 2(2), 199-223.  
<https://doi.org/10.1007/BF00974159>
- Stewart, R., & McAlpin, E. (2015). Prominent elements in songwriting for emotional expression: An integrative review of literature. *Music Therapy Perspectives*, 34(2), 184-190.  
<https://doi.org/10.1093/mtp/miv011>
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications.
- Sutton, J. P. (2002). Trauma in context. In J. Sutton (Ed.), *Music, music therapy and trauma: International perspectives*. Jessica Kingsley Publishers.
- Swallow, M. (2002). The brain – its music and its emotion. The neurology of trauma. In J. Sutton (Ed.), *Music, music therapy and trauma: International perspectives*. Jessica Kingsley Publishers.
- Sylaska, K. M., & Edwards, K. M. (2013). Disclosure of intimate partner violence to informal support network members: A review of the literature. *Trauma, Violence, & Abuse*, 15(1), 3-21. <https://doi.org/10.1177/1524838013496335>
- Teague, A. K., Hahna, N. D., & McKinney, C. H. (2006). Group music therapy with women who have experienced intimate partner violence. *Music Therapy Perspectives*, 24(2), 80-86.  
<https://doi.org/10.1093/mtp/24.2.80>
- Terr, L. C. (1990). *Too scared to cry: How trauma affects children...and ultimately us all*. Basic Books.
- Terr, L. C. (1991). Childhood traumas: an outline and overview. *American Journal of Psychiatry*, 148(1), 10-20. <https://doi.org/10.1176/ajp.148.1.10>

- van der Kolk, B. A. (1987). *Psychological trauma*. American Psychiatric Press, Inc.
- van der Kolk, B. A. (2006). Clinical implications of neuroscience research in PTSD. *Annals of the New York Academy of Sciences*, 1071(1), 277-293.  
<https://doi.org/10.1196/annals.1364.022>
- van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Viking.
- Volkman, S. (1993). Music therapy and the treatment of trauma-induced dissociative disorders. *The Arts in Psychotherapy*, 20(3), 243-251. [https://doi.org/10.1016/0197-4556\(93\)90019-X](https://doi.org/10.1016/0197-4556(93)90019-X)
- Walker, L. E. (1979). *The battered woman*. Harper & Row.
- Worell, J., & Remer, P. (2003). *Feminist perspectives in therapy: Empowering diverse women* (2<sup>nd</sup> ed.). Wiley.
- Yalom, I. D., & Leszcz, M. (2005). *The theory and practice of group psychotherapy* (5<sup>th</sup> ed.). Basic Books.
- York, E., & Curtis, S. L. (2015). Music therapy for women survivors of domestic violence. In B. Wheeler (Ed.), *Music therapy handbook*. Guilford Press.

## APPENDIX A

### Trauma Symptom Checklist – 40 (TSC-40)

Participant Number \_\_\_\_\_

How often have you experienced each of the following in the last two months? Please circle one number, 0-3.

	<i>Never</i>	<i>Occasionally</i>	<i>Fairly Often</i>	<i>Often</i>
1. Headaches	0	1	2	3
2. Insomnia (trouble getting to sleep)	0	1	2	3
3. Weight loss (without dieting)	0	1	2	3
4. Stomach problems	0	1	2	3
5. Sexual problems	0	1	2	3
6. Feeling isolated from others	0	1	2	3
7. "Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
8. Restless sleep	0	1	2	3
9. Low sex drive	0	1	2	3
10. Anxiety attacks	0	1	2	3
11. Sexual overactivity	0	1	2	3
12. Loneliness	0	1	2	3
13. Nightmares	0	1	2	3
14. "Spacing out" (going away in your mind)	0	1	2	3
15. Sadness	0	1	2	3
16. Dizziness	0	1	2	3
17. Not feeling satisfied with your sex life	0	1	2	3
18. Trouble controlling your temper	0	1	2	3
19. Waking up early in the morning and can't get back to sleep	0	1	2	3
20. Uncontrollable crying	0	1	2	3

21. Fear of men	0	1	2	3
22. Not feeling rested in the morning	0	1	2	3
23. Having sex that you didn't enjoy	0	1	2	3
24. Trouble getting along with others	0	1	2	3
25. Memory problems	0	1	2	3
26. Desire to physically hurt yourself	0	1	2	3
27. Fear of women	0	1	2	3
28. Waking up in the middle of the night	0	1	2	3
29. Bad thoughts or feelings during sex	0	1	2	3
30. Passing out	0	1	2	3
31. Feeling that things are "unreal"	0	1	2	3
32. Unnecessary or over-frequent washing	0	1	2	3
33. Feelings of inferiority	0	1	2	3
34. Feeling tense all the time	0	1	2	3
35. Being confused about your sexual feelings	0	1	2	3
36. Desire to physically hurt others	0	1	2	3
37. Feelings of guilt	0	1	2	3
38. Feelings that you are not always in your body	0	1	2	3
39. Having trouble breathing	0	1	2	3
40. Sexual feelings when you shouldn't have them	0	1	2	3

## APPENDIX B

### **Gender Resource Center Intake Interview**

Name and pronouns: \_\_\_\_\_

Year in school and major: \_\_\_\_\_

1. What makes you interested in this group?
2. What are you hoping to get out of this group?
3. Tell us about how trauma has affected your body/mind/heart. How has it affected you physically?
4. What are your current coping skills for flashbacks, somatic triggers, etc. (if applicable)?
5. Have you had any recent thoughts about harming yourself or others? Are you currently self-harming?
6. Who is in your emotional/social support network?
7. Tell us about your experience in therapy.
8. Tell us how we can make the space more comfortable for you.



## APPENDIX C

### Pretest Questionnaire

Participant Number \_\_\_\_\_

Please answer the following questions to the best of your ability. Leaving any question blank will not affect your eligibility to participate.

1. How old are you? \_\_\_\_\_
2. What is your gender identity? \_\_\_\_\_ What is your race? \_\_\_\_\_ What is your sexual orientation? \_\_\_\_\_
3. How long ago did you experience trauma?  
1-3 months \_\_\_\_\_ 4-6 months \_\_\_\_\_ 7-9 months \_\_\_\_\_ 10-12 months \_\_\_\_\_  
1-3 years \_\_\_\_\_ more than 3 years \_\_\_\_\_
4. Which of the following best describes your trauma experience?  
Single event \_\_\_\_\_ Repeated event \_\_\_\_\_
5. Do you currently have a mental health diagnosis related to trauma?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
If you answered yes to the above question, what is your current diagnosis and who gave the diagnosis?  
\_\_\_\_\_  
\_\_\_\_\_
6. Are you currently participating in trauma-related treatment?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
If you answered yes to the above question, what is/are your current treatment(s)?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What are you hoping to gain from this music therapy group?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. What kinds of musical experiences have you had (i.e., playing an instrument, singing in a choir)?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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9. What kinds of music do you enjoy?

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10. Which songs have been helpful in your healing?

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11. Please list any songs you find triggering/unhelpful.

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## APPENDIX D

### Posttest Questionnaire

Participant Number \_\_\_\_\_

Please answer the following questions to the best of your ability.

1. Write down any symptoms that have changed since beginning the group.

Symptom:

Increase:

Decrease:

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2. What did you like about the music therapy experience?

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3. What did you dislike about the music therapy experience?

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4. Which group experiences did you find most helpful?

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5. Which group experiences did you find least helpful?

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6. What did you gain, if anything, from this music therapy group?

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7. What would you change, if anything, about the music therapy group?

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8. Please write any further thoughts you have about your experience in the music therapy group:

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