The Implementation of
Trauma-Informed Practices
In Music Education

by

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A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Degree in Music Education with Distinction

Spring 2022

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ACKNOWLEDGMENTS

Thank you to my incredible mentors at the University of Delaware who helped me throughout the research process, in particular Dr. Barbara Ley and Professor Aimee Pearsall. Both of these professors were constantly available to answer questions and provide support throughout this process, and I am endlessly grateful for their support.

I would also like to give a special thank you to Dr. Paul Head, the director of Choral Studies at the University of Delaware. Although Dr. Head was not directly involved in the thesis process, he has served as an additional mentor for me in the past year, always available to lend a listening ear and to help me calm down in panicky moments. His support helped me not only to complete this thesis, but to get through senior year as well as I did. I am forever grateful for his mentorship and support.

Finally, I would like to thank my family and friends. They supported me through years of late nights and endless lecturing on trauma-informed practices, even when I am sure they were no longer interested in my excited ramblings. In particular, I would like to thank my Mom and younger brother Sam who have supported me my entire life and gave me the courage and confidence to do what I love. I am so thankful to have such an incredible support system.
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Abstract

Trauma and traumatic experiences have been shown to impact the brain and brain functioning, which in turn can severely impede a student’s ability to learn and function in a classroom (Perry, 2016). Over the past few decades, trauma-informed practices have been developed to help mitigate the negative effects of trauma. Trauma-informed practices are research and evidence-based strategies that educators and other professionals use to help support students with trauma. Additionally, music is frequently used as a modality for the treatment and healing of trauma in the field of music therapy due to the positive impacts that music has on the brain.

Despite the significant amount of research that focuses on these benefits, there is currently very little literature on trauma-informed practices in music education. This thesis aims to fill this gap in the research literature by reviewing current literature in the fields of music therapy, neuroscience, psychology, and education. For this senior thesis, I also interviewed three music educators currently implementing trauma-informed practices in their music classrooms. I identified key practices educators are using in their classroom, how they discovered these practices, and what educators thought were their barriers to implementation based on the interviews and the literature review.

Keywords: trauma-informed practices, music, education, classrooms
Introduction

Trauma and traumatic experiences have been shown to impact the brain and brain functioning, which in turn can severely impede a student’s ability to learn and function in a classroom (Perry, 2016). Both as a student and as an educator in a music-education preparatory program, I have seen the ways in which trauma and traumatic experiences can impact students and their ability to learn and function in a classroom. It is because of these experiences that I began to search for a solution, and through this process I found trauma-informed practices. Over the past few decades, trauma-informed practices have been developed to help mitigate the negative effects of trauma. Trauma-informed practices are research and evidence-based strategies that educators and other professionals use to help support traumatized students. Music is frequently used as a modality for the treatment and healing of trauma in the field of music therapy due to the positive impacts that music has on the brain.

Despite the significant amount of research that focuses on these benefits, there is currently very little literature on trauma-informed practices in music education. This thesis aims to fill this gap in the research literature by reviewing current literature in the fields of music therapy, neuroscience, psychology, and education. In this senior thesis, I also interviewed music educators currently implementing trauma-informed practices in their music classrooms. Based on the literature review and the interviews I
identified what key practices teachers are using in their classroom, how they learned about these practices, and what educators’ thought were their barriers to implementation. In my discussion, I also detail how this knowledge may impact future research as well as provide recommendation for other music educators and their schools who are or plan implement trauma-informed practices in their classrooms.
Literature Review

Before we begin to investigate the literature in the fields of neuroscience, music therapy, psychology, and education, it is important to note that music educators are not therapists. Although this thesis will discuss music therapy and strategies used in this field, the intention is not to directly apply these therapeutic strategies to classrooms. Rather, I hope to extrapolate helpful information from this body of research that can be used in a classroom setting to benefit students, educators, and their communities.

1.1 Trauma

When working with trauma-informed practices, it is very important to define trauma itself. However, trauma can be defined in a variety of different ways. The DSM-5 (American Psychiatric Association, 2017, p. 271) defines PTSD trauma as “exposure to actual or threatened death, serious injury, or sexual violence.” The National Child Traumatic Stress Network describes complex trauma as “both children’s exposure to multiple traumatic events – often of an invasive, interpersonal nature, and the wide-ranging long-term effects of this exposure.” (Peterson, 2018) My preferred definition is the definition of Dr. Bessel van der Kolk, a trauma specialist who defines trauma as “not just an event that took place sometime in the past; it is also the imprint left by that experience on mind, brain, and body” (van der Kolk, 2015, p. 21). This definition does not specify what a traumatic event might be, instead focusing on the negative impact that these experiences may have on the mind, brain, and body,
which allows educators and practitioners to take a broad approach to trauma and trauma healing.

Trauma can also be viewed in terms of the CDC-Kaiser ACE (Adverse Childhood Experiences) study. The original study, which was conducted in 1998 by Dr. Vincent Felitti and Dr. Robert Anda at the Kaiser Permanente Center in California, connected the prevalence of negative childhood experiences to negative health effects later in life. Dr. Felitti and Dr. Anda called these adverse childhood experiences “ACEs,” and the ACEs are traumatic experiences that occur before the age of 18. The ACEs fit into three main categories: abuse, household dysfunction, and neglect, and there are 10 ACEs total, each corresponding to a specific traumatic event that could occur in a child’s life (CDC.gov, 2021). An ACE score is the sum (with a maximum of 10) of the different adverse experiences that happened in a person’s life before they turned 18. The original study had more than 17,000 participants, and researchers found that 67% of participants had an ACE score of at least one. This finding was particularly astounding because it shows that childhood trauma is much more prevalent than initially thought. In addition, the study found that a graded dose-response relationship exists between ACEs and negative health and well-being outcomes (Felitti, 1998). As the number of ACEs increases, so too does the risk for negative health outcomes (CDC.gov, 2021). For example, the odds of attempting suicide is 30 times higher for adults with four or more ACEs compared to adults with no ACEs (CDC.gov, 2021). The life expectancy of individuals with ACE scores of six or more is actually 20 years less than individuals with an ACE score of zero (Brown,
If an individual has an ACE score of four or more, they are 32.6 times more likely to develop learning or behavior problems (Harris, 2018).

However, it is also important to recognize that the ACE study is limited. The ACE study does not account for all types of trauma, and it significantly excludes societal and racial trauma, as well as trauma surrounding housing insecurity (Peterson, 2018). Although the original ACE study (and many supporting studies following it), show that ACEs are consistent across all populations, the ACE study does not acknowledge that some communities are more severely impacted by the effects of ACEs due to a lack of resources (Harris, 2018). Finally, the ACE study does not account for protective factors, which can help individuals overcome the negative impacts and effects of childhood trauma in their lives (Peterson, 2018).

1.2 Trauma and the Brain

Siegel (2012) developed a way of conceptualizing the brain known as the “upstairs and downstairs brain.” Viewing the brain as being split into two sections - upstairs and downstairs - can help conceptualize the way in which the traumatized brain functions. The upstairs brain handles complex functioning, personality, logic, reasoning, and executive function. The upstairs brain includes the prefrontal cortex, hippocampus, and Broca’s area, among other brain regions. The downstairs brain primarily deals with survival and the emotional center of the brain. The downstairs brain contains the brainstem and the limbic system, the latter of which includes the amygdala. The brainstem controls involuntary processes such as breathing, regulating
balance, and heart rate (Cleveland Clinic, 2022). The limbic system is involved in emotional and behavioral responses, particularly responses involved in survival. When an individual operates out of their downstairs brain, they are in survival mode and have little to no access to any functioning processes completed through the upstairs brain. When an individual operates out of their upstairs brain, the entire brain is connected, and individuals are able to function in a healthy, complete, and connected way. However, when traumatized individuals are triggered, their downstairs brain takes control of all functioning, which will alter the way that they behave and react to their surroundings. Unfortunately, the effects of trauma on the brain go even deeper than the upstairs and downstairs brain.

One of the brain structures that is particularly impacted by trauma is the amygdala. The amygdala’s job is to process and trigger emotions, and it also serves as the body’s “smoke detector” (van der Kolk, 2015, p. 65) identifying and alerting the body to any threats. If there are perceived threats, the amygdala will signal the body to go into fight, flight, or freeze mode. Fight, flight, or freeze mode is an evolutionary defense mechanism designed to protect the body. For example, if an individual was in the woods and saw a bear 100 feet away, they would be likely to go into fight, flight, or freeze mode to protect themselves. This would be an appropriate reaction for the situation, and in this circumstance the fight, flight, or freeze reaction operated correctly. However, in a traumatized brain, the amygdala becomes hyperactive, and is more likely to misinterpret signals of danger. As a result, a person with trauma may react disproportionately to a harmless situation due to the functioning of their
amygdala. For example, if a student with trauma sees a teacher become frustrated and yell at the class, they may go into fight, flight, or freeze mode. The student is not actually in any physical danger, but because the student does not feel safe, the actual safety does not matter. The hyperactive amygdala will misinterpret the teacher yelling as a signal of danger, and the student will go into fight, flight or freeze mode, which can make learning exponentially more challenging due to the lack of connectivity with the upstairs brain.

Part of what makes learning exponentially more challenging for a traumatized brain is the prefrontal cortex. When the prefrontal cortex is properly functioning, it handles “complex functioning, attention, integrating information, planning, emotional regulation, following social norms, personality, planning for the future, and reflecting on past behaviors” (Sorensen, 2015, p. 58). However, in a traumatized brain the prefrontal cortex is often weakened and disengaged. Specifically, the prefrontal cortex is disengaged when the body is in fight, flight or freeze mode. When the body is in fight flight or freeze mode, processing in the brain shifts from the rational prefrontal cortex to the reactive, emotional amygdala. Although switching from the upstairs brain to the downstairs brain is beneficial from an evolutionary standpoint to stay alive, when this occurs frequently due to a hyperactive amygdala, functioning is severely impaired.

The hippocampus is another brain structure that is affected by trauma. The hippocampus produces and retrieves memories, regulates emotional responses, and is considered to be the central processing unit of the brain (Sugaya & Yonetani, 2022).
However, fight, flight, or freeze mode can also lead to impaired functioning of the hippocampus. When the body is in fight, flight, or freeze mode, the stress hormone cortisol is released. Extended exposure to cortisol decreases the hippocampus’ ability to communicate with other brain structures, particularly the prefrontal cortex. Fuchs and Flugge (2014) found that a lack of communication between the hippocampus and other brain areas can cause challenges in memory functioning, emotional regulation, planning, decision making, and changes in personality. All of these negative impacts are detrimental to students trying to succeed and function in a classroom.

Another brain structure that is impacted by trauma is the Broca’s Area. The Broca’s area gives us the ability to form words and produce speech. In a traumatized brain, especially when experiencing a flashback, the Broca’s area goes offline. When the Broca’s area goes offline, a person loses the ability to “put [their] thoughts and feelings into words” (van der Kolk, 2015, p. 43). This often makes discussing past traumas or traumatic memories very challenging for survivors. Knowledge of the Broca’s area is particularly important for educators, because if a student is having a flashback or operating out of the fear center of their brain, communicating using words or language may be particularly challenging for them. Having alternative ways to calm students down, as opposed to talking it out, is essential when working with traumatized students.

Polyvagal theory (see Appendix A), developed by Dr. Steven Porges (2018), is another way to view the effects that trauma has on the brain. Polyvagal theory is based on understanding the vagus nerve and its relationship with our autonomic nervous system.
system. The vagus nerve transmits information from the brain to other parts of the body. The vagus nerve specifically links the brain to the neck, heart, lungs, and abdomen (Seymour, 2017). Polyvagal theory focuses on three different levels of stress response: ventral vagal social engagement, sympathetic activation, and dorsal vagal shutdown. The levels of stress response become more severe as they go down, and each level of stress response is also associated with the different times at which they evolved in the human brain. The body moves through the different states as a result of neuroception.

“Neuroception, distinct from perception, does not require an awareness of things going on. It is detection without awareness. It is a neural circuit that evaluates risk in the environment from a variety of cues… a mechanism to move our nervous system into the three broad categories of autonomic state and to emphasize the role of the social engagement system” (Porges, 2011, p. 11).

However, although the body is able to move between the different states, in order to move from dorsal vagal shutdown to ventral vagal social engagement, the body must also go through the stage of sympathetic activation.

Ventral vagal social engagement is the most recent stress response system to evolve. The ventral vagal response system is 200 million years old and the emphasis of this system is on social engagement. When humans are in this state, they are able to connect and relate to others, and they have access to the entire range of our emotions as well as the ability to read the emotions of others, often through facial expressions or body language. The ventral vagal social engagement system “slows the heart, promotes safety-related affiliative states, and inhibits the threat-related functions of
[sympathetic activation] and [dorsal vagal shutdown] states” (Kolacz et al., 2019, p. 3). Ventral vagal social engagement is also connected to the face-heart connection. The ventral vagal social engagement system began with a face-heart connection that coordinated the heart with the muscles of the face and head. This connection helps “to convey physiological state via facial expression and prosody (intonation of voice), as well as regulate the middle-ear muscles to optimize species-specific listening within the frequency band used for social communication” (Porges, 2011, p. 23). This connection helps humans coregulate and feel safe with other humans. The ventral vagal social engagement system also serves a function in a dangerous situation. If a non-traumatized individual is in a potentially dangerous situation, instead of immediately transitioning to one of the survival states, the individual will stay in ventral vagal social engagement and turn to other individuals around them for help or comfort first. It is only when there is no possibility for assistance through social engagement that they will then enter either sympathetic activation or dorsal vagal shutdown.

In a dangerous situation, or in a situation that our body perceives as dangerous, one of the two defense systems will take over in a traumatized individual. The first of these is sympathetic activation. This state evolved 400 million years ago. Sympathetic activation “supports metabolic motor activity for fight/flight” (Porges, 2011, p. 11) Sympathetic activation engages our sympathetic nervous system and is a state of mobilization and hyperactivity. In a dangerous situation, this state would enable our body to either fight the threat or run away to safety. However, if we are unable to run
away or fight the danger, dorsal vagal shutdown can take over. This is a state of complete immobilization, and it evolved 500 million years ago. This state is also known as the freeze state and can even appear as feigned death. This is the most severe defensive state.

Both dorsal vagal shutdown and sympathetic activation are considered to be survival states. Being in these survival states for extended periods of time can sensitize the body to stressors. For example, if the body is over sensitized to stressors, neutral facial expressions can be interpreted as angry, and hearing will shift to tune more to lower frequencies (such as a growl from a predator or a car engine). As a result, sensory stimulation that is normal will begin to be interpreted by your brain as dangerous and painful.

The listening project protocol, also known as the safe and sound protocol, was created by Dr. Stephen Porges as a result of painful sensory stimulation caused by an oversensitivity to stressors in his patients. The listening protocol was created based on polyvagal theory and “assumes that if we start to engage the middle ear muscles . . . it will enable the individual to be more spontaneously social” (Porges, 2011, p. 21). The intervention aimed to engage the neural circuits of the brain with prosody with the goal of triggering a neuroception of safety. Dr. Porges hoped that by presenting auditory cues to engage the inner ear, they would be

“processed, via neuroception, and reflexively recruit and modulate the neural regulation of the middle ear muscles. Based on the [polyvagal] theory, this process would functionally reduce auditory hypersensitivities, stimulate spontaneous social engagement, and calm
physiological state by increasing the influence of ventral vagal pathways of the heart” (Porges, 2011, p. 64).

The results of this project have been overwhelmingly positive, with an increase in “spontaneous social engagement behaviors, reduced sound sensitivities, improved organization of social behaviors and emotional state, and improved and more spontaneous verbal communication highlighted by more expressive voices” (Porges, 2011, p. 64). In addition, there have been no adverse effects observed in the twenty years since this project began.

1.3 Music and the Brain

Listening and participating in music also have positive impacts on the brain. Many neurological studies have found that “music listening has an integral function on several brain areas such as motor/autonomic, emotional and prefrontal, which deal with cognition and regulation, as well as a specific influence of autonomic functions such as heartbeat, respiratory rhythm and arousal” (Beck et. al., 2017, p. 68). Similarly, studies on music listening “have been found to alter interleukin-1 and cortisol levels in participants, reduce perceived stress, increase levels of relaxation and concentration, undo or cancel feelings of anxiety, evoke specific desired emotions, or reduce pain” (Wellman & Pinkerton, 2015, p. 34). The reduction in cortisol is particularly significant based on our knowledge of the effects that cortisol has on the functioning of the hippocampus and prefrontal cortex.

A meta-analysis conducted by Koelsch (2014) found that brain structures critical in producing emotion, including the amygdala, nucleus accumbens,
hypothalamus, hippocampus, insula, cingulate cortex, and orbitofrontal cortex are stimulated by music. Additionally, Thaut (2015) found that many areas of the brain used in music are also used for attention, memory, auditory perception, memory, executive control, and motor control. This finding is significant because it indicates that music has the power to connect different parts of the brain, and building connectivity between these different brain structures can help negate the negative effects that trauma may have on reducing these connections.

The amygdala is another brain region that is positively impacted by musical participation. Viskontas (2019) found that “music decreases levels of the stress hormone cortisol and lowers the activity of the amygdala” (Viskontas, 2019, p. 56). This will not only help the brain better regulate our fight, flight, or freeze response, but it will also help improve the functioning of the hippocampus, which is negatively affected by prolonged exposure to the stress hormone cortisol. This research is further supported by the findings of Sugaya & Yonetani (2022), who state that “Music may also increase neurogenesis in the hippocampus, allowing production of new emotions and improving memory.” Additionally, Sorensen (2015, p. 53) found that “when emotions are produced from participating in music socially, the hippocampus plays a role in the production of those emotions.”

The brainstem is a part of the downstairs brain and plays a significant role in survival states. Van der Kolk (2007) has found that rhythmic activities can help persons with trauma because rhythm stimulates patterned, repetitive neural brainstem activity essential for the restoration of brain functioning. Furthermore, “the brainstem
and diencephalon have been shown to respond positively to rhythmic input and many leading trauma authorities are utilizing sensory rhythmic activities in their interventions in response to this research” (Miranda et al, 1999).

We have already established that the Broca’s area is responsible for forming words and producing speech. In her article, “Sounds of Healing,” Heather MacIntosh (2003) describes how feelings are often easier to access and express through music rather than through words, and music can “function as a bridge between the unconscious and the conscious, bringing memories and feelings to conscious awareness.” (MacIntosh, 2003, p. 18) This means that for many students, music may serve as an outlet through which they can process traumatic emotions or memories that are too challenging to put into words.

Rather obviously, music also has been shown to engage both the auditory and motor regions of the brain, particularly when playing instruments. Chen, Penhume, and Zatorre (2008) found that playing rhythmic music engages both the motor and auditory regions of the brain. Playing rhythmic music has also been found to “assist those who have experienced trauma with grounding, balance, and motor coordination has been one of the additional benefits associated with these types of interventions” (Faulkner, 2017, p. 633).

1.4 Music Therapy and Trauma
Music therapists have created interventions in an effort to begin the healing process for trauma survivors. Day et. al (2009, p. 133) found that “Music therapy
techniques such as song writing, group singing, song listening, guided imagery and music, relaxation techniques, instrumental improvisation, music and movement, and music and art facilitate positive outcomes for individuals who have experienced abuse and trauma.” Some of the more popular music therapy techniques used when working with survivors of trauma include songwriting, improvisation activities, and rhythmic activities such as drumming.

Songwriting is a popular intervention for survivors of trauma. MacIntosh (2003, pp. 19-20) discovered that “Song writing offers a safe, structured, and flexible opportunity to develop the ability to express thoughts and feelings.” However, some studies have shown that certain aspects of the songwriting process are not helpful for all individuals. In Day, Baker and Darlington’s study (2009), all participants in the study discussed procedural differences in the creation of the words and the music of the songs that they wrote. Some participants in this study were reluctant to participate in musical creation or musical participation. One participant even “felt restricted by her limited knowledge of music” (Day et.al, 2009, p. 141). Some common goals for songwriting in therapy identified by Baker et al (2008, p.105) include “experiencing mastery, developing self-confidence, enhancing self-esteem, choice and decision making, developing a sense of self, externalizing thoughts fantasies and emotions, telling the client’s story, and gaining insight or clarifying thoughts and feelings.” Another study utilizing collaborative songwriting with children experiencing homelessness and family violence found that “through group songwriting the children
identified that music offers an escape from the outside world and provides hope that the future will be better” (Fairchild, 2018, p. iii).

Simply listening to music or improvising has also been shown to benefit to survivors of trauma. Dr. Indre Viskontas (2019, p. 67) found that “listening to and making music teaches children how to extract meaning from sound. Improvisational music making also teaches them turn taking, eye contact, listening, and response.” Dorit Amir (2004, p. 98) described improvisations as “musical acts that serve as a vehicle to evoke emotions, ideas, images, fantasies, memories, events, and situations that are connected to the client’s intra- and inter- personal relationships.” She also described how improvisation can be helpful because “musical improvisations contain aspects of emotional, psychological and creative expression, … and can reach the unconscious and can be seen as a symbol of unconscious material.”

Rhythmic activities have also been popular music therapy interventions for survivors of trauma. McFerran et al. found that

“A number of popular theorists’ ideas have been used to suggest that rhythm-based activities are beneficial for people who have had adverse experiences because it bypasses higher cognitive functioning and allows connections to form via more primitive, undamaged portions of the brain” (McFerran et. al, 2020, pp. 1-2).

As mentioned earlier, van der Kolk et al. (2007) found that rhythmic activities can help traumatized persons because rhythm stimulates patterned, repetitive neural brainstem activity essential for the restoration of brain functioning. The primary method of incorporating rhythmic activities in music therapy is through the use of drums.
Drumming is another music therapy intervention widely used with survivors of trauma. Hannigan and McBride (2011, p. 3) looked at drumming and the specific benefits associated with drumming: “The rhythmic repetition of drumming has been shown to energize, to relax, and to transform the body, brain, and nervous system.” Hannigan and McBride (2011, p. 3) also found that drumming in a group assisted “in building, maintaining, and strengthening group cohesion.” Faulkner similarly found that

“group drumming connects people in an ‘in the moment’ experience and produces a form of entrainment synchronized through the rhythmic pulse. It allows people to connect in a safe way that avoids many of the misinterpretations and judgements of language.” (Faulkner, 2017, p.630)

Relatedly, Greene et al. (2009, p. 11) found that “drumming provides youth social support and social networks, opportunities to deal with emotional trauma, and an understanding of and pride in their culture.” Slotoroff (1994, p. 3) found that drumming helped clients to express challenging emotions, stating that “patients often express anger through forceful beating of drums. It appears that the combination of physical discharge and the symbolic nature of music can be helpful in eliciting and expressing anger.” Drumming has been shown to help individuals with trauma express challenging emotions nonverbally, connect with other humans, feel safe, and connect with their bodies. However, it is important to note as well that some individuals find drumming to be a challenging activity due to the hyperactivity and loud sounds (Hunter, 2011).
1.5 Trauma and Education

The ACE study proved that childhood trauma is more prevalent than previously thought, with 67% of people having an ACE score of at least one, and 12% of people having an ACE score of four or more (Felitti, 1998). Trauma impacts both the structure and function of the brain, which can severely impede students’ ability to learn and function in the classroom. Perfect et al. (2016) found that childhood trauma is associated with impediments in school performance, including social, emotional, cognitive, and even brain development can be significantly impacted by traumatic stress. Knowing the ways in which the brain and body are impacted by trauma can help educators implement strategies and procedures to help support students impacted by trauma. For example, Rosenbaum-Nordoff (2018) found that educators who recognize the signs of trauma in their classrooms are better able to understand, empathize, and provide individualized attention, accommodations, and strategies to support academic success and improve behavior.

Trauma has impacts that reach further than health concerns, however. Wolpow et. al (2009) found that childhood trauma can negatively affect a student’s capacity for self-regulation, organization, comprehension, and memorization, which can severely impact academic experiences. Dr. Nadine Burke Harris (2018) also details in her book *The Deepest Well* how her medical clinic found that students with an ACE score of four or more were 32.6 times more likely to develop learning or behavior problems. For educators with access to IEP and 504 documentation for their students, this is a significant statistic to be aware of.
Trauma can also impact a student’s ability to function within the classroom.

Perry found that

“Children who have experienced trauma will be in a persistent state of alarm and less capable of concentrating when they enter classrooms. Because of this, they will pay more attention to the nonverbal cues of a teacher, such as tone of voice, body posture, and facial expressions” (Perry, 2016, p. 2).

Although a student may be physically safe in a classroom, if they do not feel safe, they will continue to operate in a state of alarm or survival (in the downstairs brain) and will be unable to learn and function in the classroom.

Fortunately, there are strategies that educators are able to utilize to help support their students who have survived trauma. One such strategy is to create a sense of safety through predictability. As Perry (2000) explains,

“Safety is created by predictability, and predictability is created by consistent behaviors. And the consistency that leads to predictability does not come from the rigidity in the timing of activities, it comes from the consistency of interaction from the teacher” (Perry, 2000, p. 3).

Additionally, educators can shift the way in which they approach students’ “negative” behavior. Instead of viewing “negative” behavior as willful disobedience, educators can view this same behavior as trying to meet a need. Rosenbaum-Nordoft (2018, p. 6) outlines this beautifully: “with a trauma-informed lens, teachers and school staff can change their thinking from ‘What is wrong with this student?’ to ‘What is the function of that behavior?’” By understanding how trauma impacts students in this way, it enables educators to identify and meet the needs that are underlying the behavior.
Music education offers many benefits that lends itself to be a modality for trauma-informed practices. Music itself can help to engage many of the safety features of the brain, and to disarm the survival states in the brain as well (Viskontas, 2019). Music can help form communities, build connection, and give students the opportunity to express and process emotions nonverbally in a supportive environment. Biddle and Dolby (1996) found that music education offered experiential forms of learning, which Flores (2012, p. 52) describes as, “This [experiential learning] allows the child to engage in a process of exploration and self-discovery, fostering a sense of responsibility, choice, and personal agency.” Leading trauma-specialist Dr. van der Kolk (2015) also described the importance of keeping programs that engage the safety center of the brain in schools, “Despite the well-documented effects of anger, fear, and anxiety on the ability to reason, many programs continue to ignore the need to engage the safety system of the brain before trying to promote new ways of thinking. The last things that should be cut from school schedules are chorus, physical education, recess, and anything else involving movement, play, and joyful engagement” (van der Kolk, 2015, p. 88).

However, more general trauma-informed classroom practices, such as the ones discussed by Perry and Rosenbaum-Nordoft above, have not been researched in the specific context of music education classrooms.

1.6 Diversity, Equity, and Inclusion (DEI)

Although diversity, equity, and inclusion has been studied in the field of music education, there are currently very few studies on diversity, equity, and inclusion and trauma-informed practices in the context of music education. Many of these studies
focus on diversity, equity, and inclusion in terms of curriculum, and what is being taught in classrooms. Campbell (2020) highlights this in their article when speaking about the challenging journey of jazz studies into the mainstream of secondary music programs. Campbell further discusses issues of diversity in curriculum later on in their study,

“A full-fledged grasp of the meaning of diversity, equity, and inclusion, and professional attention to multicultural and global perspectives in music studies at all levels, is as yet sporadic, often superficial and sometimes only a patchwork of attempts to cover what is still a deeply European-grounded enterprise.” (Campbell, 2020, p. 2)

While schools are beginning to incorporate multicultural and global perspectives in their music curriculums, these efforts are at best an effort to improve curriculum and represent the different cultures and perspectives of the students in the room. At worst, however, these efforts are inconsistent and superficial, not truly educating students on the cultures and perspectives of the music they learn.

Other studies focus on DEI as an antiracist framework, focused on getting rid of implicit biases, microaggressions, and building antiracist practices. (Marraccini, 2022) While these studies do acknowledge the historical trauma that these students carry, they do not acknowledge other traumas and how the effects of these traumas are specifically impacting the functioning of students in music classrooms.

While antiracism and the representation of varied cultures are certainly important elements to DEI, these interpretations leave out differently abled communities. In the field of education, including music education, the term inclusion has long been used to speak about special education and the inclusion of differently abled students into general education classrooms (Jellison, 2014). When working with a DEI framework through a trauma-informed lens in music classrooms, it is essential
to take differently abled students into consideration. There are also currently no studies on viewing differently abled students through a DEI framework and a trauma-informed lens in music classrooms.

### 1.7 Social Emotional Learning (SEL)

Social emotional learning (SEL) can be defined as “the process of developing fundamental social and emotional competencies in children” (CASEL, 2006, p. 17). Five important tenets of SEL are developing self-awareness, social awareness, self-management, relationship skills, and learning responsible decision making (CASEL, 2006). However, SEL differs from other interventions in that it does not target specific students, instead serving as a universal intervention for all students in a school (Merrell & Gueldner, 2010). Pelitteri outlined how music education can be a particularly good modality for SEL,

> “There is an enormous, though often untapped, potential for music to be incorporated into various educational processes. There is a natural connection between music and emotions, which makes it a well-suited modality for psychoeducational programs that focus on SEL ... music education programs can be used as a channel for supporting emotional intelligence in diverse areas of the school environment” (Pelitteri, 2006, p. 185).

Although there is now a substantial amount of literature on the benefits of SEL in a music classroom, there are currently no studies on SEL and trauma-informed practices in a music classroom.

This research study aims to fill the gap in the research on trauma-informed practices in K-12 music education. Specifically, this thesis aims to identify trauma-informed practices currently used in music classrooms and their schools, trauma-
informed practices that music educators find beneficial, and the current challenges facing music educators when it comes to implementing trauma-informed practices. To study these challenges, I interviewed three music educators who are currently incorporating trauma-informed practices in their K-12 classrooms.
Methodology

Three participants were recruited using the snowball sampling method. Participants were recruited through several Facebook groups dedicated to trauma-informed education or music education researcher groups. The identity of all participants was kept confidential and was only known by the principal investigator. Three individuals from three different states responded to the call for participants, and each participant fit the necessary participant criteria. Each participant was required to be currently teaching in a K-12 school and actively incorporating trauma-informed practices into their classrooms to be eligible for participation.

I conducted six semi-structured interviews between September 2021 and December 2021. Each interview lasted approximately one hour. I asked the participants questions about their music classrooms, musical curriculum and philosophy, and trauma-informed practices. I conducted interviews individually over the zoom platform and each participant participated in a total of two interviews (see Appendices B and C for a full list of interview questions). I used the Zoom platform because each participant had access to this platform, and the platform enabled the interviews to be audio and video recorded and also allowed for a live transcription to be automatically made to aid in the transcription process. Following transcription, I used member checking by sending the participants the interview transcripts and asking them to review them to ensure accuracy.

At the conclusion of the interview process, the six transcripts were coded using in-vivo coding. I used the grounded theory approach to develop categories.
Grounded theory can be defined as a methodological approach that “aims to develop ‘emergent’ theories of social action through the identification of analytical categories from the data and the relationships between them” (Ritchie et. al., p. 18). After I conducted the interviews, I brainstormed and created a list of all topics and themes that I expected to find present. Then, I went through the interviews and looked for the themes that I had brainstormed as well as themes that I might have missed in my initial brainstorm. Finally, I identified three broader categories that all the themes fit into. The three categories that I identified are foundational knowledge, creating safe spaces, and challenges currently facing music educators implementing trauma-informed practices. By sorting the different themes into categories, I was also able to identify a number of sub-categories within them.

1.8 Participant Profiles

Teacher A (who we will call A.Q.), is a music educator from the state of Pennsylvania. A.Q. has worked in many different schools, beginning as a long-term sub in a farming community. A.Q.’s first full time music educator position was in a city in two different elementary schools for one year. A.Q.’s longest position was teaching middle school general music and chorus for nine years. A.Q. also taught at an alternative placement school for students who could not handle a traditional classroom setting. A.Q. is currently teaches at a private school in a city, teaching middle school general music, seventh grade ukulele, and 8th and 9th grade musicals. A.Q. also helps with the chorus. A.Q. has taught students from the age of two up until seniors in high
school. One of A.Q.’s main philosophies is that music is for everybody, and music is a way for communication, feeling, connection, and community.

Teacher B (who we will call B.N.), is a music educator from the state of Massachusetts. B.N. is in their eighth year of teaching elementary school and has been in their current district for six years. They are currently teaching K-5 general music, split between two schools. B.N.’s district has a very wide income gap, and their school is at 50% free and reduced lunch this year. B.N. is a very friendly and bubbly person and explained their musical philosophy as believing that every student is a musician, and that their goal is to help them become the best listener, performer, analyst, creator, and composer. Most importantly, however, B.N. wants their students to be the best enjoyers of music that they can be.

Teacher C, (who we will call C.G.), is currently teaching in the Midwest. C.G. has taught in several parochial schools with different socioeconomic backgrounds and taught private voice and piano lessons for many years. C.G. is currently teaching full time in a K-2 elementary school with the majority of the population having a low socioeconomic status. C.G.’s school gets 100% free breakfast and lunch. C.G.’s philosophy is student-centered, focusing on the student and giving students a safe place where they can learn.
Results

My coding of the interviews revealed three central themes critical to the implementation of trauma informed practices in schools. The first theme was foundational knowledge. This foundational knowledge consisted largely of information that educators used to inform their trauma-informed implementation. The second, and largest, theme was creating safe spaces. My coding of the interviews identified that creating safe spaces was by far the most important element in implementing trauma-informed practices. The final theme consists of challenges music educators faced while implementing trauma-informed practices in their classrooms.

1.9 Foundational Knowledge

The first theme that I identified was the importance of educators having foundational information on trauma and on trauma and music. All of the educators spoke about foundational information that they had gained either from their personal experiences with trauma or from professional development sessions that shaped their implementation of trauma-informed practices in the classroom.

1.9.1 Music and the Brain

The educators spoke about their knowledge of music and the brain and noticing how music helps traumatized students in their classrooms. A.Q. spoke about “realizing that music can be very powerful in helping [traumatized students] through their day.” B.N. spoke about studies they had read on music on the brain: “I think
there are, you know, hundreds, thousands of studies on why music is good for the brain. And we all know that trauma can develop certain responses…” B.N. went on to identify a need for more research in the area of trauma and music and the brain, and how music affects a traumatized brain specifically. C.G. also spoke about how students that struggled in other classes excelled in their music classes: “I can’t explain it from a research perspective but I do know that there are students who struggle in the regular classroom, who have trauma in their lives, and when they come to music, there is something when we move, when we sing, when they can just be like, whatever it is, or they can express their emotions because of a song that we’re doing.”

1.9.2 Trauma and the Brain
Educators also spoke about the importance of having a basic understanding of how trauma impacts students' development and ability to learn. B.N. mentioned how the knowledge of trauma’s impact on the brain changed the way they help students with trauma in their classroom: “here’s the brain on trauma, here’s a normally functioning brain…but more importantly here’s how we change the neural pathways to make the kids do better. And from there, I just completely changed the way that I interact with kids and the way that … I do classroom management, totally different.” B.N. also spoke about the ACE’s study: “and the other thing that I remember having an impact on me was the Adverse Childhood Experience survey.”
1.10 Creating Safe Spaces

The most significant finding of this study is the importance of creating safe spaces in classrooms. For this study, a safe space is considered to be an environment that students not only cognitively know that they are logically in a safe space, but feel safe – enough that they are able to connect all of the different parts of their brain and not be operating out of the survival areas of their brain. As Purvis described in her TBRI, “Trust-Based Relational intervention” article, “It is not enough for parents to know that their children are safe; felt safety only ‘registers’ in the children’s physiology and neurochemistry if the children themselves know they are safe.” (Purvis, 2009, p.5) All educators interviewed in this study spoke extensively about the importance of creating safe spaces in their classrooms, and strategies that they used to create safe spaces. Educators also spoke about two frameworks that they used to help create safe spaces in their classrooms - the frameworks of Diversity, Equity, and Inclusion (DEI), and social-emotional learning (SEL) frameworks.

1.10.1 Meeting Basic Needs

Educators spoke about the importance of recognizing and meeting students’ basic needs. Meeting students’ basic needs is essential to create a safe space for them because it makes sure that they are able to ascend Maslow’s hierarchy of needs to enable them to connect and learn in a classroom (Maslow, 1943). Purvis also discussed the importance of meeting physical and physiological needs (or basic needs) of students, “the foundation of [meeting these needs] is that a child’s mind is housed in his or her body and that the needs of the body influence the child’s ability to do
higher level tasks” (Purvis, 2009, p.5). A.Q. spoke about the importance of allowing students to leave the room and get water if necessary. C.G. described a specific procedure that students with severe anxiety could use if they became overwhelmed in class: “And I’ve had kids in the past with severe anxiety problems where I would tell them if you’re feeling really riled up, you don’t even have to ask, just, you know, leave the room if you need to, and then come back when you’re ready.” C.G. described a specific situation in which a student came to class with shoes that were too big: “I call the nurse and didn’t make a big deal, just like hey do you want to see if you can find some shoes that might fit better, and he was like ‘yeah’, so she had some. So, he had went down…so those are ways I try to connect, I try to look and see what their physical needs are.”

1.10.2 Connection/Relationships

Educators spoke extensively about the importance of building relationships and connection when creating safe spaces. Porges’ polyvagal theory provides an example of why building relationships is important when creating safe spaces. As Porges notes, “[the state of ventral vagal social engagement] promotes positive social interaction, and promotes a sense of safety between people” (Porges, 2011, p. 278). Educators also described a variety of strategies that they use when building connections within their classrooms and with individual students.

For example, several educators spoke about the importance of knowing students’ names, and how this is often an excellent way to connect. C.G. described
some strategies they use to connect, “I try to call each student by name, whether I see
them in my classroom or when I’m doing a duty or see them when they come in the
building, and I try to connect with them with what’s going on in their life, if I know
something specific or if they mentioned something they were worried about or
whatever, just little things like that.” B.N. also described the importance of checking
in with students: “building relationships is the most important so I think the best way
to do that is to check in with kids. I am a pretty big believer that a private discussion is
the best way to handle problems rather than addressing the whole class with that kid’s
name.” A.Q. also spoke about strategies that they used to check in with students: “I
also try to check in with the students, like right at the start of class but [also]
periodically. If I noticed that people are getting anxious, or they’re reacting to
something or you know something’s obviously going haywire with a student or a few
students, [I’ll check in] ...”

C.G. spoke also about the importance of having student-first approaches when
creating safe spaces: “Teaching is supposed to be my number one thing, but sort of
not, it’s kind of like the number two thing, a big thing is giving students a safe space
where they can learn, and yes they’re learning music, they’re learning all the, you
know, fundamental speed and meter and all this stuff, but they’re learning that they
have a safe space where they can learn these things… it’s more about the student.”

Educators highlighted the importance of consistency in terms of relationships,
and how in some cases music educators may even have an advantage in this area. B.N.
described how being an elementary school music teacher can be an advantage in terms
of consistency, “So what happens is, for a lot of my kiddos I become their consistent adult. And because I have had them for four years. And then for some of them I’ll have them again once I get to four or five, there’s some kids that I’ve had for six years in a row now, which is amazing…you invariably become this consistent. There’s this constant in their life, and vice versa. And for so many trauma kids there’s a shortage of constant adults around them. So I think there’s something really powerful in developing a relationship where you can say, yeah I’ve known you half of your life.”

Educators also spoke about the importance of giving students the ability to be creative and take risks, while also telling them that it is okay to make mistakes. B.N. described a game that they use in their classroom to give students an opportunity to be creative: “My favorite is a game called ‘do the you’ that I made up, where, at the beginning of the song you listen, you feel the heartbeat. You ‘do the me,’ and copy my dance moves. This is where, again, we establish risk taking because I am not a good dancer. And I just go for it. Then ‘do the you’, you can dance however you want as long as you’re being safe and appropriate. Then in the middle, ‘do the who?’, I look for kids who are raising their hands, and then we ‘do the Jack’, and we all copy Jack’s dance moves…again, we’re relationship building.” B.N. went on to talk about how important risk taking is in developing a safe space, “The freedom to take risks…is a really important aspect to felt safety. And I think I do that by taking my own [risks].” C.G. described the level of trust that they found when similarly giving students the opportunity to have their own voice in class and be creative: “When a student has a voice, I guess you could say. Then they feel heard, they feel seen, and to me, I mean I
haven’t asked them this, but they feel safe. It’s really important that students feel safe in my room.” A.Q. also described specific structures and procedures they have in place for when students (or their teacher) either feel hurt or make a mistake, “you know, we can have a disagreement and talk about it in a healthy way, but also knowing that we can make mistakes, you know we all make mistakes, the teacher is going to make mistakes, so we have a process in place for that too. Like if you hear something that feels offensive or hurtful, you know you can stop the class by saying ‘ouch.’”

B.N. went on to describe the impact that creating safe spaces and utilizing trauma-informed practices has had on her classroom and students, “They [the students] are a lot more likely to trust me. And I think I’m a lot more likely to trust them as well. Because in a trauma-informed classroom, yes, there are consequences. But the consequences are always more about learning than punishment.” B.N. also spoke about recommendations for any educators wanting to incorporate trauma-informed practices into their classrooms, “Some of the best advice that I could give to a teacher who was looking to implement trauma-inclusive practices is just to keep an open mind and keep a flexible timeline. This can’t be done in one night; it just doesn’t happen that way because trauma-inclusive teaching requires a positive teacher-student relationship.”
1.10.3  **Diversity, Equity, and Inclusion**

When speaking about creating safe spaces, educators also spoke about elements used in Diversity, Equity, and Inclusion Frameworks. Specifically, they discussed the need for accessibility of music for all students, the importance of equity in their classrooms, and the importance of culturally relevant curriculum.

A.Q. spoke about the different accommodations that they made to ensure students could participate in music class, “I want music to be accessible to everybody. So if learning how to read music is an obstacle, I try to make it easier to try to gear a lot of my classes to that so that it becomes easier, or if it’s just a way of participating somehow than we get out toy drums, we get out shakers, we get out, you know - we clap, we dance, we do body percussion, I just want, you know, people to be able to be musicians.”

Educators also spoke about the importance of differentiating lessons for students. As A.Q. explains differentiation, “it means meeting kids where they are…and knowing that it’s going to be tricky to sort of maneuver through a whole classroom where you know everybody’s dealing with something different or not dealing with anything at all, and to specialize your education to that particular kid that’s going through a lot, and the other kids that may not be going through as much. And then the other kids can be tricky but it’s necessary work.” C. G. also described the importance of approaching traumatized students differently depending on the student: “I don’t push her like I would another student. She doesn’t always like to stand up when we do the activity. Well, I’m not going to sit there and go, ‘you need to stand
up,’ you know because that’s not going to do any good…it’s better for me to build trust with her, rather than shame her and say ‘why aren’t you standing up?’"

Educators also discussed the importance of addressing equity in their classrooms. As A.Q. stated, “Some kids will need more than others, and we just have to be very, you know, allowing for that, very flexible and forgiving of that. So, I mean obviously we can’t make it known that like, ooh the student has an IEP, we have to just sort of frame it like different students will need different things, so we’re going to just be accommodating and flexible.”

Educators additionally spoke about the importance of being culturally relevant in their classrooms. As A.Q. explained, “The material I use tends to be either folk music or music from other countries or other cultures. This year what I’ve stressed, especially with our DEI slant is researching the backgrounds of the songs and music that we do. And we also have a lot of listening logs that we do so that we explore music of, like, the past or different cultures or different genres, so that they really understand that music can be performed on an instrument that may not be in our culture, but it can be used for different cultures…so it’s supposed to be a fun class but there’s also a lot of cultural awareness built in as well.”

B.N. also described the importance of a culturally relevant curriculum: “So I think a lot of this comes back to culturally responsible teaching, and how intertwined, they [culturally responsible teaching and trauma-informed practices] are. I need my curriculum to reflect the students that are in front of me. And I need my curriculum to work with all the obstacles that my kids are facing. So, for me, that’s meant,
eliminating songs that have racist roots…” Incorporating DEI frameworks allowed educators to make sure that every student was not only included and able to participate, but also to feel that their own cultural background was represented in the curriculum and music being taught.

1.10.4 Social-Emotional Learning

Educators also spoke extensively about incorporating social-emotional learning in their classrooms and giving students the space to feel and express emotions in music class. C.G. spoke about specifically using the music to hit social-emotional learning aspects. C.G. also described how music gave their students the opportunity to express their emotion: “there is something when we move, when we sing, when they can just be like, whatever it is, or they can express their emotions because of a song that we’re doing.” A.Q. similarly described giving students percussion instruments to help them express negative emotions: “I had a lot of angry children and it was almost disturbing to see like, second grade age kids have so much anger inside them, and you know when I talk about it like, ‘all right, we’re going to talk about our feelings but through percussion instruments,’ you know, just handing a percussion instrument, and you know they can just play a beat or play some rhythms or, you know experiment with different sounds.” A.Q. also described how this was a beneficial practice for their students, “[there are ways kids can] work out issues, deal with things, handle things in such various ways that music is so valuable for that.” B.N. spoke about giving students the space to express emotions in their class as well: “they’re free to be wacky,
they’re free to be silly, kind, caring, scared, brave but they’re, you know they’re allowed to be angry and learn how to deal with that and just be their beautiful selves.”

1.11 Barriers to Implementation

The final theme that I identified in the interviews was the barriers and challenges that prevent educators from implementing trauma-informed practices in their classrooms. All educators spoke about the challenges of implementing trauma-informed practices, and every educator identified challenges related to collaboration, lack of resources, lack of documentation for traumatized students, lack of time, and personal trauma and burnout.

1.11.1 Collaboration

The first barrier to implementation that I identified was a lack of collaboration. Educators spoke extensively about the importance of collaboration, both with other educators, colleagues, community members, parents, and administrators. While talking about the importance of collaboration, educators also identified some challenges with successful collaboration. A.Q. was the only teacher that was generally satisfied with their collaboration situation at their current school. However, even A.Q. said that “[meetings] are not as frequent as it would be nice to … but yeah, trying to find the space and time where everyone can meet would be ideal but pie in the sky.” A.Q. also described how this was not the same at other schools they had taught at: “I feel like one of the biggest things that I would have loved to see happening all around like in all the schools that I taught at was more collaborative, communication, because I feel
like, in order to help a kid that has trauma there has to be more communication with
the other teachers that the student takes classes from, the parents or whoever's at
home, therapists, you know, everybody that's in this child's life, you're working
together to help this kid, I always felt like there was always something missing like
some piece of that missing in almost all the situations that I was in. … I would love to
see more collaborative connections. … there could be more communication as to what
we teachers in the classroom should specifically do, because I feel like we get the
IEP’s, we get the write ups, we get all the suggestions, but I feel like there could be
even more detailed practices that we could implement.”

B.N. echoed this sentiment when speaking about who she wished were
involved in collaborative situations, while also identifying a further challenge in
collaboration: “Families and communities, you know, caregivers are not as involved as
they maybe could be. But you never know what’s going on at home. And I would
hesitate to make something worse.” B.N. also described feelings of loneliness due to a
lack of collaboration and communication with non-specialist teachers: “I do feel like
sometimes we’re on an island, because our situations are so different from the
classroom teachers just in sheer number of face-to-face minutes. And I think that
sometimes we are forgotten about.” Finally, B.N. spoke about a need for “more
upfront collaboration, rather than reactive collaboration. I think the grade level
teachers can know pretty quickly if a kid is really regulated, … I wish there was a little
more upfront discussion about that so I don’t have to kind of figure it out myself.”
All three educators spoke about the importance of school counselors, and the need for additional school counselors. A.Q. also spoke about wanting to talk more with the counselors: “I mean, they’re accessible, but I think partly because of HIPAA and privacy issues they can only divulge so much… and you know dealing with a trauma student within all of that would be great to know.”

C.G. spoke extensively about the lack of communication and collaboration within their school, describing how specialists often do not get the IEP’s and 504’s for their students unless specifically asked for. C.G. also described a specific situation with a particularly traumatized student who struggled the first year in the class: “because specialists - we’re not told. We were told later and that was like when I said like, we like we have to know something.” C.G. outlined how they pictured an ideal trauma-informed collaboration, “like a tree… where it’s broken down like when a trauma happens, like here’s your go-to as a teacher, you know if something happens, we have a system like if something happens in your classroom like behavior. But I think there should be a go-to if you - of course we have to report if we suspect physical abuse, sexual abuse, neglect we have to report all that - but to me as a teacher, it got to be more than we report it. It’s like - where’s kind of the food chain on that?”

1.11.2 Lack of Resources
The second barrier that educators spoke about was a lack of resources available. All educators spoke about the need for more training in trauma and the need
for more trauma-specific resources in their buildings or districts. C.G. explained feelings of helplessness due to a lack of training: “I would say with some of the most severe trauma [I felt] helpless because I’m not trained in trauma, I’m trained as a music teacher who’s read about trauma and dealing with my own personal stuff. And so, knowing what is the best thing to do and what resources, even if our building even has the resources we need because sometimes I think we don’t, like our counselor is part time and she’s part time with the other building… but sometimes I feel helpless, because I don’t know, I just don’t know where, how they can best be helped. Because doing music is great but sometimes they need something that is outside, definitely outside the classroom.” C.G. also described the importance of having consistency in training across a building or district: “we were not - the specialists, we’re not trained, supposedly we’re supposed to be. But what is not consistent with that is not everyone is trained, so I’m like, if we’re going to buy into a framework and see if it works, we should all be fully trained. And that means the teacher aids who work in the cafeteria with students, that means support staff…”

When discussing the lack of resources available to trauma-informed educators, educators also identified the need for a documentation system for students that have trauma. C.G. described how several students in their school received IEP’s due to the impact that trauma was having on the student’s behavior and academic performance. A.Q. spoke about how IEP’s unfortunately “don’t signal any trauma things.” B.N. described the type of documentation that is needed: “I almost wish there was a third kind of document for trauma informed kids because IEP’s are so spread out, you know
you’ve got kids with down syndrome or autism or any of those, you know, major nonverbal developmental delays, and they have IEP’s. And you have students who are neurotypical that have a speech delay who have IEP’s. And it’s just so spread - disparity so big, but a lot of those accommodations pop up everywhere. And I think they go for trauma kids too.”

1.11.3 Lack of Time
The third challenge to implementation was identified as the lack of time. All three educators identified time as a significant challenge in their trauma-informed practices. As A.Q. described, “It’s hard though, because I have them for 45 minutes. They have to clean our chairs the last five minutes, because of all these COVID protocols. And that gives me 40, I have to take attendance which takes two or three have to put it in the computer, on a paper - both this year, and so limited time.”

B.N. also spoke about the lack of time that teachers have in general: “Prep time’s hard to come by. There’s never enough of it. Ever.” B.N. went on to specify why time is especially essential in a trauma-informed classroom, “Some of the best advice that I could give to a teacher who was looking to implement trauma inclusive practices is just to keep an open mind and keep a flexible timeline. This can’t be done in one night; it just doesn’t happen that way because trauma inclusive teaching requires a positive student relationship.”
1.11.4 Dealing with Personal Trauma and Burnout

The final challenge to implementation was having to deal with personal traumas and burnout while implementing trauma-informed practices. Burnout, also known as secondary traumatic stress, can be defined by symptoms or stress reactions that may mirror PTSD reactions, and may be experienced by those hearing the stories or experiences of those who have had a traumatic event (Christian-Brandt, 2020). When educators are themselves burnt out or experiencing trauma it can be difficult to effectively educate and connect with students in a trauma-informed way. A.Q. described a class during the 2020 presidential election: “But I just remember coming home from that class and just feeling like - uhhh [groan].” Simmilarly, C.G. noted, “sometimes I go home from work, and I’m sad because some major things happen … some kids who’ve gone through trauma, in our school district at least, they might be evicted from an apartment, because there isn’t paid so then they go, maybe we see them again in a year, maybe I’ll never see them again…” B.N. described the help that teachers need to deal with their own traumas and still connect with students: “And, you know, but we all have our own ACEs. We all have our own traumas. We all have our own weight that we’re carrying with us… I can’t fix that. You know, you need help. And there are going to be moments when kids say or do something, and you want to work with them to make [what they did] not ever happen again, and you need a day. You need a week. You need help. So I think it’s really important for teachers to know that about themselves, to know what are the issues that are going to push your buttons and to know if it’s not the right time to fix it because otherwise you’re going
to strain the relationship and you’re going backwards, you know.” Dealing with personal trauma can be challenging enough but compiling that with secondary traumatic stress and doing the work of implementing trauma-informed practices in a classroom can be overwhelming, and educators need more tools and resources to help deal with this additional stress.
Discussion

When I began this study, I expected to discover specific musical strategies that educators can use to help mitigate the effects of trauma in their students. Instead, the most significant takeaway by far was the importance of creating safe spaces for students. Educators spoke about the importance of creating safe spaces more than any other topic, and it is clear that educators must first create a safe space before they can hope to implement any other trauma-informed practices in their classrooms. The three educators that I spoke to created safe spaces through meeting their students’ basic needs, connection, and through DEI and SEL frameworks. What worked for these educators may not work for every educator, however. Different classrooms and different school populations may need different things to create safe spaces in those specific environments. Similarly, different teachers will need to do different things to create a safe space in their specific classroom due to their specific personality and teaching philosophy.

Another takeaway that I identified was the need for additional resources and trainings on trauma provided by schools to educators. The educators that I interviewed all spoke about the need for further research and training. Many of the educators that I spoke to had some type of professional development on trauma-informed practices, however they emphasized the need for these professional development sessions to be held at times when teachers are actually able to absorb the material. One of my educators spoke about having professional development on Fridays, and how educators are much less likely to truly learn and absorb this material when they are
already exhausted from a full week of teaching. Similarly, educators were frustrated with a lack of consistency when districts or schools tried to implement systems that could have possibly helped them in their trauma-informed implementation. When discussing these topics, I also noticed educators speaking about numerous systematic challenges associated with implementing trauma-informed practices. Educators working with a non-trauma-informed administration will have a much harder time implementing trauma-informed practices and will have a harder time connecting with resources that can help them and their students. When implementing a broader framework, particularly if this is a trauma-informed framework, it is essential that everyone in a school building is trained in that system, whether they be classroom teachers, receptionists and cafeteria workers, music teachers, or administration. This consistency is essential when trying to implement school-wide trauma-informed practices.

Educators also discussed widespread problems of burnout. As a preservice educator, even I can speak about the level of burnout and secondary traumatic stress that exists within the field of music education. After the COVID pandemic, making music with our students is harder than it ever was before, and music educators are bearing the brunt of that stress. Reconnecting with students post-COVID can also be overwhelming for educators due to the amount of stress that our students had to deal with during COVID. Listening to and empathizing with students is not hard to do but dealing with the burnout and secondary traumatic stress that building these necessary connections and relationships is incredibly challenging. Music educators need access
to more resources to help them deal with this stress, both to help them do their jobs better, and to help them not carry this secondary traumatic stress home.

1.12 Implications and Recommendations

For educators currently implementing trauma-informed practices in their classrooms, it is important to focus as much as possible on creating safe spaces in classrooms and on connecting with students. Try to incorporate musical activities that give students the chance to develop their own voice and be creative, whether that be musically or through movement activities. Understand that students will have hard days, and that educators will also have hard days. Educators cannot be perfect, and in creating a safe space for students, we must also try to create a safe space for ourselves as educators to make mistakes every once in a while. By correcting these mistakes in a positive way, we can even model this positive behavior for our students.

For schools and districts, it is important to understand that educators need support just like the students do. In light of this, schedule professional developments at times in which educators will actually be able to absorb information. Provide educators with a specific, structured list of people to go to if they need help with specific students or with their classes. Furthermore, provide educators with resources that they can use if they begin to feel symptoms of secondary traumatic stress or burnout. This will not only help the educators provide better instructions to the students but will also help with teacher retention. School districts should also consider implementing trauma-informed practices across specific buildings or across districts, so that such practices are not up to one teacher and are instead reflected in the rest of the administration and school population.
For preservice educators (and their professors), it is important to take the time that you have in school to learn about trauma-informed practices. Take (or teach) a class focused on trauma-informed practices in music education. If this is not a class offered at your institution, take any class focused on trauma and the effects that it can have on the mind, brain, and body. This knowledge will help inform you when you eventually go into your own classroom.

1.13 Study Limitations and Directions for Further Research

This study was able to identify numerous directions for further research. The first area of research needed is identifying musical interventions focused on healing trauma in classrooms. Although I initially thought that this study would discover this, my research only looked at what educators are currently doing, and more research needs to be done on specific musical interventions to find out what works and what does not work.

Additionally, this study did not focus on identifying barriers to implementation; however, all of the educators identified many barriers to their trauma-informed implementation. Educators identified challenges including time, collaboration, lack of resources, and dealing with personal trauma and burnout. Research needs to be conducted on how time (and the lack of it) may impact educators in their trauma-informed implementation. Research should be done on different types of collaboration, and on what types of collaboration are beneficial in a trauma-informed classroom setting. Furthermore, research should be done on who should be included in trauma-informed music education collaboration settings, and the
advantages and disadvantages of having different collaborators involved. More resources must also be made available to educators, both through professional development like I talked about above, and through the publishing of further research on trauma-informed practices in music education. The need for further research in the area of educators and secondary traumatic stress is particularly important. Further research is needed in this area to identify how this stress and burnout is impacting music educators’ instruction and their lives as a whole, while also identifying potential strategies to help prevent these negative impacts on educators.

A final limitation of this study relates to its small number of participants with limited demographics. Future studies must be conducted with larger study populations. Further research should also be conducted using different research methods, such as through surveys, focus groups, or a larger number of interviews. Further research should also be conducted with educators from a broader range of demographic backgrounds, a broader range of types of schools, (e.g. public, charter, private, parochial), and schools located in a broader area of regions, (e.g. urban, suburban, rural).
Appendix A – Polyvagal Theory Chart
Appendix B – Question List #1

1. Can you talk to me a bit about your teaching background?
2. Can you tell me about your teaching philosophy?
3. When did you start implementing trauma-informed practices in your classroom?
4. What made you decide to incorporate trauma-informed practices in your classroom?
5. Where did you learn about trauma-informed practices (in education)?
6. What does a trauma-informed teaching approach mean to you?
7. Is there a particular framework of trauma-informed practices that you use or particular research literature that you have based your trauma-informed implementation on?
8. How is music specifically a beneficial modality for trauma-informed practices in schools?
9. Have you incorporated drumming or songwriting in your classes as a trauma-informed practice?

10. Have there been particular strategies in implementing trauma-informed practices that you have found particularly helpful?

11. Were there any trauma-informed practices that you stopped implementing because they were not working in your classroom?

12. Have you noticed changes in your students’ behavior/performance after implementing trauma-informed practices in your classroom?

13. What were some initial and/or ongoing challenges in implementing trauma-informed practices in your classroom?

14. Does your school and/or district also have trauma-informed practices or frameworks in place?

15. What does the ideal trauma-informed program in your music classroom or in your school look like to you?

16. Is there anything else that you would like me to know?
Appendix C – Question List #2

1. What are specific strategies that you use to build connection in your classrooms?

2. What are specific strategies that you use to develop felt safety in your classroom?

3. Do you utilize calm corners in your classroom? (if so, how do you utilize it?)

4. How do IEP’s or 504’s impact your trauma-informed instruction?

5. Can you talk to me a bit about the curriculum in your classes – what type of material do you cover?

6. How does trauma-informed practices influence/shape your curricular choices (if it does influence curricular choices) Alternatively, how are you piecing trauma informed and music together?

7. How does culturally responsive pedagogy intersect with your trauma-informed practices?
8. Do you utilize movement in your classrooms? (if so, how do you utilize it?)

9. How do you give students voice in your classroom?

10. What are some resources that you are glad you have access to in your school/district? What are some resources that you wish were more accessible or had access to?

11. How does collaboration with other teachers/administration play into your trauma-informed practices in music?

12. How does collaboration actually happen – informal or formal meetings? Emails, conversations, etc?

13. Who do you collaborate with in your trauma-informed practices? Are there people that are not involved that you would like to be? Or why are they not involved?

14. What would you like collaboration to look like?

15. how does interpersonal equity play a role in your trauma-informed implementation?

16. How do you incorporate societal trauma into your trauma-informed practices?
   How does equity play into your implementation?
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