## Emotional freedom technique and the benefits to use in middle school classrooms

**Education**, School



The topic of this research paper is how body based therapies can help change the way the brain and body function because of trauma. Working with people who have trauma histories has opened up a whole new way of thinking about how to help them feel comfortable in their bodies because that is where they are holding the trauma. The body based therapy that will be discussed in this paper is the Emotional Freedom Technique (EFT). This technique will be discussed based on the positive outcomes experienced when applying this treatment to people who have been diagnosed with having PTSD. Research studies were conducted on the positive effects EFT has on people who suffer from having PTSD. Two research studies will be discussed in this paper. One study was conducted on adolescents living in Rwanda who survived the genocide in that country and suffered from PTSD as a result. Another study shows the physiological changes EFT has on the brain. EFT has been shown to calm the Amygdala and lower cortisol levels. This is an important topic to discuss and conduct further research on because "talk therapy" may not be the best treatment for everyone. It is now known that people who have trauma histories hold memories of the trauma inside their bodies as well as the brain.

Body based therapies have been shown to be successful with dealing with people that have trauma trapped in the body. PTSD According to the DSM-5 in order to meet the criteria for having Post Traumatic Stress Disorder (PTSD), one must experience the trauma directly, witness the traumatic event as it happened to others, learn that the traumatic event happened to a close family member or friend or have repeated or extreme exposure to traumatic events. Also, because of the traumatic event, one must experience

symptoms from each of the four clusters: intrusion, avoidance, negative alterations and alterations in arousal and reactivity. The first cluster is intrusion. This consists of intrusive thoughts, nightmares, flashbacks and extreme psychological or physiological reactions to internal or external stimuli. The second cluster is avoidance. This includes avoiding internal feelings or thoughts or external reminders, which could be people, places, things and situations. The third cluster is negative alterations. This includes the inability to remember events from the traumatic event, exaggerated beliefs about oneself, distorted cognitions, being in a negative emotional state, feeling detached from others, and the inability to experience positive emotions. The fourth cluster is alterations in arousal and reactivity. This includes irritable behavior, self-destructive behavior, hypervigilance, sleep disturbances, exaggerated startle response and problems concentrating.

According to the PTSD United website there are some statistics available about people who are living with PTSD. 223 million people have experienced some form of traumatic event in their lives. About 20 percent of those people are suffering from PTSD. Women are twice as likely as men to suffer from PTSD. Emotional Freedom Technique Emotional Freedom Techniques is also known as Tapping. EFT is a powerful holistic healing technique. Research has been conducted and EFT has been proven to effectively resolve a range of mental health issues, including PTSD. EFT combines ancient Chinese acupressure and modern psychology. Tapping with the fingertips on specific meridian endpoints of the body, while focusing on negative emotions or physical sensations, helps to calm the nervous system, rewire the brain to

respond in healthier ways, and restore the body's balance of energy. EFT uses aspects from exposure therapy and cognitive therapy but adds an extra element, which is stimulation of the specific meridians. EFT consists of a verbal and a somatic component. Drawing from exposure therapies, the client is instructed to vividly remember and name a traumatic event.

Simultaneously, the client repeats an affirmation of self-acceptance, in order to provide a cognitive reframe. While using phrases designed to keep attention focused on the event, the client taps a series of acupuncture points or "acupoints" on the hand, head, and torso. Clients tap with their fingertips on a series of 12 acupressure points associated with stress reduction. EFT has clients assess the intensity of their traumatic experiences on an 11-point Likert-type scale before and after the treatment. The outcome is client-assessed for each memory, until the emotional intensity is reduced to a comfortable level.

## PTSD and Brain Function

To effectively treat PTSD, one must understand how PTSD affects brain function. Specifically, understanding key biological processes involved in treatment-related change can inform treatment planning, increase efficiency, and improve acceptability as we apply what we learn to clinical care. PTSD changes the brain's structure and alters its functionalities. People who suffer from PTSD have regions of the brain that are different from people who don't. The amygdala, hippocampus and the prefrontal cortex are involved in triggering PTSD symptoms. Together, these regions are responsible for enacting, controlling and suppressing the stress response in all people. It has

been found that the physiology of these specific brain structures is different in people who have PTSD.

The hippocampus is the part of the brain that deals with memory. It enables us to create new memories and retrieve memories from the past. People who suffer from PTSD have a reduced hippocampal volume. The prolonged exposure to stress can cause atrophy to the hippocampus leading to memory loss and cognitive impairment. This can result in a lowered capacity to manage the stress, potentially increasing stress levels. When there are internal or external reminders of the trauma, the hippocampus will recall the traumatic memory provoking out an extreme stress response, which does not allow the person to distinguish between the trauma from the past and what is actually happening in the present. This means that a person suffering from PTSD does not simply remember a traumatic event, but relives the traumatic event over and over leading to further trauma. The amygdala stores emotionally charged memories and acts as a trigger for reactions to emotions. People who suffer from PTSD have a hyperactive amygdala when faced with stimuli that represents their personal trauma. The amygdala is in such a hyperactive state that even when stimuli does not represent their personal trauma it can still trigger a stress response. The amygdala is the part of the brain that helps us process emotions, particularly fear and the response to fear. The classic responses to fear are fight, flight or freeze. The amygdala acts as a trigger for a neuroendocrine system known as the HPA axis, which stands for the hypothalamic pituitary adrenal axis. The amygdala receives stimuli which it matches against the memories stored in it and the

hippocampus. If the amygdala determines the stimuli matches a fearful or traumatic memory, the HPA axis is triggered into action leading to the release of stress hormones to enable a response. This system acts as a survival mechanism and held a special place in evolution because it determined if a person could survive long enough to reproduce.

The prefrontal cortex is the thinking part of the brain that is responsible for regulating the emotional responses put out by the amygdala, which manages how to respond to fear. People who suffer from PTSD have a reduced prefrontal cortex volume, leaving it less effective in managing, or inhibiting, the amygdala which can leave them in a constant state of fear and over reaction, known as hyperarousal. Cortisol Cortisol is a hormone that is released by the adrenal gland when internal or external stressors become present. Cortisol may therefore be a link in a chain of events that begins with an emotionally triggering memory and, through cellular signal transduction pathways, lead to long-term physiological effects. The stressful event triggers the amygdala which activates the hpa axis to secrete cortisol, adrenaline and other hormones which enable the fight-or-flight response. Cortisol prioritizes bodily functions enabling those needed for the immediate response and disabling those functions not immediately important. After the stressful stimuli is dealt with, the cortisol levels drop and return the body back to normal functioning. When faced with chronic stress, however, the body's ability to effectively combat stress decreases.

An increased level of cortisol over a sustained period of time can have many negative effects such as a suppressed immune system, mood disorders, a breakdown of protein and muscle, as well as other negative physical and mental health effects. Cortisol levels are raised in those that have stress related conditions. For this reason, researchers were surprised and a bit perplexed to discover that many people with PTSD have lower than expected cortisol levels. A study done by Wingenfeld et al. reported decreased cortisol values on military veterans with PTSD. Research done on first responders with PTSD conducted by Witteveen AB et al. reported lower levels of cortisol immediately following trauma in patients who later developed PTSD.

Another study offers a hypothesis to explain the lower cortisol levels found in individuals with PTSD. " It seems that inadequate glucocorticoid release following stress not only delays recovery by disrupting biological homeostasis in the short run but can also interfere with the processing or interpretation of stressful information, resulting in long-term disruptions in memory integration" (Zohar J). Research One study tested cortisol levels in 83 participants. The participants were randomly assigned to three groups: no treatment (NT), EFT and an SI group. The EFT group met with an unlicensed life coach for 50 minutes. The coach performed a tapping routine. The NT group sat in the waiting room and read magazines. The SI group met with a Licensed Clinical Psychologist for 50 minutes. During that time, the therapist worked on building a rapport, and challenging negative thought patterns. Cortisol levels were checked and subjects' levels could not be above 6 ng/ml or below . 5 ng/ml before starting the study. Subjects could not have any issues with the HPA axis or adrenal glands. Participants filled out a psychological distress symptoms questionnaire (SA-45, a validated

instrument with 45 items scored on a scale from 1 to 5) and gave a saliva sample to get a baseline cortisol reading. A second SA-45 was given and another saliva sample was collected after the first 30 minutes of therapy and 90 minutes after for the NT group. There was a statistically significant difference between treatment groups on change in cortisol level. In the post hoc comparisons, the EFT group showed a greater percentage decrease in cortisol level (24%) than the other two groups did (14% in both). There was no difference between the SI and NT groups.

Another study using EFT was done in Rwanda. Although this study is outdated, it is a powerful study and alone proves the long lasting effects EFT has. EFT was administered on 50 adolescent orphans who were suffering from PTSD because of the genocide that happened twelve years before. PROPS and CROPS trauma assessments were completed by caregivers and by each adolescent. "One adolescent was a 15-year-old girl, one of the few survivors from her village, was three at the time of the genocide. Her family and other villagers had taken refuge inside the local church. At dusk men bearing machetes stormed into the church and started a massacre. The girl related how her father told her to run and not look back for any reason. She started to run as fast as she could. However, she heard her father yelling and screaming in a frenzied, frantic way, "like a crazy man." Even though she remembered that he had said not to look back, she kept hearing him scream and turned to see what was happening. She watched, horrified, as a group of men with machetes murdered her father. Every day following the attack, which had occurred 12 years earlier, she had flashbacks (" daymares") of

seeing her father being killed as well as unrelenting nightmares about the scene. As we added tapping on the specific acupuncture points to her telling of the story, her heart-wrenching sobbing and depressed affect suddenly transformed into smiles. When I asked her what happened, she reported having accessed fond memories. For the first time she could remember her father and family playing together. She said that until now she had no childhood memories besides the genocide. Then I directed her back to her feelings when she thought about what had happened in the church. The interpreter, who was a pastor, looked at me hesitantly, as if to ask: "Why are you are bringing it back up again when she was doing fine?" But we needed a complete treatment. The girl started crying again as she remembered seeing other people being killed. She recalled how she had escaped, and she realized that her father's quick thinking had saved her life by getting her to run while distracting the perpetrators' attention. We continued to work through each of the traumatic events using the same tapping protocol. She cried upon reexperiencing each of the horrors she witnessed while hiding outside with another young child. After about 15 or 20 minutes focusing on and treating the intense disturbing affect brought up by this and a number of other scenes, she started laughing. I asked her what was coming up for her and she talked about her father. Her mother didn't want the children eating sweet fruits because they were not good for their teeth. But her father would sneak them home in his pockets and when her mother wasn't looking, he would give them to the children. She was laughing wholeheartedly, and we laughed with her. We processed a number of additional scenes. Finally when asked "What comes up now as you

remember what happened at the church," she said thoughtfully, and without tears, that she could still remember what happened, but that it was no longer vivid as if it were still happening. It was now faded in the distance, like something from long ago. She started to talk about other fond memories. Her depressed countenance and posture were no longer evident. When she was seen again during the next two days, she described how for the first time she had no flashbacks or nightmares and was able to sleep well. She looked cheerful and told us how elated she was about having happy memories about her family".

One EFT session was enough to decrease PTSD symptoms which included nightmares, bedwetting, flashbacks, jumpiness, difficulty concentrating, isolation and aggression. The symptoms decreased enough to where EFT became a part of the culture at the orphanage. Three month, six month and twelve month assessments were done again using the PROPS and CROPS trauma assessment. After one year, PTSD symptoms were either eliminated or greatly reduced. PTSD has been mainly thought of as a psychological disorder and treated with limited success.

Understanding the physiological aspects of PTSD, such as the changes in size and volume of brain structures, can explain the lack of successful treatment while also opening up new avenues of treatment. Body based therapies such as Emotional Freedom Techniques (EFT), also known as Tapping has shown incredible results when applied to those suffering from PTSD. Traumas that have been wreaking havoc in people's lives and on their ability to cope with

stress and even function effectively in everyday life, can finally be released using the EFT method.