### A NEW PARADIGM FOR PTSD TREATMENT:



#### **Abstract**

Many mental health professionals have identified deficits in conventional psychotherapy for the treatment of posttraumatic stress disorder (PTSD) and have called for better methods (Fisher, 2004; Van Der Kolk, 2002). This article proposes resolutions to the following issues in the treatment of PTSD. (1) Are abreactive "retraumatizations" necessary? (2) How can dissociative experiences be efficiently accessed and integrated? (3) What are effective ways to deal with speechlessness in unresolved trauma? (4) How can physical symptoms or "body memories" be resolved efficiently? This article proposes a new paradigm in the treatment of PTSD, Emotional Transformation Therapy (ETT), that addresses these difficult issues (Vazquez, 2004).

Key Words: posttraumatic stress disorder (PTSD), Emotional Transformation Therapy™ (ETT), body memories, psychotherapy, dissociation

osttraumatic stress disorder (PTSD) was first officially recognized as a psychiatric condition in 1980 by the American Psychiatric Association; today it could potentially be the most frequently occurring psychiatric condition if accompanying dissociation did not block identification of its presence. Aspects of PTSD have been so treatment-resistant that many alternative forms of treatment have emerged to either augment conventional talk therapy or replace it altogether. Everything from hypnosis to psychiatric medication to eye movement desensitization and reprocessing (EMDR) has been used for PTSD. Emotional transformation therapy (ETT) represents a movement from biochemical approaches to a biophysics approach that incorporates some conventional methods along with powerful innovations.

#### All Traumas Are Not Alike

There are numerous conditions that fit the criteria for the diagnosis of PTSD, but these conditions are strikingly different in depth, complexity, and intensity. Therefore, PTSD treatment varies enormously regarding the length of time to completion, the amount of unresolved emotion existing, and the scope of symptoms addressed. Since appropriate treatment is somewhat dependent upon accurate diagnosis, it would be valuable to differentiate the distinct patterns of PTSD.

For example, the *Diagnostic and Statistical Manual IV* (American Psychiatric Association, 1994, p. 427-428) describes features of a singular psychological trauma, but in actual practice, people report multiple psychological traumas, repetitions of the same type of psychological trauma that reinforces the effect, and vicarious trau-

mas, etc (Salston, 2003; Jenkins & Baird, 2002). Moreover, modifiers such as the degree of severity, the degree of amnesia, the degree of delayed onset, etc., result in markedly different resistance to treatment. When a person's psychological constitution has been repeatedly stressed before his or her development has produced adequate defenses, it tends to result in compromised defense mechanisms that leave the person more vulnerable to environmental challenges (Polan & Hofer, 1999; Bloch et al., 1956). This factor may account for one person experiencing psychological trauma while another person in the same circumstance may not experience traumatization. While this article will not focus on diagnostic issues, these issues are noteworthy as important factors related to the treatment issues described.

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### Treatment Methodology

Therapy **Emotional Transformation** (ETT) is a new form of interactive psychotherapy, developed by this author, which uses powerful techniques of visual brain stimulation to both quickly access dissociated components of targeted symptoms and rapidly relieve emerging affect. This approach utilizes the benefits of light stimulation into the eyes during verbally expressive techniques. A careful monitoring of somatic experiences that are believed to accompany emotional experiences are closely tracked during the processing of issues to hasten the progress. Visual light stimulation has been found to provide its benefits partially through the biochemical mechanisms of the serotonin and norepinephrin neurotransmitter systems (Rao et al., 1992; Brewerton, Berrettini, Numberger, & Linnoila, 1987; O'Rourke, Wurtman, Brzenzinski, Nader, & Chew, 1987). Further scientific research has verified that bright white light treatment is effective for a wide range of psychological disorders and extends far beyond its original use with seasonal affective disorder (Kripke, Mullalney, Klauber, Risch, & Gillin, 1992; Kripke, 1998; Rosenthal, Genhart, Sack, Skiverer, &

Wehr, 1987; Kasper, Ruhrmann, & Schuchardt, 1993; Deltito, Moline, Pollak, Martin, & Maremmani, 1991).

Another empirically validated principle of light stimulation used in ETT includes the association between mood states and color sensitivity (Barrick, Taylor, & Correa, 2002; Todd, 1973; Stewart, Gaddy, Byrne, Miller, & Brainard, 1991). Perception of the clarity and color of the viewer's visual environment is known to be related to the perceiver's state of mind. This is such a consistent effect that it has been scientifically documented and is used as a diagnostic indicator in conventional psychological testing (Barrick, 1994; Cohen & Hunter, 1978; Schactel, 1943). A photosensitivity assessment method has been developed from clinical session observations that can be scored and reveals an individualized profile of color sensitivity for each client (Dearing & Singg, 1996). The total scores on each color yield a configuration of scores that characterize psychological patterns. This profile provides indications about the nature of one's unresolved issues, emotional and cognitive themes that may not be conscious to the person, and specific developmental periods in which unresolved affect is dissociated. These findings can be used to either select colors that are most likely to elicit targeted emotions to emerge for processing to completion or palliate emotional distress.

Peripheral eye stimulation is a radical extension of the premise upon which lateralized visual brain stimulation is based (Hugdahl, Franzon, Anderson, & Waldebo, 1983; Schiffer, 1997; Schiffer, Anderson, & Teicher, 1997; Schiffer, Anderson, Renshaw, Maas, & Teicher, 1998; Wittling & Roschmann, 1993). Lateralized brain stimulation is based on the principle that light stimulation of the left visual field affects the right brain hemisphere and light stimulation of the left visual field affects the right brain hemisphere (Schiffer, 1998). While this concept is accurate to some extent, it includes a very limited portion of the potential of visual field stimulation, and its bilateral explanation does not account for brain activity necessary for stimulating the other portions of

the visual field. Peripheral eye stimulation can access a huge number of specific neural networks of information one at a time by utilizing eye positions throughout a 360° range, not just right and left visual fields. Peripheral eye stimulation can pinpoint each aspect of a psychological issue. Through this means, one can titrate aspects of a traumatic experience one component at a time, which can reduce flooding of emotions. This precision allows therapists the ability to locate a specific psychological state to access relevant implicit memory, integrate distress of one state with other more constructive states for relief of emotional distress, access distinct states possessing positive resources, and reduce the magnitude of an emotional intensity.

In addition to the benefits of light stimulation, ETT uses "entrainment" or "photic driving" for the purpose of eliciting specific brainwave states conducive for each therapeutic purpose. Entrainment occurs when a pulsing light source emitted into the eyes elicits a predominant brainwave state that quickly matches the rate of the pulsing light (Glicksohn, 1986; Montagu, 1967; Vogel, Broverman, Klaiber, & Kun, 1969; Takigawa, 1988). The concept of eliciting certain brainwave states to relieve specific psychological conditions is the basic premise upon which EEG biofeedback (neurotherapy) is based. Unlike neurotherapy, ETT elicits brainwave states and can process issues and affect during the client's experience of these states.

Eye movement techniques have been shown to facilitate rapid change of emotional states (Faw & Nunnally, 1967; De Jongh & ten Broeke, 1998; De Jongh, ten Broeke, & Renssen, 1999; Marcus, Marquis, & Sakai, 1997; Rothbaum, 1997; Scheck, Schaeffer, & Gillette, 1998). While eye movement techniques used in ETT are not the same as those used in EMDR, ETT does use principles that appear to stem from a similar mechanism. The multidimensional eye movement processes of ETT are different from EMDR in that eye movement is largely conducted in conjunction with specific forms of light stimulation, and the range and direction of eye movements in ETT

are much greater and are selected on different premises. These multidimensional eye movements result in extraordinary speed in facilitating psychological changes. Therefore, while the unique configuration of components that comprise ETT is new, most of its components have been verified by scientific research.

These techniques function together in a well-integrated process. The term "transformation" refers to the experience of rapid progression through emotions at such depth and speed that the person often feels changed to a magnitude beyond mere emotional relief.

The following information identifies each of the most challenging issues and how ETT is used to treat them.

### Safety Issues

People who have dissociated strong emotions frequently have not developed alternative strategies for managing this affect between sessions. It has been observed that there is a tendency for traumatized individuals to either dissociate and feel nothing or become overwhelmed with too much emotion at once. In addition, some people have been traumatized so much that their basic psychological constitutions become fragile and hyper-aroused by environmental stressors that would normally be perceived as minor. Therefore, cognitive, behavioral, affective, and social support strategies are taught to the client so that he or she can manage and moderate his or her own affect. Peripheral eye stimulation techniques can be used to regulate the amount of affect emerging to avoid flooding of emotion. These strategies for self-management of affect should be standard practice for PTSD treatment but are not the focus of this article.

### Are Abreactive "Retraumatizations" Necessary?

According to Van Der Kolk, "when they recall trauma, many people with PTSD become so emotionally distressed that the recollection feels like a retraumatization" (2002, p. 67). It is proposed that it is not often helpful for people to process unresolved dissociated emotions without reexperiencing them to some extent. Con-

ventional talk psychotherapy too often uses a long drawn out verbal catharsis that is perceived by the client as retraumatization. On the other hand, if the therapist colludes in the client's denial and avoidance of facing his or her own feelings, the therapist would be at risk of helping to alienate the client from his or her own authentic self from which these emotions emanate. The damage of self-alienation may pose a severe risk. Human emotions play a central regulatory role in brain functioning and in the formation of the authentic self (Schore, 1994). A constructive goal would be to learn to appropriately regulate affect. A position between painful and lengthy re-experiencing of a psychological trauma and not feeling it at all is proposed throughout the rest of this section.

Successful treatment of PTSD may be substantially enhanced through the use of "state-dependent learning and memory." This concept has been described as the following:

In normal memory formation the specific pattern of arousal present in the brain at the time of training may become an integral component of the stored information. The neural representation of this specific pattern of arousal might depend on the pattern of activity generated by brainstem acetylcholine, catecholamine, and serotonin systems. It is this idiosyncratic and unique patterned brain state, present at the time of memory formation, that might need to be reproduced or at least approximated at the time of retrieval in order for the stored information to be elaborated (Zornetzer, 1978).

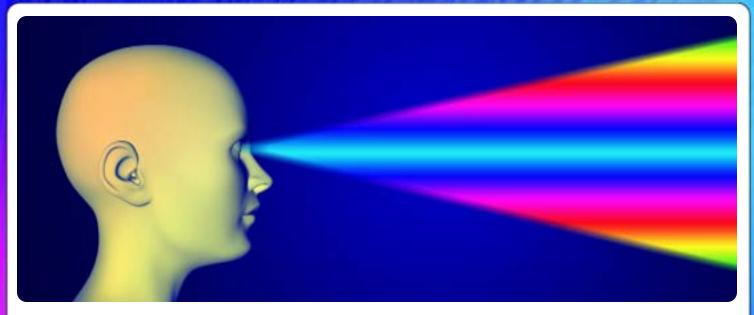
Because a specific pattern of arousal is an integral component of the stored information, a re-entry into the client's trauma state or an approximation of the state might be necessary for both retrieval and elaboration. It has been observed that during the reactivation of the trauma response, that state is most malleable and receptive for the most substantial change. Therefore, to avoid excessive retraumatization, interventions should ideally titrate affective overwhelming, occur at the time of re-activation, be quick, be thorough,

and bring emotional experience to a longterm completion. The symptom of reliving aspects of traumas can be seized upon as an opportunity to facilitate the greatest possible change.

ETT provides a new level of titrating emotional intensity during treatment through peripheral eye stimulation, alteration of mood through color stimulation, alteration of brainwave states, etc. These features of ETT allow affect intensity to be precisely shifted within seconds. Affect can be elicited, reduced, eliminated, or otherwise purposefully changed for optimal therapeutic objectives through peripheral eye stimulation. This capacity almost completely eliminates the risk of retraumatization.

Scientific studies on the chemical composition of human tears have revealed that emotional tears are significantly different than irritant tears. Emotional tears possess toxins, whereas irritant tears do not (Frey, 1981). This suggests that crying has a detoxification function. This is not to say that excessive crying cannot be maladaptive, but that some natural degree of crying provides health benefits and should be supported.

At the center of ETT is the capacity to profoundly change emotional states. When an emotion is discharged through ETT processes, it is usually extinguished. However, often when one emotional state is concluded, another one emerges; when this next one concludes, yet another and another emerge until a whole pattern of emotion is ended. This sequence takes place at an accelerated rate in ETT. As a whole chain of emotions arises and extinguishes, the overall effect is often far more than just relief. Clients often appear to be undergoing an accelerated evolution of internal organization that strengthens their psychological constitution. It has been observed that with each emotional state encountered and overcome, the client grows more enriched and empowered. This transformation process roughly parallels S.W. Porges' polyvagal theory of brain activity. This sequence begins with the "primitive" parasympathetic system enervated by the dorsal vagal branch of the tenth cranial nerve emanating from the



brain stem or "reptilian brain." This occurs in people as immobilization, freezing, or dissociation. During recovery, this dorsal immobilization is followed by activation of the sympathetic branch of the limbic mammalian brain to activate fight or flight. In Porges' theory, the next step in this progression of recovery is the social engagement function involving the prefrontal lobe of the neo cortex (Porges, 1997) that allows a traumatic experience to be understood and communicated.

One ETT process utilizes an intensification of affect to evoke a profound spiritual experience. This often has the effect of profound positive shifts in emotion, cognition, behavior, and physiological experiences into levels of change beyond the usual limits of psychotherapy. This method is based on a model that researcher Andrew Newberg developed from scientific studies of spiritual adepts where brain activities were monitored by SPECT scan technology (Newberg, 2001). Without timely intensification of affect, the opportunity to undergo some types of powerful spiritual experience is limited.

# How Can Dissociative Experiences Be Efficiently Accessed and Integrated?

In many cases, the length of time between the original trauma and the onset of symptoms is so great that initially neither the client nor the therapist has enough evidence to conceptually connect the two. In addition, only partial aspects of PTSD symptoms that do not meet the criteria for a PTSD diagnosis may have been triggered initially. This results in the presence of all of the diagnostic evidence for a certain psychological condition while the actual PTSD condition remains out of awareness. For example, depression symptoms may be triggered by environmental stimuli without the client being consciously aware of the relationship between the original trauma and the environmental stimuli that triggered current symptoms. By use of light stimulation and verbal expression focusing upon the presenting symptoms, rapid awareness of dissociated material emerges with an unprecedented accuracy and consistency. Then the awareness of the psychological trauma and its connection to present symptoms becomes understandable.

It has been observed that most clients undergoing ETT who have previously undergone hypnosis, eye movement desensitization and reprocessing (EMDR), or body-oriented methods were found to have inadequate retrieval of dissociated material and incomplete processing of psychological traumas. Hypnosis has long been known to retrieve unconscious material (Hammond, 1990). However, there is a significant proportion of the population that is not hypnotizable, and the use of hypnotic suggestion risks influencing the fabrication of recollections. Hypnosis

requires trust in the therapist conducting it. People who have been traumatized through betrayal by authority figures are either slow to trust others or may reenact pathological attachment bonding with authority figures by being overly responsive to the slightest suggestion. ETT relies more upon the role of visual light stimulation that shifts transference focus off of the therapist during treatment. This avoids some of the transference with the therapist that confuses compliance to treatment.

EMDR has been found to have the capacity to change traumatic experiences (Rothbaum, 1997), but it is largely dependent upon the client initially knowing that a trauma exists that is related to the symptoms. It is consistently revealed through the use of ETT that in most cases of PTSD either the awareness of a trauma or the awareness of the relationship between a trauma and current symptoms were not initially known by the client. During repeated clinical sessions with numerous people, it has been repeatedly observed that even when EMDR is successfully used to rework a traumatic experience, its comparative lack of ability to uncover other substantial correlated trauma has been revealed when ETT was used subsequent to EMDR.

For example, one highly experienced EMDR trainer, who also learned level I of ETT, used color stimulation with a client with whom she had conducted numerous EMDR and Developmental Needs Meet-

ing Strategy (DNMS) sessions over 2 years. The therapist believed treatment was nearing completion with all of the known issues and had reached relative conclusion. However, when this client was exposed to visual color stimulation, the therapist reported the following:

We got to levels of material that we had not accessed before. He was sobbing deeply and revealed a core negative belief that he said had been a theme for him his whole life. This belief had never been identified before. This issue was worked through to completion. Afterwards when we discussed the work, he commented that with DNMS and EMDR he is consciously able to put up some defenses to control the direction of the work. With ETT he is not; it cut right through to the issues and bypassed his defenses (H. Huffington, personal communication, 2005).

A third means for accessing implicit memory relevant to psychological trauma is through body-oriented methods like cranio-sacral manipulation, massage, Rolfing, etc. While these methods can often activate the reliving of memories, these methods themselves do not often achieve thorough processing of the retrieved material. It has been observed that these retrieved memories often cycle back into implicit memory unless they are processed to completion at the time of retrieval. ETT accesses relevant memory without suggestion or physical touch and is not solely dependent on the content of the memory for its success. Somatic Experiencing<sup>TM</sup> (SE<sup>TM</sup>) is an approach to psychological trauma resolution developed by Peter Levine (Levine, 1997). SE appears to follow along the same general sequence for resolving psychological trauma as ETT. However, SE lacks the precise moment-tomoment visual feedback system used in ETT that helps the therapist track psychological movement of progress with high efficiency. It lacks the brainwave control utilized by rhythmic light stimulation that is simple to implement and results in more rapid progress. Although SE also advocates titration of affect, it typically lacks the capacity of peripheral eye stimulation to precisely break up an overwhelming affective experience into specific component parts within seconds. In addition, stimulation by a radiating light source amplifies brain activity in such a way that resources can be activated to a degree that normal therapeutic visual environmental circumstances would not be likely to achieve. SE tends to use more body movement to move emotional charges whereas ETT moves relevant emotional energy by means of the visual system. However, SE and ETT have in common the tracking of somatic experiences during session processing.

ETT utilizes the following factors to coordinate mental focus on psychological material that is dissociated: brainwave entrainment elicits specific brainwave states in which dissociated material is lodged, color elicits either "grounding" or evoking of the emotional and cognitive aspects of the targeted issue, facilitation of the client's mental and somatic focus with verbal expression on the targeted issues tends to connect awareness with primitive emotions, and peripheral eye stimulation tends to thoroughly access hidden aspects of an issue whether it exists in explicit or implicit memory. When these four factors are utilized in synchrony, dissociated material is consistently accessed. Then specific visual brain stimulation techniques provide a means for efficient assimilation of dissociated material.

## How Can Physical Symptoms or "Body Memories" Be Resolved Efficiently?

According to Van Der Kolk "even after they remember the trauma ... create even longer islands of safety and competence, people with PTSD may still react physiologically to reminders of the trauma as if they are back in the past" (2002, p. 67-68). As emotional transformations take place through ETT, accompanying physiological tensions tend to change at the same time. While psychotherapists conducting ETT are usually not physicians, the stress component of many medical conditions often plays a central role in the development and maintenance of medical problems. In cases in which the accompanying physiological manifestation of psy-

chological trauma is a diagnosed medical disorder, it has been observed that a rapid dissolution of the medical problem often occurs when the trauma is successfully processed. This may occur because some medical symptoms lose their ability to continue to exist when the traumatic emotions cease. In other cases, medical symptoms are only partially reduced because the physical damage has limited some of the body's capacity to repair. Virtually any part of the human body could be involved in a psychological trauma response. Sometimes physical conditions thought to be purely organic or genetic in nature have been observed to have been repaired through ETT trauma resolution.

When a person survives a traumatic experience, elements of the response to trauma at the time of the event often become linked with the fact that the person survived. Therefore, these elements are imprinted as a successful strategy and retained as part of a survival mechanism (McKenzie & Wright, 1996). Subsequently, when a perceived threat to life occurs, a return to the elements of response associated with survival occurs. Conditioned responses are not always logically appropriate to the current experience context. By shifting implicit memory of survival responses into explicit memory, these reactions associated with the memories can be processed to completion resulting in the separation of physical responses from perception of survival threats.

ETT has, as its primary strength, a means to bypass intellectualization and verbalization as a defense. Since ETT directly accesses the denied aspects of the emotional charge and accompanying physiological experiences, these imprints of the trauma are usually eliminated simultaneously because they are linked to the state-dependent memory that is accessed. Specific ways to access physiological imprints include the use of brainwave states that access dissociated state-dependent learning and memory, color stimulation that stimulates the physical region where the emotions are felt in the body. and continuous visual feedback that serves as diagnostic data to the therapist and allows it to be known how complete the "... traumatic memories stay stuck in the non-verbal, non-conscious subcortical regions where they are not accessible to the frontal lobes. Through appropriate light stimulation and verbal expression, the implicit memory related to trauma can be transferred to the frontal lobes, recalled, expressed in words, understood in a new perspective, and relieved."

resolution of psychological trauma has become. Therefore, the somatic component of psychological trauma is precisely tracked as a part of the ETT process.

If therapy can access and quickly process unresolved affect to resolution, the need for psychiatric medication might be drastically reduced or eliminated. There are several reasons for this. Medications may collude in alienating clients from their own affect by blocking awareness of the client's emotions. This interferes with psychotherapy designed to uncover affect. Since ETT provides an alternative strategy for both titrating affect intensity and relieving unresolved emotion, the symptoms for which most psychiatric medication are targeted often no longer exist after ETT treatment. This often renders medications unnecessary. However, medications that provide fast-acting, short-term relief for self-management may be helpful during initial phases of affect retrieval. The advent of the use of ETT appears to largely end the problems of drug side effects and the risk of prescription addiction issues by providing an alternative to medication usage during PTSD recovery.

## What Are Effective Ways to Deal With Speechlessness in Unresolved Trauma?

Van Der Kolk suggests that "traumatized individuals often lack the capacity to communicate, in words, the essence of what happened to them. Instead, the imprints of their trauma consist of sensations and perceptions that may have no verbal equivalents" (2002, p. 66). While it has been observed that traumatized individuals are often speechless, ETT utilizes techniques to reverse alexithymia (having no words for emotions). One particular color

of blue, when used in conjunction with other appropriate colors, is useful in routing experience through the verbal functions of the brain.

In some cases, the expression in words is not necessary to relieve psychological trauma, but in far more cases, the lack of verbal expression is the critical portion of the avoidance defense that must change in order to achieve complete conclusion of the emotions associated with the trauma. For example, in one case Bart reported that at ages 3, 4, and 5 he was afraid to speak and withheld his feelings. His family lived in poverty in war-torn Russia at the time and then the family escaped to Poland when Bart was 6 years old. I asked him to say now all of the things he would not say when he was 5 years old. He said, "I am afraid. Everything around me is dying. I felt totally alone and frightened. There was no food. Everyone was afraid."

Red light stimulation was used. He spoke of these feelings in Polish. Then Bart was asked to say them in Russian because that was what he spoke at the time of the trauma. He reported that he could not recall how to say them in Russian. Then the wavelength of light was changed to the blue range and he became able to spontaneously speak about the experience in Russian. When this expression took place, the emotional charge of the incident was brought to completion.

According to Van Der Kolk, "traumatic memories stay stuck in the non-verbal, non-conscious subcortical regions where they are not accessible to the frontal lobes" (2002, p. 68-70). Through appropriate light stimulation and verbal expression, the implicit memory related to trauma can be transferred to the frontal lobes, recalled, expressed in words, understood in a new perspective, and relieved. In rare cases in

which a person's traumatic response is not accessible to verbalization, ETT can be used to change the traumatic experience through the use of the physical symptoms instead of words.

### **Case Study**

Diane was a 45-year-old divorced woman who sought a session with me to relieve her macular degeneration eye condition. She was in an audience at a presentation I gave on ETT at a conference in the Midwest around 1998. Diane reported that she had tried every type of conventional and alternative medicine that she could find to resolve her condition but nothing really helped. She was told that macular degeneration would soon lead to blindness. Since I was seeing her in a session at the conference site, my normal background intake was limited.

I conducted an informal pre-therapy measurement of her visual acuity. I asked her to describe what she could and could not see in the room and when viewing the scene out of the window. She described many vague, blurry objects within the room and especially outside the window.

Then I had Diane look at a rhythmic indigo light which I often use to help people overcome denial in the form of not being willing or able to psychologically "see" aspects of their issues. Rhythmic visual entrainment was used to evoke brainwave patterns that heighten the client's inner awareness. Then I asked Diane when any type of visual symptoms first began. She reported that she was first evaluated as near-sighted when she was in the 10th grade. I changed the color from indigo to orange because orange assists in recollections related to the adolescent stage of life. Then I asked her what experiences of stress took place around that time in her

life. At first she said that she experienced the usual stress of taking tests and social pressures, but then she suddenly recalled the following event. "I had a history teacher that got so frustrated with teaching us on one particular day that he became physically violent. The teacher yelled in anger, turned over a desk, and threw a couple of chairs across the room. This ranting really scared all of us and it got so loud that after a while policemen came to the class to lead him out of the room."

I asked Diane what she experienced during that event. She replied, "When all of this violence was going on, I was so terrified that I thought I might be killed! I remember that I was huddled in the corner holding my eyes closed as tightly as I could. I somehow thought that if I could not see what was happening I could escape."

During the building of emotional intensity, I changed the color from orange to yellow, had her view specific peripheral regions of the light to titrate affect, and had her look directly at the light to undergo an eye movement process. This process transformed her terror to a calm presence. Subsequent to this process, Diane reported, "I no longer feel afraid when I think about that experience. I hadn't thought about that event in many years! In fact, I had forgotten it. I wonder if my not wanting to see at the time of that event relates to my losing my eyesight."

Then Diane recalled yet another event in which another teacher also became violent in the classroom when she was a senior in high school. She again closed her eyes tightly in fear during that second episode. She processed this "reinforcing trauma" in a similar manner with similar relief. This processing took place in a single session. At the end of the session, I asked Diane to again describe her visual perception of our environment and the scene out of the window. She reported, "Everything looks sharper and clearer. I can't believe it! When I look out of the window I now see trees, buildings, signs, and so many things that I know I could not see anywhere near this clearly before! Will this last?"

I told her I did not know, but the indications appeared good. I offered her my

business card and advised her to let me know if her improved vision did not last so I could possibly help her further.

Diane never reported recurrence of her visual problem. This is not a scientifically valid experiment, but it is a common occurrence of the manifestation of medical problems due to PTSD.

### Discussion

This case of PTSD is categorized as a "reinforcing trauma" because two traumatic events of the same type occurred. There are several modifiers represented. The severity of the recalled event was perceived as life threatening by the person and the presence of the police validates that the authorities at hand viewed the circumstance as dangerous. Repression was so severe that the client was amnesic about the event. The delay of onset was 29 years, which was so great that the relationship between the event and the evolving onset of symptoms were not previously seen as related. Since the traumatic event was not consciously known by the client, her identity was not linked with the trauma. Had blindness occurred, her identity of herself as a blind person would likely have been an issue. This PTSD case represents a strong degree of medical symptoms that were consequences of the trauma but were seen only as medical and not related to trauma at all. The involvement in the medical system prolonged the relief of the case by virtue of using medical diagnostic testing without any attention given to possible psychological attributes.

It was the precise use of color and brainwave states in conjunction with the specific questions that facilitated this change. Questions such as "When did any type of visual symptoms first begin?" and "What experiences of stress took place around the time of the onset of your visual symptoms?" resulted in precisely targeting the trauma related to the current symptom of macular degeneration. The persistence of symptoms of increased arousal and avoidance of the stimuli associated with the psychological trauma reemerged explicitly during the session. As the reliving of emotion of the trauma arose, ETT processes quickly relieved the emotional intensity. Then the entire trauma resolution process was repeated as another similar trauma recollection emerged. The thorough elicitation of the entire trauma cluster took place during a single session. The classic symptoms of PTSD such as "re-experiencing the traumatic event" took place as well as the psychological defense in the symbolic form of "not wanting to see." This apparently manifested in a physical symptom related to her inability to see. This condition should be differentiated from conversion disorder in which the client perceives a physical problem but the existence of a medical condition cannot be verified by objective measurements. In this case there was not a follow-up opportunity to help adjustment to post recovery.

One's identity, lifestyle, and behavior are often built around a trauma-based orientation to life. Then, when the psychological trauma response is gone, it often appears that the new person no longer fits into the old environment. People around the traumatized person have become accustomed to the previous behavior, and new behavior may often disturb these relationships. Therefore, therapy focused on adjustment to life without PTSD symptoms should ideally take place.

Although there are hundreds of therapists using ETT, careful scientific research must be done to document its effectiveness. Since ETT alleviated so many PTSD clients who had already experienced EMDR, Emotional Freedom Technique (EFT), hypnosis, and other advanced methods, ETT should be compared to these other methods under scientific conditions. More studies need to be done on the use of color in psychotherapy. The powerful peripheral eye stimulation method needs to be tested under rigorous scientific conditions.

### Conclusion

Through transforming the unresolved emotions of a traumatic event, all of the symptoms of PTSD cease as a consequence. Specifically, re-experiencing of the trauma ceases, avoidance of stimuli associated with the trauma ceases, numbness of general responsiveness is eliminated, per-

sistent symptoms of increased arousal normalize, and trauma-related dream and flashback activity ceases. Without these symptoms, the condition can no longer be categorized as PTSD.

The length of time it takes to complete treatment for PTSD with ETT depends upon the type of PTSD pattern and the types of modifiers involved. However, many singular traumas have been facilitated to long-term resolution within a single ETT session. It has been observed that if a person had, for example, 100 traumatic events, it would not be necessary to process every event to completion. For example, the thorough processing to completion of 30 of the most highly charged trauma responses might disengage all 100 emotional responses and the patterns of symptoms associated with the condition. If the traumas are reinforcing traumas of a similar type, such as multiple observations of murder, a certain threshold of relief may be reached in which the entire pattern of traumas related to the symptoms extinguishes. At other times, the resolution of the initial original trauma may disengage most or all of the other reinforcing trauma responses. Every pattern of PTSD has been successfully relieved through ETT. Of course, the more complex patterns require more sessions. When one or more modifiers complicate PTSD to a further degree, it requires more therapeutic work to complete treatment.

With ETT, it is typically not necessary to input a replacement positive experience after trauma resolution in order to insure the long-term change because light stimulation activates inner resources for self-regulation. However, when the traumas occur in early childhood and infancy, replacement positive experiences are most likely to be useful. At times, basic educational guidance is helpful for people who have not been exposed to healthy parenting, healthy relationships, or a view of life beyond survival perspectives.

ETT provides a new method for facilitating thorough rapid changes that minimize abreactive intensity and offer precise management of affect regulation. It provides a means to access verbal components of psychological trauma that may otherwise be inaccessible. ETT has the capacity to access dissociated material that is typically not available through other forms of therapy. It can pinpoint and extract somatic memory into conscious awareness. Through these capacities, ETT offers a means to process aspects of PTSD that have often been found to be treatment resistant.

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