Clinical

PERIPHERAL LIGHT STIMULATION FOR RAPID EMOTIONAL, SOMATIC AND TRANSPERSONAL REGULATION

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ABSTRACT

The capacity to efficiently regulate human emotion, cognition, and somatic experiences during severe psychological distress and physical pain has long been a central challenge in both psychology and medicine. Through the use of precise light stimulation into the periphery of the eyes, in conjunction with interactive processes, a means to facilitate a new level of rapid relief of these challenges has been developed. Peripheral eye stimulation is one of several processes within Emotional Transformation Therapy that utilizes the interactive bond between external light and human consciousness. It precisely accesses affect, cognition, somatic and transpersonal experiences, often within seconds, that are relevant to a particular issue. This clinical paper reviews scientific research about the effects of light on the brain and nervous system, theoretical concepts pertaining to the use of the eyes and internal psychological "parts," and then reports two cases studies to examine the application of peripheral eye stimulation. This technique allows facilitators to break down the intensity of unbearable affective and somatic experiences into component parts that are either less intense or that possess varied aspects of the overall experience. The capacity to isolate or integrate component parts of consciousness at will allows progress to take place and transpersonal experiences to be evoked with markedly less distress. This often results in a greater sense of safety and control to the client, while at the same time allowing a more rapid and thorough healing to take place.

KEYWORDS: Affect regulation, peripheral eye stimulation, internal psychological parts, light stimulation

INTRODUCTION

The challenge of asserting precise control of overwhelming, flat, or chaotic emotional states and accompanying cognitive sequala may be the single most important task in psychotherapy. Sigmund Freud thought it could be done through analysis. Carl Rogers thought it could be done by listening with unconditional positive regard. Behaviorists have confessed that behavioral conditioning was largely inept at affect regulation.[1] Then the biochemical proponents tried to regulate affect through the use of psychiatric medications. More recently various meridian tapping techniques, eye movement desensitization and reprocessing (EMDR), neurofeedback, and others have tried to regulate affect. All of these approaches have contributed something to the challenge of regulating emotional states. Some methods only slightly affect it, others block emotions, some approaches only temporarily stop unwanted emotions, and others impact emotions only after a long and painful excursion into them. Peripheral eye stimulation is a technique within Emotional Transformation Therapy (ETT™) that offers an entirely new level of facilitating a more rapid form-n of affect regulation.

This new level of facilitating affect regulation is characterized by the following types of outcomes:

- The reduction of emotional flooding within seconds or minutes
- Rapid access to hidden reserves of positive resources
- Rapid relief of severe and chronic physical pain
- The creation of internal and external psychological and interpersonal boundaries
- The integration of dissociative psychological parts
- Rapid access to relevant implicit memory
- Rapid access to spiritual and transpersonal resources
- Rapid shifting from one emotional state to another
- Rapid reduction of racing or overwhelming cognitive states
- Access to intergenerational recollections

Emotional Transformation Therapy is a new form of interactive psychotherapy that uses powerful visual brain stimulation techniques such as peripheral eye stimulation to rapidly transform psychological, physical, and spiritual issues.[2] ETT™ possesses a diagnostic feature that uses visual perceptual feedback. Among the techniques used are brainwave entrainment, multidimensional eye movement, color wavelength resonance, peripheral eye stimulation, etc. ETT™ can be used on a limited basis without equipment but is more often used in conjunction with a spectral chart, specialized goggles, or with a light emitting visual device. ETT™ is learned through a training program.

REVIEW OF THE PROFESSIONAL LITERATURE ON PSYCHOPHYSIOLOGICAL EFFECTS OF LIGHT STIMULATION

Since the development of bright visual light treatment for use with seasonal affective disorder (SAD) in 1984, there have been many scientific studies that have verified the effectiveness of visual light stimulation for the relief of emotional distress.[3-6] Research has also shown that light treatment is effective for a wide range of psychological disorders that extends far beyond S.A.D.[7-9] Brain activity initiated by visual light stimulation has been found to provide its benefits partially through the mechanisms of the serotonin and norepinephrine neurotransmitter systems.[10,11] The association between mood states and color sensitivity have also been empirically validated.[12-15] Beyond the activation of the visual cortex it is not typically recognized that when light enters the eyes, it initiates impulses whose routes travel through the retinal hypothalamic pathway that has a significant bearing on both moods and physiological processes.[16,17] A review of every study that compared bright light treatment with antidepressants showed that light treatment provided superior outcomes for treating depressed patients.[18] Recent research in biophoton emission provides evidence that DNA plays a role in the emission of light between molecules and light is believed to play a role in the regulation of activity in living human cells.[19] Microtubules within the neurons have been found to furnish a pathway for light to travel throughout the body and carry information that governs many life activities.[20,21]

INTERNAL PSYCHOLOGICAL PARTS

Wilder Penfield stunned the world when he showed that by stimulating specific regions of the brain during brain surgery, patients reported distinctly different sensory and memory experiences.[22] This finding suggested that psychological information is stored in separate units. Numerous forms of psychotherapy hypothesize that psychological experiences are separated into distinct "parts" that may have varied emotional, cognitive, behavioral and other characteristics. For example, Freud described the id, ego, and superego as different parts existing within us. This concept was followed by numerous therapeutic systems of internal "parts" theories such as transactional analysis's adult, parent and child;[23] psychosynthesis's sub personalities;[24] internal family system's managers, firefighters, exiles, and self.[25] Many more theories have long valued the idea that our inner psychological experience is divided. The extreme example of this concept extends to the condition of dissociative identity disorder (DID) in which fully developed different personalities exist within the same overall personality. However DID is not what most "parts" theories address. It is proposed that peripheral eye stimulation (PES) technique represents a quantum leap in both the accessing and facilitation of change involving internal psychological parts because of the speed at which each part is accessed and the precise nature of each part retrieved.

PES provides a therapeutic technique that does not impose a psychological construct from a previous personality theory about the nature of inner parts or how the internal parts are supposed to be configured. Since there are so many "parts models" in psychotherapy theories, the circumstantial evidence suggests that 1) There must exist, within us, divisions of the perceived self that have pragmatic therapeutic value, and 2) There are many different kinds of internal parts configurations. PES evokes awareness of these parts as they naturally occur. For example, internal parts may appear as portions of the other theoretical constructs like the id, or other parts may appear as combinations of two components of the theoretical constructs such as a "firefighter" and a "manager", or they may appear as a part that does not fit into a previously known construct at all.

MIND/BODY EFFECTS OF EYE POSITION AND MOVEMENT

The idea of accessing distinctly different psychological information by the use of eye position was first made popular by the neurolinguistic programming approach (NLP).[26] Bandler and Grinder proposed that we all have "visual accessing cues." This refers to the spontaneous movement of the eyes to a fixed point that takes place during conscious memory retrieval. Specific memories are hypothesized to be retrieved during the time the eyes are viewing a fixed point. Grinder and Bandler hypothesized that when the memory being retrieved is visual in nature, the eyes move either to the upper right or left at 10 o'clock or 2 o'clock. If the recollection is auditory, the eyes move to either 3 o'clock, 9 o'clock or 7 o'clock (from the viewer's perspective). Finally, if the recollection is kinesthetic the eyes move to a position at 4 o'clock from the viewer's perspective. These concepts have often been accepted as fact among neurolinguistic programming proponents. While it is not disputed that the eyes usually move to a position during recollection, the hypotheses regarding the specific direction or the sensory nature of these memories has not been supported by many clinical observations. PES observations indicate that any sensory modality can be found through the use of virtually any eye position 360° in radius. Bandler and Grinder have not reported any recognition of the role of light entering the eyes as an important factor in visual accessing cues. PES is different than NLP visual accessing cues in that the specific type of light stimulation into the eyes, at the time of viewing a fixed point, has been found to have a major impact upon the nature of the psychological information being recalled. These two factors make PES a completely different phenomenon than visual accessing cues.

EYE MOVEMENT VS. PERIPHERAL EYE POSITION

Peripheral eye stimulation utilizes fixed eye viewing as opposed to eye movement to achieve its outcomes. Research has demonstrated that fixed eye viewing is associated with long-term memory retrieval which is in contrast to saccadic eye movement used in EMDR.[27,28] While new memories may arise during or after EMDR, these recollections appear to be either a part of the already known

memory or they arise as an exposed layer of memory attached to the relief of a current memory.

It was initially thought that saccadic eye movement through all of the peripheral positions would integrate data from each position. During the eye movement through peripheral positions and after it, there was a tendency for the client to experience calmness. However, repeated testing of this hypothesis showed that in the vast majority of cases when the eyes were fixed on emotionally charged positions subsequent to eye movement, the emotional charge at those points remained unchanged. This can be understood to suggest that eye movement accessed only a superficial level of psychological activity that failed to make contact with the deeper core affect accessed through fixed eye peripheral positions. This concept would account for the inability of eye movement to change emotionally charged fixed peripheral viewing points. Peripheral eye stimulation often results in accessing and extinguishing unwanted affect and memory that is left intact subsequent to the saccadic eye movement of EMDR.

DUAL BRAIN VS. MODULAR BRAIN

Another type of visual stimulation that has undergone scientific inquiry and has been used for therapeutic purposes is lateralized visual brain stimulation developed by Harvard psychiatrist, Fredrick Schiffer.[29] He described that light stimulation of only the left portion of each eye activates only the right hemisphere of the brain and stimulating only the right portion of each eye activates only the left brain hemisphere. Schiffer covered one eye completely as well as the nasal portion of the opposite eye. Each brain hemisphere activation results in a tendency for markedly different thoughts, emotions, and perspectives. Through the use of "lateralized glasses" one can isolate these specific brain activities.[30] Schiffer used safety glasses in which all light was blocked from the viewer's eyes except the right portion of the right eye. A second pair of glasses blocked all light except the left portion of the left eye. These findings are preceded by the split brain research of Roger Sperry and others which found that each brain hemisphere is responsible for distinctly different types of thinking.[31-33]

While the right/left brain hemisphere stimulation methods are supported by much research and appears to be conceptually sound, further exploration of

entirely different angles by this author has now called into question the accuracy of some of Schiffer's concepts and drastically expanded the potential of peripheral visual brain stimulation. What effect would take place if light was blocked from only the bottom portion of both eyes and then the top portion of both eyes? It was discovered that entirely different psychological experiences occurred when the periphery of the eyes were stimulated at the 12 o'clock and 6 o'clock positions. This process was extended to several other angles resulting in even more distinctly different affective, cognitive, physiological, and spiritual experiences with over fifty volunteers. At this point, the process became radically different from Schiffer's original idea and the term peripheral eye stimulation was chosen to more accurately portray these new observations.

This 360° range of visual stimulation has been found to reliably evoke very specific configurations of different thoughts, emotions, physical experiences, spiritual experiences. Furthermore, specific wavelengths (colors) of light stimulation of the eye's periphery allows for a capacity to access a new level of affective precision in identifying internal "parts" because this author discovered that each band of wavelength of light reliably resonates with specific emotional themes. PES findings suggest that Schiffer's bilateral brain stimulation is only of limited utility for explaining the mechanism of action in peripheral visual stimulation and is unlikely to account for all of the other phenomena evoked by using the many eye positions beyond right and left.

This author's first exposure to Schiffer's concepts took place during ABC television's 20/20 program seen in 1998. At that time the use of a light emitting device for psychotherapy by this author had already been developed. In 1999 one of my students at that time, Richard Goldberg, began to use Schiffer's lateralized glasses with volunteers as they viewed the light emitting device. Then when this author recognized that the lateralized glasses were not necessary if clients were directed to simply view the darkened peripheral area around the light source.

THE PERIPHERAL EYE STIMULATION PARADIGM

If the right-left brain hemisphere concepts cannot fully account for how psychological material is organized into specific peripheral modules, how can peripheral locations of information be accounted for? It has been noted that when

a client possesses specific psychological attributes in specific peripheral positions, these associations exist due to the angle of entrance into the eyes of the sight of an emotionally charged experience. For example, when one woman was in a hospital bed with cancer, her husband approached her from her left side to tell her that he was having an affair. This angle was approximately the 7 o'clock position from her viewpoint. Years later when the 7 o'clock position was used in PES, the affective intensity of that traumatic event was instantly elicited. Therefore, specific angles of modules of PES appear to be installed by virtue of the angle of a visual stimulus entering the eyes during significant emotional arousal. In addition, both the routes by which light through the eyes initiates brain stimulation as well as the function of both brain hemispheres during limbic system processing are involved in PES processes. Therefore, both brain hemisphere functions are involved in this process. However, the process appears to be far more complicated than simply stimulating only one hemisphere at a time.

How does light stimulation of the periphery of the eyes activate physiological processes that might account for the impact of PES? The pathway of impulses initiated by light into the eyes takes a slightly different route than light into the central area of the eyes. When light enters the direct center of the pupils it enters the middle of the retina on the back of the eyeball. However, when light enters the periphery it enters the pupil and the impulses travel in the following sequence:[34]

1. Stimulation appears on the opposite side of the retina as a diffuse light source.
2. Then the optic nerve tract (optic chiasm) receives the stimulation and these impulses travel along the lateral part of the optic nerve.
3. Next this lateral stimulation goes through the medial portion of the optic chiasm to the opposite lateral part of the nerve.
4. Impulses reach the lateral geniculate nucleus on the posterior part of the thalamus.
5. Impulses travel through fibers that branch off and go into the anterior hypothalamus where the suprachiasmatic nucleus (biological clock) exists and controls day, night and seasonal cycles.
6. Impulses travel from the optic chiasm to one of the seven layers of the lateral geniculate nucleus. Stimulation from one eye goes to layers 1, 3, 5 and 7 and stimulation from the other eye goes to layers 2, 4 and 6.

7. From the lateral geniculate body the neurons form the Meyer's loop to area 17 of the visual cortex.

8. Impulses from peripheral stimulation locate in the visual cortex (upside down and backwards). The further the stimulation is on the periphery of the eyes, the further forward impulses locate on the visual cortex.

9. Central vision goes to the parietal lobe which places it into conscious perception. Peripheral vision goes to the frontal eye fields which relates to the control of eye muscles. Peripheral stimulation also travels to the superior caliculus (reflexive centers).

Stimulation that originates from the periphery of the eyes provides further stimulation at different locations of the visual cortex. Each of these locations has a multitude of different neural connections to numerous parts of the brain such as the following:

- Impulses travel from the visual cortex to the midbrain to cranial nerves 3, 7 and 9 for parasympathetic control.

- Impulses that travel from the visual cortex to the longitudinal vissicules that goes to the frontal lobe and pre frontal cortex which controls emotional centers.

- Impulses that travel from the visual cortex to the limbic system through the cingulate gyrus.

Research in cognitive sciences and developmental psychology has shown that the human brain is largely formed and strongly influenced by interpersonal influences.[35] By combining the interpersonal activity in verbal psychotherapy with precise visual brain stimulation, progression through affective states becomes accelerated and selective.

One method of PES is done by providing a black region that surrounds either a reflecting or radiating light source as the central visual stimulus. By having the client look at the dark area, absent of significant light surrounding the light source, light is directed into the periphery of the eyes. The result is brain stimulation that evokes distinctly different experiences by virtue of each specific angle in which light enters the eyes. Through this principle, a therapist can direct the client to view a fixed point in a specific dark area outside of the light source in order to evoke specific modules of experiences. This provides

a method by which one could instantly activate specific internal modules. Two types of coordinates are used to direct the client to the desired visual target around a light source. The first coordinate involves the "clock" angle in relation to the center of a visual target such as 1 o'clock, 2 o'clock, 3 o'clock, etc. The second coordinate concerns the distance from the edge of a light source or other visual stimulus. These are described as 1 inch out from the visual target, 2 inches out, 3 inches out, etc. These distances are conceived as concentric circles surrounding the visual stimulus and referred to as "orbits." Therefore, a client can be directed to a position such as 3 o'clock, at a 2 inch orbit. These types of coordinates serve to evoke specific modules of psychological experience and information. The most useful orbit has been found to be 1 1/2" to 2" outside the edge of the visual stimulus when the subject is 18" to 24" away from the visual target.

By adding the variation of "orbits" to "angle of clock position," peripheral eye position now possesses an access to an enormous array of specific psychological resources. Through this new mechanism the organization of each person's psychological modules can be identified and mapped for therapeutic purposes. By using these two coordinates, the depth and range of psychological resources can now be easily accessed and quickly used.

In 2005, this author collaborated with another colleague, Joel Mueller, to design a simple device that could be used to facilitate PES without a light emitting device. We developed the Peripheral 360° goggles which uses a disc that can be rotated for each eye. Each disc possesses a small opening for light to enter the periphery of the subject's eyes. This could be used in a well lit room, outdoors or in any lighted environment. The rotating discs could be used to isolate specific peripheral positions and their associated neural networks with speed and precision. This peripheral stimulation method with the goggles differs from viewing the black area surrounding a light source in a few key ways.

- The Peripheral 360° goggles drastically reduce the amount of overall light entering the client's eyes which, by itself, aids light sensitive clients.
- The goggles allow the facilitator to utilize different angles of light stimulation. for each eye separately and/or simultaneously.
- The goggles, by the use of a simple flashlight, allow the facilitator to increase the amount of light in one eye at a time.

These variables increased the repertoire of brain stimulation and the precision for accessing attributes of each module. For example, one woman consistently 8 o'clock and another person found their positive resource of peace at 4 o'clock. While this process appears complicated at first, it also possesses enormous proficiency when a facilitator learns the procedure and tracks the mapping of each individual's brain organization.

PES AND THE NATURE OF PSYCHOLOGICAL MODULES

When a specific psychological issue is focused upon through verbal expression at the same time as a specific angle of the visual periphery is being stimulated by a low brightness light source, a separate module of compartmentalized information may be evoked. This information may have distinctly different affective, cognitive, kinesthetic, transpersonal, and behavioral attributes. For example, one module may be reported as highly emotional, while another module may be characterized as intellectual without much affect and still others may have an entirely different type of emotion. Certain modules appear to be age-related in that they exhibit child-like perspectives, while others appear to be far more mature. Modules for each client can be mapped. The following factors have been noted after observing hundreds of sessions of counseling using PES with different people.

- When significant unresolved emotions are possessed, these emotions are likely to emerge as if they were stored in separate compartments.

- Many emotions dissipate from conscious awareness but are largely intact when re-opened through peripheral eye stimulation.

- People who may have fewer unresolved emotions tend to have fewer distinctively different modules of separate psychological attributes as well as a lesser degree of separation barriers between compartments (interval psychological parts).

- The greater the quantity and intensity of unresolved emotions, the greater the tendency for the brain to store them into more compartments.

- Specific angles of peripheral eye stimulation can activate modules of positive resources such as experiences of courage, love, peace, or understanding.

- Psychological internal parts or modules, while possessing qualities of compartmentalization, do not have analogous physiological brain structures as containers but are in actuality "neural networks" that store separate information.

In order to effectively use these modules therapeutically, one must determine both the objective of treatment and the ego strength of the client. For example, a client who is highly dissociative may have as an objective "to get back in touch with his or her emotions." However, the therapist must decide whether this client possesses the ego strength to face and experience this dissociated affect. On the other hand, many clients' need to relieve, discharge or otherwise extinguish emotional experience that feels unbearable which they already consciously know they possess. In these cases the objectives may involve both the accessing and resolving of fixated affective charges.

RAPID RESOLUTION OF AFFECTIVE FLOODING

When a client is affectively overwhelmed, a rapid movement from one peripheral eye position (approximately 5 to 30 seconds at each position) to another peripheral eye position, while the client is focused on his/her affect has the effect of titrating profoundly the affective charge. PES can break down affective overwhelm into manageable components so that a resolution process can take place without long and painful abreactive re-traumatization. Through this method, therapists possess a tool that can change overwhelm within seconds, and almost totally eliminate re-traumatization from retrieval of traumatic memories. In many cases, this titration process can be used to permanently alter long-held affective overwhelm patterns.

To understand how or why rapid PES reduces emotional flooding, it is helpful to understand how this type of emotional dysregulation develops in the first place. According to research in developmental psychology, affect dysregulation is a consequence of attachment disorders occurring between the young child and his/her caregiver.[36] In the case of affective flooding, it has been found that when the attachment figure is not available to console the child's affective

reaction, the child is left to manage his/her own affect alone.[37] Without parental comforting the intensity of emotion tends to elevate and endures much longer than would be necessary otherwise. Repeated experiences of intense and lengthy emotional responses tend to evolve into a pattern.

A second factor that contributes to affective flooding occurs as the result of an interpersonal environment during early childhood development in which interpersonal boundaries are repeatedly intruded upon. These early life interactions internalize and contribute to one's intrapsychic interaction or mental model. Experiencing intrusive boundary violations tends to manifest within one's internalized mental model as porous boundaries between internal modules. In addition to this, excessive affective intensity and duration is often already difficult to contain. Therefore, intense affect coupled with porous barriers between modules is likely to result in the tendency of affective flooding when one perceives a threat.

A typical sequential procedure that is used to reduce affective flooding involves but is not limited to the following steps:

1. Have the client describe their affective overwhelm including the somatic experience. Provide empathic feedback.

2. Have the client rate the intensity of the affect from 1 to 10, with 10 being most intense.

3. Place the peripheral goggles on the client and direct them to describe their issue and rate their affect level of intensity and describe the somatic experience again.

4. If the affect is intense, quickly shift the peripheral stimulation to another position. If the affect intensity is much less, lengthen the amount of time of exposure at this position. (A specific order is used to check each peripheral position in a systematic sequence.)

5. Continue the process until affect is reduced to the desired level.

6. Remove the goggles and allow the client to observe the change as well as to describe their reaction to the experience. Provide support and education.

When PES is used, it appears to partition off modules whose containments were inadequately developed. By rapid shifting from one module to another,

the client learns to shorten the length of time distressing emotions are experienced. In addition to the construction of internal boundaries, if the facilitator is appropriately supportive, the quelling of intense affect is further enhanced. Through this process repair of inadequate psychological boundaries can be deliberately implemented by PES.

RAPID REDUCTION OF COGNITIVE FLOODING

The use of PES for cognitive overwhelm has several applications. It can be used to reduce obsessive thinking. It can be used to reduce the chaos of psychotic states. PES can be used to reduce scattered thinking such as that which occurs in attention deficit disorder. It is particularly valuable for rapidly reducing the cognitive flooding found in survivors of trauma. While each of these cognitive symptoms are different in content, rate, and amount of disorder, what they all have in common is the excessive rate and quantity of cognitive activity that may result in the person's lack of functionality in his/her environment. In each of these cases the person experiences overwhelming cognition that appears to saturate psychological modules due to porous intrapsychic boundaries. Through PES internal boundaries between modules can be erected within minutes which results in a reduction of cognitive overwhelm and more ordered attention. When this process is repeated cognitive flooding reduces even more. Then when affective sources of the disorder are identified and corrected through other ETT™ processes, a long-term change in the cognitive overwhelm pattern can take place.

RAPID UNWINDING

About 40% of the time clients undergo a sequential affective and cognitive resolution process with each experience of a different peripheral eye position. In this process each angle of light stimulation appears to represent another step in the healing process of a given problem. As the client repeats the issue and related emotion in each position, different emotions and perspectives about the same issue tend to emerge. The facilitator's task is to provide supportive listening and to keep the client on track. The speed at which new awareness occurs is often instant and the rate at which emotional intensity is relinquished

often takes place within seconds, which dramatically differentiates this process from a typical talk therapy catharsis or other methods. The findings from this process suggest that in these cases one's psychological modules are saturated with unresolved affect but the barriers between these modules are semi-permeable. Therefore, with each opening of another module and its accompanying release through expression a change in one module decreases the overall load. This unwinding response suggests a readiness to conclude unresolved affect.

There are numerous ways to utilize access to separate modules. A second type of rapid unwinding response occurs when a certain threshold is reached during the systematic unveiling of various affectively charged parts. After about 5 or 6 different verbal descriptions of varying types and intensities of affect in different eye positions, the overall targeted affective charge often spontaneously remits. From that point forth the affective charge in every position tends to become transformed. This works as though the sheer quantity and diversity of exposure and verbalization reaches a point at which all containment of separate modules relinquishes and a spontaneous integration takes place.

TRANSFERRING MODULES THROUGH SUPERIMPOSITION

One NLP technique involves the "anchoring" of an unwanted emotional experience and the anchoring of internal resources for the purpose of uniting these experiences in the "collapsing of anchors."[26(p.84-85)] PES utilizes a similar concept but offers some unique variations from this original concept. Light stimulation into the eyes provides an initiation of impulses that travel throughout the entire brain and nervous system.[38] In addition, each angle of light stimulation accesses precise neural networks. Therefore, when visual stimuli are used to link one experience to another, entire neural patterns of thoughts, behaviors, and emotions may change rapidly. This new form of accessing resources and linking them to targeted affect offers a new level of impact than that of "collapsing anchors."

In order for a facilitator to know which module to superimpose onto another, facilitators must understand which emotional states represent progress from

other emotional states. In the ETT™ training a detailed listing of the degree of progression of each emotional state is taught. It is not within the domain of this article to detail that concept. However, one example can illustrate this concept. If a client exhibits the presenting symptom as helplessness, introversion and fatigue in one module, and then the next module exhibits, anger, rage, and expressiveness, anger is considered to be an advancement from helplessness. Therefore, the anger module is superimposed onto the helpless module in order to progress the system toward an ultimate improvement. The anger module is not the final destination of the treatment but is used to activate emotional experiences toward an ultimate closure that might be, for example, a peaceful experience.

A different therapeutic maneuver can occur when a certain module resists superimposition and retains the unwanted affective charge. If there is more than one unwanted affectively charged module, the peripheral position in which this module occurs can be targeted for an ETT™ process that shifts affect. ETT™ possesses several techniques for transforming these emotions that are not within the parameters of this article to describe. Then this formerly fixated module transforms into a new positive resource. Once this new resource is developed, the affective charges in other modules often lose their resistance to change. At this point all parts often undergo a transformation to a new constructive affective charge. In other cases this new resource can be used to transform the fixated positions through superimpositions.

A different use of the peripherally accessed parts involves having the client continue verbalizing in one position for a long time (5 - 25 minutes). When a client is working on a certain issue, he/she may discover insight after insight as implicit memory shifts into conscious awareness by the use of specific peripheral positions of stimulation. Certain peripheral positions appear to serve as a key to unlock vast reservoirs of data. Sometimes this emerging data leads to access of information of family history that exposes generation after generation of awareness that were significantly out of range of conscious awareness, yet the information appears to all be related to the client's current issue. This new context of understanding often dramatically shifts the affective charge about the current issue being pursued.

CASE STUDY #1: EDWARD

Edward was a 29 year old, single male who had been in counseling for 10 years. His personal history included an abusive alcoholic father and sexual abuse by his Catholic priest when Edward was 14 years old. He reported the use of cocaine for the last year and a half but reports no use of cocaine for the last month and a half. Edward reported being in the midst of a 4 week plan to get off the anti depressant Effexor. His symptoms met the criteria for his diagnosis as major depression, recurrent. Edward flew to my location for a series of sessions during one week.

This client reported that he was diagnosed as dyslexic. After two sessions of ETT™ he wanted to focus on correcting his cognitive flooding and his inability to finish projects. After achieving improved confidence and relaxation in the first two sessions, he reported that he gets distracted very easily and then is unable to follow through to complete a project. We proceeded to pursue his severe procrastination problem. I chose to use peripheral eye stimulation with the Peripheral 360° goggles to treat the symptoms.

At 3 o'clock he suddenly reported that he could see the entire issue differently, better. Then I changed the position of light stimulation to 9 o'clock and asked him to describe this issue and his emotions about it. He reported the following:

> It makes me feel inferior and I beat myself up about it. . . Right now I feel more focused. I usually have a hundred things going on in my mind but now I am totally focused. This is amazing!

To be sure his change was complete the peripheral position was changed to 6 o'clock. At this posirion he reported feeling less focused but better than he initially felt. Then the peripheral position was changed to the 12 o'clock angle. Here he reported the following experience: *I feel very focused, more than at any of the other positions. I feel more energy in my body especially in my arms.*

Then I asked this client to experience 6 o'clock while picturing 12 o'clock. When he did this, he reported excellent mental focus at 6 o'clock. Next I asked him to experience 3 o'clock peripheral stimulation while picturing the

12 o'clock position. This resulted in excellent focus of mental attention at 3 o'clock. Each of these changes took place within 15 seconds. This procedure was only one of several ETT™ processes used for several symptoms throughout a series of five sessions during one week. Edward's symptoms of major depression were no longer present by the end of the series of sessions.

Three months later during a telephone consultation this client reported that his ability to focus continued to be as clear as the day I saw him. All of the symptoms he reported at our initial session continued to remain corrected.

USING PES WITH PHYSICAL PAIN

PES assists in revealing the full range of the nature of physical pain. For example, one peripheral position may elicit right shoulder pain at level eight (on a scale of 1 to 10 with 10 being most painful), emotions of guilt, restrictive behavior and a cognitive issue pertaining to a certain relationship. Then a different peripheral stimulation position may elicit reduction of physical pain to level two, affect of empowerment, more flexible behavior, and cognitive issues relating to entirely different relationships. A third peripheral position may yield an entirely different configuration of physical, affective, relational and cognitive attributes. These types of experiences tend to be the norm rather than the exception in pain work with PES. These findings suggest that physical pain is often not simply a comorbid diagnosis but functions as if it exists as the symptom of primary focus that possesses affective, behavioral, cognitive and other attributes that are all aspects of the physical pain disorder.

Physical pain syndromes parallel affective flooding in that the pain pervades one's entire psychophysiological system without adequate internal boundaries within one's mental model. This situation can be segregated into components with each module usually possessing less intense pain than the system as a whole. By breaking this somatic flooding into component parts the overall intensity diminishes. Either rapid unwinding or superimposition of pain-free modules onto painful modules can reduce or eliminate physical pain.

Other physiological conditions that possess well-documented physical attributes have changed in conjunction with PES. For example, knee pain with clearly

known cartilage or ligament damage, plantar faciaitis, tinnitus, and several other conditions have changed during or after PES usage. All of the mechanisms by which physical changes takes place in conjunction with PES are not yet fully understood.

USING PES WITH DISSOCIATION

Just as PES can be used to reduce affective experiences, it can also be used to manifest affective experience when people have been disengaged from their own affect through dissociation. This can be done by a systematic search for affect laden modules and then superimposing these modules onto dissociated flat affect modules. Of course facilitators must ascertain whether the client can manage this affect when it is retrieved or be prepared to teach the client to accept this affect. If a good collaborative client-therapist relationship has been established, retrieval of dissociated affect can be processed to fruition without lengthy strategies designed to "get the client in touch with their feelings." By reversing dissociated affect one at a time, a cumulative gradual experience of healthy affect can be restored. PES is highly instrumental in this task but other ETT techniques are often used to complete this new arrangement involving affect congruent experiences.

ACCESSING POSITIVE RESOURCES

One of the most intriguing aspects of PES is the capacity to rapidly access positive resources that possess powerful transcendent attributes. There appears to be no limit to the nature and range of these resources. Some of the characteristics of these states include, but are not limited to, the following attributes:

- A sense of safety and security
- Confidence
- Complete peace accompanied by a deep relaxation
- Empowerment

- Omniscient points of view that allow for a new perspective of an issue that results in the relinquishment of fixated or intense distress
- Religious or spiritual images or symbols that evoke inspiration
- Profound love and a sense of meaning and purpose as well as a sense of connection with other people who were previously seen as distant.
- A perception of being flooded by a very positive experience of the perception of inner light
- A spontaneous willingness to forgive oneself and/or others for perceived mistakes

These resources can often be quickly accessed by simply stimulating the specific positive resource peripheral position with light and having the client focus on the relevant issue being pursued. The superimposition of these positive modules onto affectively disordered modules often creates awareness of new answers to a client's problem within seconds. These resources may initially be in a minimal state of potency. However, by extending the amount of time the client is experiencing this module and encouraging expression of these attributes, the module's potency can be expanded.

SINGLE SESSION CASE STUDY #2: AMANDA

Amanda was a 35 year old divorced female who volunteered to participate in a live demonstration at a professional conference. The only criteria used for seeking volunteers for this demonstration was that the person was currently experiencing emotional overwhelm. Amanda described distress regarding repeated abuse and harassment by her brother that had continued for 25 years. She reported that he sexually, physically and verbally abused her as a child which resulted in a "master-slave" relationship. Amanda reported feeling scared, angry, victimized and intimidated by him. She reported the use of numerous forms of psychotherapy and bodywork for years with only minimal success. However, these intense emotions continued to dominate her experience. Her current level of emotional overwhelm was at 8 (from 1 to 10 with 10 being most intense).

I chose to use Peripheral 360° goggles for peripheral eye stimulation to assist in regulating her affective overwhelm. The goggles were shown to her and I explained the procedure. I had never met her before that moment and she had never observed this approach. When I placed the goggles upon her with light entering only at the 3 o'clock position, she instantly changed. She reported that her entire bodily experience underwent an enormous relief and that her emotional distress reduced by about 80%. Cognitively she reported amazement about the rapid change and briefly struggled to believe her experience.

Next I changed the angle of the entering light to the 9 o'clock position. After this change, she instantly reported 100% relief of her emotional overwhelm. She reported a perception that her entire body was filling up with golden light and that all bodily distress had been released! Amanda appeared to be in an ecstatic state of joy as reflected in her verbal expression. When the goggles were removed she continued to feel recovered from the issues and joyful about the change.

Subsequent to the conference I had no contact with her for two and a half months. When I did talk with her to follow up on our session, she reported the following:

> I still feel wonderful. I feel empowered. The threat of my brother no longer bothers me yet I am appropriately cautious. It feels like an enormous weight was lifted off me, when I worked with you! I feel confidence and my entire view of my brother has changed—he has problems, but I am no longer intimidated by him.

This session is an example of a rapid unwinding of affective flooding. When enormous shifts are made in the affective and kinesthetic experiences of long-held trauma, people often experience states of extreme well being. While these states are, of course, desirable they are often disorienting and people often need help in integrating the experience into their lives. In this case much preparation for change had already taken place so it was easier to integrate. The only intention I had in the demonstration was to reduce affective overwhelm and assist her to feel more safe. These objectives were achieved and her transpersonal experience carried her much farther into a sense of heightened well being.

DISCUSSION

In the fields of psychotherapy and medicine no technique works 100% of the time. However, peripheral eye stimulation provides an extremely high degree of consistency when used appropriately for the purposes it is intended: to reduce affective flooding, cognitive chaos, or physical pain. In the vast majority of cases PES markedly reduces or eliminates the aforementioned symptoms by the end of the first session. Then people usually ask; will it last? In most cases it requires a series of two to six sessions to acquire a long-term resolution of these symptoms. However, a significant portion of trials yield long-term results in a single session.

PES is only one of several techniques employed within the ETT™ therapeutic model. Therefore, it is often used in conjunction with other strategies. For example, in the first case study with Edward, visual stimulation with the color orange was pivotal in elevating his self-confidence. Once this confidence was improved he was deemed to be in a better position to pursue the issue of his distractibility and inability to complete projects. Then PES was used to correct this problem.

In many cases the use of PES facilitates changes in the original objectives of treatment. Because PES elicits conscious awareness of previously implicit memory many clients discover that a symptom serves a constructive purpose. Subsequently a different issue, emotion, or memory becomes the more significant target for resolution.

What are the risks of PES? Certain peripheral eye positions evoke an intensification of the symptoms. This is only a problem if the facilitator has not been appropriately trained in procedures to manage this intensification. In rare cases the symptoms are relieved during a session, but a delayed response may include a more intense flare up of symptoms hours later. This is a risk when the client concludes that the treatment failed and does not return for subsequent sessions. Unfortunately, pain patients, who have already been through numerous treatments, are often quick to assume failure and hopelessness because the results did not last after one session. Therefore informing clients about outcome possibilities and the importance of follow up sessions usually prevents this problem.

Since the majority of psychological diagnoses in the Diagnostic and Statistical Manual, IV Revised possess diagnostic features regarding dysfunctional affect regulation, PES has a broad range of applications to many psychological conditions. It specifically offers a breakthrough in the rapid control of overwhelming affective states. This has particular value in working with trauma in which affective flooding is a common challenge. By controlling potentially intense affect, safety is elicited and clients can undergo treatment without emotionally painful experiences dominating their treatment. Since this PES technique is fast acting, the need for psychotropic medications may change and could eventually become unnecessary. Psychotherapy with clients who dissociate has long been a challenge. Shifting the client from dissociative states through quick PES processes can enhance the proficiency of affect regulation.

PES also provides a new approach to rapidly reduce physical pain and numerous other physical symptoms ranging from tinnitus to fibromyalgia. PES can efficiently relieve the bodily aspects of response to trauma without the use of physical touch which has long been a challenge for psychotherapy. Finally, the rapid accessing of positive and transpersonal phenomena may be the most exciting aspect of PES.

All of these phenomena have been repeatedly observed in private sessions by this author and hundreds of clinicians around the world and at demonstrations during professional conferences. However, we need research to document the efficacy of PES under scientific conditions. The lag time from discovery and practice to scientific verification can be as long as a decade or more. Lack of scientific evidence for a procedure does not necessarily mean lack of effectiveness.

This article serves as the first description of this technique of treatment in a professional journal. While many of the nuances of the technique should be learned through direct supervision, the basic principles and applications of PES have been described herein. PES offers the next step in the long quest for healthcare providers to more effectively regulate affect, cognition and kinesthetic overwhelm.

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