

The Science of Releasing Trauma through PsychoNeuroEnergetics PNE

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Abstract: The mission of PsychoNeuroEnergetics (PNE) is to heal the paralyzing effects of traumatic events that are held in our nervous system and fascia, and lock us in to limited belief systems and purposes. The transformational nature of this work requires a high-functioning nervous system. To support the nervous system and provide a strong foundation for the body as a whole, a program of superior nutrition and exercise has been developed. We are now understanding more about the science of brain and nervous system function in the methodology of PNE.

PsychoNeuroEnergetics

A PNE session incorporates extended holding of reflex points, primarily the points known as the STOs, which can be found to either side of the spine at the base of the skull within the occipital triangle between the sterno-cleido-mastoideus and trapezius muscles.

The point-holding creates a deep, holistic integration of consciousness and a natural, physical stability that mitigates against retraumatization. There may be several cycles of discovery, trauma release, and transformation of conscious or unconscious beliefs before the points signal a natural separation of energies between PNE practitioner and client and therefore the end of the session.

A point-holding session generally involves clearing of emotional triggers, and concomitant fascial restrictions and central nervous system constrictions. A PNE practitioner is trained to recognize and facilitate the physiological releases in the body as subconscious emotional patterns and memories begin to arise. The practitioner facilitates the neurological unwinding as it relates to physical and emotional trauma, and belief systems held in the client's fascia, thus allowing for integration of the body, emotions and mind in a healthy, more vital life experience. Thus, whole-system healing is established through the creation of new physiologically harmonious belief systems.

The Polyvagal Theory

In recent years, neuroanatomical discoveries have given us a basis for understanding how this work of the PNE creates dynamic, global, long-lasting, life-changing, seemingly miraculous healing, resulting in less reactive responses and a greater sense of loving contentment, regardless of the circumstances of life. The saga begins with memory and patterns of trauma that become submerged in the ancient aspect of the brain called the limbic system.

The limbic system is the feeling, instinctual, reactive brain, which lies between the thinking neo-cortex and the hypothalamic endocrine and neurologic outflow via the septal nuclei. The limbic system is involved in memory storage, emotions, attention, and focus, all which are vital for survival reflexes.

When threat occurs, metabolic activity decreases. There is often a “freeze response,” as in death feigning and shutdown behaviors, which engages the unmyelinated, visceral, vagal response system via the dorsal root motor neuron in the medulla. This is the **first** and most ancient response of the autonomic nervous system (ANS) to threat.

The **second** evolutionary adaption to a threat is the well-known fight-or-flight mechanism. This response is derived from a predominate sympathetic outflow via the adrenal glands, which release epinephrine into the blood. Since epinephrine cannot cross the blood-brain barrier, it stimulates the

ascending vagal norepinephrine-based fibers and via the nucleus of the solitary tract in the medulla, it activates the amygdala and the hippocampus.

The **third** evolution of the autonomic nervous system's response, in this case to perceived safety, is called the *communication-mammalian myelinated vagal pathway* or the *smart vagus-ventral vagus system*. Alternatively, it is also called the *social engagement system* by Stephen Porges.

Porges states that this system was developed in mammals to optimize oxygen resources. This myelinated vagal system, which processes through the nucleus ambiguus in the medulla, can inhibit the two previous systems. It regulates the cardiac output and aligns cranial nerve function to create social facial expressions and vocalizations to ward off threat. The increase in cardiac output and bronchi relaxation promotes increased oxygen, with a concomitant calming effect. The increase of the influence of the nucleus ambiguus effect allows for higher cognitive process to calm the stress response and establish effective communications with people via facial expression, voice inflections, listening and eye contact. The further calm turns off the stress via the myelinated vagus and decreases the HPA axis activation (fight or flight). This system is modulated through the neurotransmitters of oxytocin and vasopressin and allows for adaptive behavior, courting, sexual arousal, and establishing enduring social bonds. For us mammals, if this system does not work, then we revert to the use of the two earlier evolutionary brain reactions to stress.

In a PNE session, we may re-experience somaticized traumas that have previously been imprinted through the earlier evolutionary adaptations of the unmyelinated vagal response systems, only now we have the opportunity to bring to bear the higher cognitive processes available in the social engagement system that predominates in safety. In this way, we can re-establish healthy choices, where we were previously unconscious, triggered and reactive.

For example, a somaticized freeze response that keeps the body in a state of relative paralysis can be released even many years after the experience. Peter Levine notes that unlike many of us, animals in the wild routinely shake off the terror of a threat or attack, an immediate, healthy response that makes them virtually immune to the symptomology of somaticized trauma. He describes the need for this release to regain health in his book *Waking the Tiger*.

When unwinding this form of unresolved trauma response from the nervous system, the person will begin to shake from deep within. Sometimes the shaking is global and sometimes it is a local area such as a finger or arm. A gratifying sense of release and freedom is attained, and primitive, limiting beliefs that were taken on at the time of the event are reevaluated from a new and larger perspective within a perception of current safety.

The PNE Points

The Papez circuit is one of the major pathways of the limbic system. Papez proposed (1937) that emotions are organized in the hippocampus, experienced in the cingulate gyrus, and expressed through the mammillary bodies of the hypothalamus via endocrine activity. The limbic system inflow processing tracts primarily include information from the limbic cortex (consisting of premotor, prefrontal and orbital cortex), the amygdala (within the anterior temporal lobe) and the hippocampus (forms the medial wall of the lateral ventricle in the medial temporal lobe). The outflow tracts are primarily through the septal nuclei and the hypothalamus (forms the base of the third ventricle).

This limbic system circuit is accessed through holding the STOs, the suboccipital points in the area of the lateral mass of the atlas and the occiput. This area is full of nerve flow from the cervical motor nerves to the suboccipital muscles.

It is now well known that the suboccipital muscle Rectus Capitus Posterior Minor is connected not only to the occiput, but also the atlas and the dura matter. Tension in this muscle effects the tension

on the dura mater that covers the brain and thus influences the flow of cerebral spinal fluid, which nourishes the brain and peripheral nerves.

The cervical plexus, made of roots from C1-C4 have a huge sensory component and it is well known that the vagus nerve afferents flow with the sensory nerves. The vagus is one of the main roads to the emotional Limbic brain.

Pressure on this area also affects the phrenic nerve which innervates the pleura of the lung, the pericardial covering of the heart, the posterior abdomen, the inferior surface of the diaphragm and the celiac plexus nerve distribution to the gut. Thus pressure on these points opens up the physiology and the emotional memories stored in the brain, the viscera and the fascia.

In Traditional Chinese Medicine, these points (the GB20 acupuncture points) are known as the window in the sky points and have been noted to bring information from the subconscious mind to fuller consciousness. In osteopathy, the soul and emotional memory are considered to be contained in the fascia, and the cerebral spinal fluid is claimed to carry the primary respiratory breath of spirit. Thus PsychoNeuroEnergetics has global healing effects on the body, the mind, the soul, the heart and the spirit.

References

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