Jurnal SENI MUSIK
Vol. 17, No. 2 Oktober 2025 page: 72 - 87
DOI: dx.doi.org/xx.xxxxxx/jsm.v1i1.xxx
P-ISSN: 1829-8990 E-ISSN: 2580-5371

Adaptation of Iso Principle Concept as a Foundation in Music Therapy Session Planning for a First Responder with PTSD: A Case Study

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Abstract

Post-traumatic stress disorder (PTSD) among first responders is an understudied issue in Indonesia. Until the point that this study was written, there has not been any literature regarding this issue that is available in Indonesia. In the American continent, music therapy is used as one of the non-pharmaceutical interventions for first responders and veterans with PTSD. Despite of the many literatures that were written on music therapy and PTSD, there is a lack of information on approaches and considerations when working with first responders with PTSD in a music therapy session. This study aims to offer the clinical idea and considerations; mainly the adaptation of Iso principle concept; to base music therapy session planning for first responders with PTSD. The Iso-principle is the idea of matching the chosen music to the client's mood, and gradually changing the music to the desired mood. In this case-study, the flow of music therapy sessions with an adult male first responder will be reviewed and analyzed.

Keywords: First-responder, PTSD, Iso principle, music therapy

Adaptasi Konsep *Iso Principle* Sebagai Dasar Perancangan Sesi Terapi Musik Untuk Petugas Gawat Darurat dengan PTSD: Sebuah Studi Kasus

Abstrak

Gangguan stress pasca trauma (PTSD) pada petugas gawat darurat adalah area studi yang kurang dipelajari dan dikaji di Indonesia. Sampai pada masa penulisan studi ini, belum ada literatur di Indonesia yang membahas mengenai topik ini. Di benua Amerika, terapi musik telah digunakan sebagai salah satu intervensi non-farmakologi untuk petugas gawat darurat dan veteran yang mengalami PTSD. Meskipun telah banyak literatur yang membahas terapi musik dan PTSD, informasi seputar pendekatan dan pertimbangan untuk mengaplikasikan sesi terapi musik untuk petugas gawat darurat dengan PTSD masih sangat minim. Studi ini bertujuan untuk memberikan ide dan pertimbangan klinis; terutama mengenai adaptasi konsep Iso principle; untuk mendasari perencanaan sesi terapi musik untuk petugas gawat darurat dengan PTSD. Iso-principle adalah sebuah konsep dimana musik awal yang dipilih harus menyamai suasana hati dari klien, dan secara bertahap mengubah musik yang digunakan untuk menuju suasana hati yang diinginkan. Dalam studi kasus ini, sesi terapi musik dengan seorang petugas gawat darurat pria akan dikaji dan dianalisis.

Kata Kunci: petugas gawat darurat, PTSD, Iso principle, terapi musik

Introduction

The USA national center for PTSD (Post Traumatic Stress Disorder) reported that about 6 of every 10 men and 5 of every 10 women experience at least one trauma in their lives (US Department of Veteran Affairs, 2022). In Indonesia, an article by Supriyanto (2021) reported that following a traumatic event, the PTSD diagnosis will be observable within a 5-10% of the impacted society. For example, following a natural disaster in West Java and West Sumatera that impacted 859 children and adults, there is a 19.9% of PTSD prevalence. Traumatic response in human could be triggered by a varying traumatic event. One of these events is witnessing accidents, or horrid crime scene. For first responders, this kind of emotionally provoking sight is a part of their work. Despite of the high-risk to trauma exposure, there is a lack of data and study that speaks specifically about clinical interventions for Indonesian first responders that experiences trauma. Until the point that this study was written, there has not been any resources that addresses the risk of PTSD among Indonesian first responders. This study aims to offer the resources and considerations for practitioners when working with first-responder PTSD patients within the scope of music therapy.

Post-traumatic stress disorder (PTSD)

Post-traumatic stress is a disorder that is classified under the category of Trauma and Stressor-Related disorders in the Diagnostic and Statistical Manual of Mental Disorders V (DSM-5). The trauma and stressor related disorders may happen when an individual or a community is exposed to traumatic or stressful event. Based on the DSM-5 , there are a few criteria that may apply for individuals with PTSD diagnosis (American Psychiatric Association, 2013): 1) Exposure to actual or threatened death, serious injury, or sexual violence; 2) Presence of one or more intrusive symptoms associated with traumatic events such as distressing memories, dreams, and dissociative reactions; 3) Persistent avoidance of stimuli associated with the traumatic event(s) beginning after the traumatic event(s) occurred; 4) Negative alterations in cognitions and mood associated with the traumatic event(s); 5) Marked alterations in arousal and reactivity associated with the traumatic event such as irritable behavior, reckless behavior, hypervigilance, exaggerated startle response, problems with concentration, and sleep disturbance. The duration in which the criteria occurred within an individual must be more than one month, and these disturbances must have cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. These disturbances should not be caused by physiological effects of a substance or another medical condition.

First-Responders & Trauma

First-responders are people who respond to the scenes of emergencies. This includes police, firefighters, and paramedics, among other emergency personnel (Center for Addiction and Mental Health, 2022). It is estimated that 30 percent of first responders develop mental health conditions, such as depression and posttraumatic stress disorder (PTSD), as compared with 20 percent in the general population (Abbot et al., 2015). The nature of their work involves witnessing deaths and injuries on a daily basis. The number of traumatic scenes that they have encountered in their occupation alone is more than what any individual might experience throughout their lifetime. Despite their occupation's high risk to traumatic events exposure, a survey by Ebersole towards 2000 first responders reported that 40% of these first responders received negative repercussions at work if they are to seek mental health service. This could worsen the overall mental health condition of first responders.

There are preventive actions that first responders can take to prevent the development of occupational trauma or other mental health concerns. The Substance Abuse and Mental Health Services Administration (2018) broke down the protocol for preventive measure into three steps: pre-disaster, during disaster, and post-disaster. Within this preventive measure, elements such as work experience, job satisfaction, mastery, confidence, and social support play an important role. In the case that a first responder experience PTSD due to their occupation, several clinical interventions are proven to help alleviate the symptoms (Haugen, 2012). These interventions include, cognitive behavioral therapy, eye movement desensitization, prolonged exposure, and stress inoculation therapy. These interventions come with a few pros and cons, however guidelines for application exists to support trauma therapists. Among other interventions that may be applied for PTSD cases is music therapy.

Music Therapy and Trauma

Trauma is an experience judged by the participant to be shocking and memorable, experienced, witnessed, or was confronted with a series of events that involved actual or threatened death or serious injury, or threat to the physical integrity of self or others (Baranowsky, 2019). When an individual encounters a traumatic response, a part of the brain called the amygdala may record the event and all elements surrounding it as danger. The way the amygdala works is not only it recorded the visual aspect of the event, but it also recorded everything that all of our five senses captured during the event. Therefore, sometimes an individual does not need an exact replica of the traumatic event to be triggered. Just an element from the traumatic event might be triggering to individuals experiencing trauma response. Swallow (2002) stated that since trauma response is an emotional experience, to some extent the music therapists are in a privileged position. Music therapists possess a tool which gives them access to the emotions of trauma patients. When used safely, music has the power to heal by helping patients rationalize emotions and deconditioning some memories that are attached to intense emotions. Throughout the past couple of decades, music therapy works for patients with trauma has been progressing. Here are some examples of the works that had been done for this population.

Music therapy was used at the Pavarotti music center in Mostar, Bosnia-Herzegovina as a part of post-war trauma intervention (Lang & Mcinerney, 2002). The name Pavarotti was used by the center after in 1995, Luciano Pavarotti put on his first fundraising concert in Modena, Italy in aid of War Child's Mostar project. The idea of the music center is to provide a place where people could gather to hear and play music together post-war events. Lang and Mcinerney pointed out

that they focused on several features of the post-war trauma patients such as: depression, regression, avoidance, and aggression. They used clinical improvisation to reduce anxiety and build a sense of connection between therapists, patients, and family members.

In India, music therapy was used to help orthopedic patients cope with their PTSD symptoms, post orthopedic procedure (Bharathi, 2021). In this quantitative study towards 80 patients in India, the researcher concluded that music therapy is an effective non-invasive therapy to reduce levels of PTSD symptoms and to relieve pain. Meanwhile Dr. Galina Mindlin (2011) used the 'Brain Music Therapy' at St. Luke's Roosevelt Hospital to help first-responders cope with the stress and trauma symptoms in their daily live. The Brain Music Therapy was developed by researchers from Russia in collaboration with musicians and engineers to create a brain monitor that was capable of recording and translating brain activity into music. In Dr. Mindlin's research, 47 first responders were randomly assigned either to the experimental group or the control group. The result is that the experimental group made significant improvements in sleep quality, insomnia, mood, and daytime function compared to the control group. While there have been several studies that addressed music therapy for trauma patients (Hussey & Pasiali, 2007; Beck et al., 2018; Sutton, 2002), until the time that this case study was written, there has not been any literature that specifically addressed the considerations when planning music therapy sessions and choosing music for trauma patients.

ISO Principle and ISO-Moodic Principle in Music Therapy

The iso principle is a widely known terminology, exclusively in music therapy work (Davis et al., 2008; Heal & Wigram, 1993; Wigram et al., 2013). The iso-principle is a concept in which the therapist meets a patient at a current body state with a musical element, then moves them to a new, desired state by gradually changing the music element (Goldschmidt, 2020). Meanwhile, the ISO-moodic principle in music therapy refers to the need to match the music to the current mood that a patient is in, and that the patient's mood state may be altered on exposure to music that evokes or tends to evoke a similar mood state (Katsh & Merle-Fishman, 1985). The iso-moodic principle of music therapy assumes that individuals have the tendency to attend selectively to music that is relatively congruent with their current mood state (Barathi, 2013).

When providing care for PTSD patients, it is important to provide a safe space for patients to explore their emotions safely and comfortably. PTSD patients have the tendency to be extra cautious and guarded due to their trauma response. Therefore, an approach that is gradual and person-centered in nature should be preferred when working with PTSD patients, to make sure

that the session progresses at the pace of the patients. Hypothetically, the concept of iso-principle and iso-moodic principle could be applied for the music therapy session structure. In this case study, we will see how a music therapist can adapt the concept of Iso-principle and Iso-moodic principle and use it as a consideration when planning a session for first-responder patients with PTSD.

Methodology

The case study was chosen as the methodology of this study. A case study has the potential to capture descriptive and detailed information about the patient and their relationship with the therapist (O' Donoghue, 2017). Case study methodology offers a formal structure for stories, and stories provide rich and reliable information (Aldridge, 2005). This method allows for the exploration and evaluation of the phenomena. The source of data for this study came from the session's verbal and visual documentation, as well as the therapist's and patient's reflections and testimonials.

This case study was written from a session that was done in a mental health institution located in the province of Ontario, Canada. These were individual sessions that were facilitated by an Indonesian therapist. Consent for the publication of this case was provided by the client through the institution. These sessions run every once a week for approximately 1.5 months. There is no video or audio documentation for this case since audio and video documentation was not allowed in the institution for any purpose. The sole form of documentation that the writer has, comes from a written report and session plan that the therapist has. The written report follows the common clinical documentation SOAP format (Subject, Objective, Assessment & Plan).

Patient's Background

Tony is a man in his mid-30s during the time of his sessions. He was admitted to the Post Traumatic Stress Recovery unit of the institution due to severe PTSD symptoms. Tony has a wife, and before his diagnosis he was a first responder. As a first responder, his job is to be the first few people to be on a scene of crime or accidents to provide assistance. Most of the times, to be the first to arrive on scene, a first responder might witness events that may provoke traumatic response.

At the mental health institution, Tony was assigned a designated trauma therapist and was set to receive several interventions. Based on the information provided, Tony was experiencing nightmares, flashbacks, anxiety, and was sometimes aggressive. He was often avoiding other

sessions and had to be encouraged to attend therapy. Tony was referred to the music therapy session when he was already in the institution for a couple weeks. His main therapist was hoping that music therapy sessions could help him be more open towards other interventions and address his over-perfectionism. Over-perfectionism or excessive needs to be in control is often seen in PTSD patients. Another aim of the music therapy sessions is to provide Tony with a sense of safety and comfort to express and talk about his experiences.

Assessment

Upon the first session, Tony did not show up to the music therapy room and later told the therapist that he did not feel well. In the next appointment, Tony was late, and the therapist had to check in on him at his ward and encourage him to attend the music therapy session. During this first session, physically he looked guarded, and his demeanor seemed slightly awkward. However, after an introduction, it was clear that he did not hesitate to speak at length about himself and what he experienced. In fact, he spoke for the whole session. Sometimes he would repeat some details and beat around the bush. He would also change the focus of a conversation when the questions start to make him feel uncomfortable. In this session, Tony said "I have to be honest. I came not because I want to but because I was told to. I honestly don't have any interest in doing this". Tony would also decline when the therapist asked him if he would like to play an instrument or listen to music. It seems like he was using verbal conversations to avoid musical interventions.

We addressed what his primary therapist referred to as his perfectionism, and Tony said he did not think that he is a perfectionist. Tony also mentioned that he struggled to understand other's validation of his emotion. He said, "I am very black and white. I used to work as a firefighter. When a therapist validates me, I told her that no one has ever done that before, and I'm confused". Tony also shared that when he saw someone getting validations from others, it is as if they are asking for "a pat on the back". Through this assessment session, the therapist observed that just like most PTSD patients, Tony appears guarded and is avoiding any interactions that may cause him to feel any intense emotions despite it being a positive emotion. His confusion towards others' validation appears to be a defense mechanism, and his refusal to acknowledge others' need to be validated is his own projection. Being able to access delicate emotions is important in PTSD intervention before we could begin separating the patient's trauma memory and the attached emotions. In Tony's case, accessing these emotions slowly, and being to be embrace it will be the first big step that he needs to work on.

Music Therapy Sessions

1. Third Meeting

In the third meeting, the therapist became a bit more direct to encourage Tony to start trying some musical activities, while still maintaining a sense of safety and boundary. The aim of the third meeting was to encourage Tony to start letting music in, and to get him used to the idea of music as a therapeutic intervention. In the third session, there are a few considerations that were involved in the session planning (see table 1). Among which are the gradual changes in the difficulty level of each activity to decide the order of each activity. Other considerations include the choice of recorded music for the receptive activity, the choices of instruments for improvisation session, and room setting.

Table 1. Third Session's Plan

ACTIVITIES	EXPLANATION
Mindfulness Activity	Patient will choose 1 instrument from the provided instruments pile and do a mindful observation of the instrument. Patient will observe the instrument's shape, colour, texture, and sound. Considerations: By being able to hold the instrument physically and observing it in detail, this activity will orient the patient to the present moment and divert his mind from the sense of guardedness in the session
Music Listening	Patient will have a choice to open his eyes or keep them closed during this activity. Patient will listen to a recording of "Night" by Ludovico Einaudi. Considerations: "Night" by Ludovico Einaudi is minimalistic and will not encourage deep imagery or exploration. There is a sense of repetition which encourages familiarity and therefore a sense of safety for the patient. The aim of this activity is to get the patient used to the idea of listening attentively to music and deconditioning music listening activity as something that is less threatening.

Music Improvisation	Patient will choose one instrument from the provided instruments. Patient will then engage in a simple music playing with the therapist Consideration: The therapist provided choices of instruments to give the patient a sense of control. The number of instrument choices were limited so that it does not overwhelm the patient. When playing with the patient therapist will provide a clear and stable bass line, as well as predictable harmony to provide a firm and safe ground for the patient to improvise on.

The therapist had set it so that the session would start with an activity that is less intimidating to do, and later progressed to an activity that is more challenging. It is important to note that the therapist will not force the patient to do all the activities if it is obvious that the patient is struggling to stay centered, or if the patient seems triggered. The therapist started with a mindful observation activity. Therapist told Tony to pick one of the provided instruments that he had never seen or played before. He picked a Guiro, and mindfully observed the visual appearance, texture and sound of the instrument. After the activity he said, "That brings down my anxiety. My temperature dropped and I can feel the air. There are thoughts, the other side of my head is telling me this is stupid. But I pushed it away". The therapist responded by appreciating him for his effort in being mindful.

The second activity was listening to instrumental music titled "Night" by Ludovico Einaudi. The therapist told Tony to listen to aspects of the song such as the instruments, changes, and layers, and notice if there's any thoughts and feelings. The therapist gave Tony the choice to close his eyes, or keep his eyes opened. Tony closed his eyes and during the music listening, his breathing became shallower, and he looked slightly more tense. After the listening he said, "The first part of the music was calming. And then when the other instruments came in, I heard a sense of 'hope' and 'perseverance'. And because these things are foreign to me, immediately my body was tense, like I'm tied down. My breathing became shallow. I had to spend a lot of energy focusing on my breathing. At one point, I saw an image of an orchestra playing in front of me." The therapist then asked Tony if he would like to visualize the imagery and sensation. He drew what he called "a block of concrete", with a crack on it and lights radiating through from inside the concrete (see image 1). He explained, "I feel like someone is chiseling this concrete, and that light is hope and perseverance." The therapist asked if for the future he would like that crack to be sealed or chiseled

even more. He said "A part of me wanted this crack to be sealed because I'm expecting to come back to the work I was in. But I know that my work is only a small part of my life and there is a part of me that wants to break this open slowly."



Image 1. Tony's Drawing

The therapist had planned an improvisation to end the session. The therapist explained to Tony about the improvisation and asked if he would like to continue with this last activity. At first, Tony seemed hesitant but then with more encouragement he seemed willing to try. A few instruments were prepared at the center of the room. Some instruments that were prepared for choices were the djembe drum, a few resonator bells, cabasa, and a wooden marimba with pre-set keys. The therapist wanted to give Tony some options, but also restraining the amount of instrument choices so that it does not overwhelm him. The therapist asked Tony to stay with the theme of 'Hope' and 'Perseverance' and told him to pick an instrument that could help him portray this theme. He said "Now I'm going logical and a big part of me thinks this is stupid. I'm kind of worried too". He kept going back and forth between instruments, until he stopped at the marimba and played a little longer than the other instruments. The therapist went ahead in supporting him with a guitar playing. The therapist started with a steady accompaniment and a clear bass to provide a solid ground while Tony explored the sound of the Marimba. Tony and the therapist then played together for a few minutes until he stopped and trembled and became tearful. The therapist stopped playing and approached him, directing him to take a few deep breaths. After he got calmer, he sat down and said "That was difficult. because it sounded like hope". Noticing that he did an emotionally difficult activity, the therapist validated him and thanked him for his willingness to go into an uncomfortable area. Tony accepted, thanked the therapist, and said he is willing to go for another session.

2. Fourth Meeting

In the fourth session, the therapist started with a check-in on Tony's weekend and then proceed with a few activities with the same structure as the previous session. The session begun with a mindfulness activity and following this activity, we did a music listening. The music that was brought in for the session was an instrumental titled "Happiness Does Not Wait" by Olafur Arnalds. Throughout the listening, Tony closed his eyes. His breathing looked shallow at times, and he appeared a bit tense. After the listening he then said, "Two things came to me when listening to this song. It's a victory and a funeral. By funeral I mean like a loss of a part of myself. Like a part of me is dead. Every time I had my eyes closed, I always felt 'startled', multiple times. But I kept it closed throughout the song. That song was intense, my jaw also hurt. At times my body temperature rises too, and I was sweating." The therapist and Tony discussed further about the sense of 'Loss' that he heard in the music and how it could be the beginning of grief process to whatever it was that he lost from his trauma event. Tony stated that the grieving process had begun a month prior to the sessions, and he had been using rational thought until the point of the session. The therapist offered another part of the grieving process which is the emotional aspect and he admitted that he had only been using his rational mind.

The session then continued with music improvisation. The therapist provided Tony with a marimba with a pre-set key. He said, "Now I'm thinking why I should play this". The therapist challenged him by stating that in the previous session Tony said he wanted to give "more crack to the block of concrete" that he drew. He agreed and we eventually played together in an improvisation. The therapist supported Tony on guitar. In this improvisation, Tony's playing was repetitive and did not show changes despite the therapist's attempt to offer musical ideas. After the playing Tony said "See, this one sound happy. It's weird because last week we were trying to explore something happy, but it ended up being sad. This week is the opposite. I journaled after last week's session, and I focused on the playing part. I think what happened last week was that I felt sad and scared of feeling those 'hope and perseverance'. But this week's playing is more comfortable and easier for me. I felt happier than when I came into the session." The therapist then told him that everything he's feeling is valid and sessions could differ from one another. Sometimes a therapist's task is also to bring Tony out of his comfort zone.

3. Fifth Meeting

After briefly checking-in and starting with a breathing exercise, Tony and the therapist continued the session with purposeful music listening. The therapist played the theme from "Schindler's List" by John Williams. Throughout the listening, Tony looked calm, and he kept his eyes closed. After the listening, he smiled and said that there is "happy and sad" to the music and there is a sense of 'perseverance'. He talked about the song having a sadness to it, but the sadness was not able to reach him. He said "The first time we did this activity a few weeks ago, there was a sadness to the music, and it was hard for me to control myself. But in this session, I know there is still a sadness, an emotion to the song, but I can control myself." Tony also talked about having an image of "walking on a hill, and beside the hill was a cliff, and underneath it was waves of ocean". He then drew this image and explained that in that picture he just "kept walking".

Tony and the therapist stayed with the theme of perseverance and did an improvisation. The therapist provided Tony with a marimba that has a pre-set key. Tony then commented on the lower register being easier to listen to this time and wondered if he could have the whole set of keys instead of a pre-set. The therapist put back all the keys of the marimba for him to play on. He began playing on the marimba and the therapist supported him on the piano. The therapist could see that Tony was trying to match his own playing with the therapist', as well as offering musical ideas to the interaction. At the end of the session Tony said "That was easier for me. Of course, there is still a sense of anxiety inside me. But not as much as when we did this for the first time. Right now, I'm just playing… up and down… letting it flow."

Termination and Patient's Testimonial

Due to unforeseen circumstances, Tony had to be discharged early and therefore cutting short his music therapy session. Despite the lack of opportunity to have a final session, Tony managed to write to the therapist, providing his consent for the therapist to write a case study based on his session, while also providing this comment:

> "The work that the therapist and I did together was in my opinion the most influential part of my recovery, which took me completely by surprise as I don't have any music background and was quite reserved and apprehensive during the process, it was simply amazing the results it produced"

Discussion

There are a few important considerations for therapists when working with patients with PTSD. For example, it is essential for therapists to be fully present with patients, helping patients feel in control, listening to and validating painful traumatic events, focusing on strengths and resilience, and avoiding triggers of the traumatic events (e.g., restraints, loud noises) (Glick et al., 2018). This is sometimes challenging because PTSD symptoms may affect the patients' social relationships, their trust towards authority figures, medical personnel, and medical interventions.

In Tony's case, it was clear from the very beginning that he had very little interest in being engaged in any clinical intervention to help him with his PTSD symptoms. He was referred to music therapy sessions in hope that music might be the tool to help him be more open towards interventions, and more specifically be more open towards validations, and emotional experiences. Due to the threatening experiences that a PTSD patient might encounter in the past, they have sometimes managed to build an emotional and social barrier around them, to prevent themselves from feeling intense emotions that may trigger their traumatic memories. Unfortunately, in order for a patient to begin processing their trauma, they need to slowly tear down this barrier. Otherwise, relationships cannot be built.

For Tony, the barrier that he built came in a form of avoiding session, apprehension, and excessive use of verbal interaction during the first session. After a couple sessions, music had helped him take the first step into tearing down his barrier. This first step can often be intimidating. However, music has the potential to slowly bring patients out of their tight barrier, while maintaining safe structure. This safe structure was provided through predictable melody and chord progression, as well as firm bass line in the improvisation activity. It was also provided in the general structure of the sessions. When designing the plan for Tony, the therapist made sure to respect Tony's level of tolerance and safety, while pulling him gently to begin experiencing his emotions. This is done by applying the adaptation of ISO-priciple principle concepts towards session planning. Meeting and matching where Tony was initially, and gradually challenging and bringing him into progress. Through his sessions, we could see that there are a few considerations that could be taken into account when planning a session for PTSD patients. 1) The gradual flow of the session, 2) The choice of music, 3) choice of patient and therapist's instrument, 4) close observation of the patient's verbal and non-verbal responses.

The therapist started with a very simple activity to ground him and get him used to musical activity. Observing an instrument may seem simple, but it gave him a tangible activity to begin the session. Activities that are tangible and grounding are important for PTSD patients, because it will

provide them with an anchor to prevent their mind from having flashbacks or triggers. The therapist then proceeded with a more challenging activity, which is music listening. In choosing music for PTSD patients, it is essential to consider their sensitivity towards any sounds or voices. PTSD patients might have sensitivity towards sounds or voices that we consider mundane. This is dangerous as it may trigger their trauma response. In Tony's case, the therapist was very careful by choosing minimalistic music with minimal orchestration and plenty of repetition to provide a sense of familiarity. Being able to predict the direction of the song is essential for patients to give them a sense of safety. Unfamiliarity could be threatening to PTSD patients. The therapist then ended the session with music improvisation. When doing improvisation with Tony, the therapist deliberately provided a few choices of instruments to give him a sense of control. The therapist also provided him a chance to try out the instrument in a few tries until he is ready. In this case due to Tony's reluctance of the session, Tony did not utterred his readiness. The therapist needs to observe his body language and gestures because he keeps circling around to avoid being engaged in musical improvisation. Once the therapist noticed that he stayed the slightest bit longer in an instrument, the therapist began playing a clear and steady bass line and chord to make it less intimidating for Tony. Choosing an instrument that is harmonic in nature and could be used for accompaniment is essential in musical improvisation with this type of patient. The thing that the therapist was trying to establish through this improvisation is an interaction and therapeutic relationship, and an assurance that this is a safe space for Tony to explore.

As this article only presented a case study from one patient, it can only be used as a consideration and ideas for sessions. It is not suggested to generalise the result of this study for all PTSD cases. Each patient may present different symptoms of PTSD. Their trauma experiences may also vary. Working interdepartmentally as a team is also the core value of providing holistic care for PTSD patients. However, through this case study, we can conclude that music has the potential to be the tool that can effectively and safely bring patients to access their emotions and engage in social interaction, and eventually cope positively with their trauma experience.

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