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Original Article

Quantum Science Approach to Emotional Resolution in the Vital Energy Body

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Abstract

The current biophysical model of clinical care posits that all mental disorders, originate and end in the brain and fail to address the worsening scale of such disorders effectively. Quantum psychology posits a worldview based on the fact that Consciousness is fundamental and is a more useful model of mind-brain relationships and under-stands that feelings thoughts, emotions, and intuition define the human experience. During traumatic experiences, mood extremes, delusions, or hallucinations, there is a hyper-arousal of emotions that are held as predictive patterns in the body-mind. Any stimulus can re-trigger these patterns from memories, evoking responses and interception cues that contribute to reinforcing disordered cognitive and emotional states. This study spotlights viscerosomatic quieting, as an approach to help resolve acute emotional difficulties in depression, anxiety, panic attacks, delusional thoughts, or hallucinations to use with conventional medicine approaches that can help with a better quality of life.

Key words

Quantum Psychology, emotional regulation, EmRes®, Ayurveda, viscerosomatic sensing, emotional resolution, meditation, interoception, vital energy body, chakras, depression, mental disorder, delusions, hallucination

About the Author



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Introduction

Mental disorders are poorly understood and impact not only those who suffer, but also family members, and cascade into complex networks of communities with huge impacts on society as is evidenced by the drug and opioid addiction crises accompanied by a meteoric rise in homelessness. Medical science assigns all mental disorders, as starting and ending in the brain. Current medical approaches include pharmacology and electro-shock therapy which modify brain signaling pathways and the nervous system to dampen any responses and leave much to be desired with the patient's quality of life.

Clinical studies have attempted to uncover the psycho-biological factors underlying mental disorders, utilizing a variety of biochemical and neuroendocrine strategies and genetics studies but failed to establish causality.

This paper offers an alternative to the mainstream model and understanding of the nature of mental disorders through the lens of Quantum Science. The holistic approach applies quantum principles to address feelings, thoughts, and emotions which are quantum objects of the mental realm which can be addressed through awareness practices. These practices help reduce the expression of threat stress and symptoms giving the individual a sense of safety. All living organisms, from single-celled to complex humans and mammals, are unitary organisms which means that every part of us responds to any event as a whole, and not just in the brain as the conventional medical model proposes. The Quantum paradigm posits that our experiences of sensing, feeling, thinking, and intuiting, are quantum potentialities emerging from the domain of possibilities within which, Consciousness can choose from (1)

We come into the world with basic conditioning and biases, inherited and acquired for survival.

Many heritable traits from our ancestors and the sociocultural constructs that we live in the collective unconscious is based on the negativity bias which shows that we are wired for a fear response more readily, as part of our ancient survival mechanisms and that we tend to look for negative cues and outcomes more than positive ones and this forms the basis of many of our decision-making abilities. The mind, as soon as it sees that the negative connotation for meaning is connected to survival instinct, feels threatened and goes to recall its reference points to the other memories. All life experiences are filtered through the reflection in the mirror of memory - all past unconscious memories - so any subsequent new experiences also get colored by what is already stored in the brain and body complex and its vital energy correlates.

Our perceptions of danger or threat initiate complex cascading bio-physical events in response to the threat. We are positing that these events start in the construct of the subtle vital energy body that has vital energy correlates associated with all tissue systems in the body. Feelings are quantum objects and communicate non-locally to initiate a cascade through the physical layers and create sensations in the body as part of our threat-signaling mechanisms to inform the nervous system and our sense of safety.

For individuals, who live in a state of trauma or prolonged threat-stress response, the sense of safety is elusive and creates a persistent state physiological hypervigilance-induced of responses sustaining the body in a state of high alert and to be awash cortisol/adrenaline responses that we are not designed for. The body and mind engage in stunted responses locked into predictive patterns in memory, associate meaning to the response, and generate anxiety around a future state of safety while over-identifying the sense of "ME" with thoughts. This is a baseline human condition of the modern world.

A paradigm shift is necessary and must include the primacy of Consciousness, and a mind-over-matter approach, exploring the vital energy body construct as the operating software system within the hardware of the physical. Many materialists insist that there is no role for feelings, beliefs, or conditioning, assigning mental activity only to measurable electrical impulse activity within the nervous system. To disregard the definitive construct of what makes up the human experience is a major flaw in scientific thinking. As David Chalmers, a philosopher, and scientist posited the hard problem of Consciousness - If we are just machines with sensory processing, then what constitutes the very existence of awareness of the sensory input in itself and its reactions?

'Healing' means "To make Whole" - to make whole the fragmentation of ourselves that occur through a sense of separation, to integrate the inner landscape and outer reality that is created through this separation from others and Consciousness. A Quantum healing approach to mental health engages with the higher archetypal representation of Wholeness by integrating the inner and outer realms of experience. The realm of the subtle/vital energy body through the Chakras and the felt experience of the world through interoception (2) cues - the body's ability to become aware of, feel and sense experiences, in response to a stimulus, help give meaning and purpose which is the hallmark of our experience of reality. This approach emphasizes the vital energy body as well as the tangled hierarchical relationship with the brain and its perception and memory apparatus. Sufferers of mental disorders and trauma want to look for new meaning and their purpose, their experiences in the world, and to understand how to navigate the environment they don't trust. By bringing awareness to what shows up in the body in response, we can offer new adaptation patterns, for stress resilience as well as give new meaning to feelings which in turn will help down-regulate emotional responses and neuroses.

Existing Literature Research and Strategy

Relevant studies using inclusion criteria in Google Scholar using terms related to trauma, emotional regulation, neuroscience, bodysensing, feeling, and vital energy body. Keywords using the databases in Research Gate, PubPsych, PubMed, PsyJournals, PsycINFO, PsycARTICLES, *Elsevier*, using

the search terms, in combination with 'Trauma',' childhood trauma', 'bipolar', 'schizoaffective', 'body therapy 'or 'body trauma therapy', 'embodied skills', etc. were highlighted and focused on results on published authors, relevant neuroscience studies on viscerosomatic. embodiment approaches, emotional regulation, and somatic sensing therapies.

Quantum science literature, the work of our mentor, Dr. Amit Goswami, Ph.D., where Consciousness is fundamental, forms the premise of Quantum Psychology.

Dr. Bessel van der Kolk, president of the Trauma Research Foundation in Brookline, Massachusetts wrote his book - *The Body Keeps the Score*, where he uses recent scientific advances to show how trauma reshapes both body and brain, compromising sufferers' capacities for pleasure, engagement, self-control, and trust.

Joseph Ledoux and Richard Brown offer a leading theory of consciousness, to allow a higher-order theory to account for self-awareness, and then extend this model to account for conscious emotional experiences. They propose instead that emotions are higher-order states *instantiated* in cortical circuits. (2017 February, Joseph E. LeDoux, and Richard Brown. A higher-order theory of emotional consciousness. *PNAS* 2017; DOI: 10.1073/pnas.1619316114

Somatic Sensing therapies (<u>Peter Levine et al.</u>) and healing touch have shown some level of success in treating patients in <u>PTSD</u> studies.

Antonio Damasio, in his theory of somatic markers (Damasio et al., 1996), has suggested interoception is involved in cognition and decision-making. Clear links have been found between compromised interoceptive function and psychiatric disorders, including depression (Avery et al., 2013), anxiety (Paulus and Stein, 2010), and addiction (May et al., 2014).

Lisa Feldman-Barrett, Ph.D. (Northwestern Univ.) in her book "How Emotions are made" theorizes how we are swayed more by feelings and emotions than information and facts and overturns archaic constructs of the triune brain. She posits that emotions are created on the fly, and are neither universal nor located in specific areas of the brain but that they vary by cultural conditioning and result from dynamic neuronal networks making predictions and corrections based on environmental changes. She states that emotions are constructed by core systems that interact across the whole

brain, under a lifetime of acquired learning or conditioning. This implies that we have a greater role to play in our emotional constructs.

EmRes® is a process refined by Cedric Bertelli and the Emotional Health Institute. No research has yet been done to study the of EmRes® in the schizoaffective disorders or mental illness. EmRes® is preceded by a technique called Tipi®, created by French educational sciences expert, Luc Nicon in 2003, [Tipi® - "Technique d'identification des peurs inconscientes" - the technique of identification of unconscious fears]. Nicon conducted a 4-year study on 278 people suffering from various states of emotional distress. His study demonstrated that nearly 271 subjects living with phobias, anxiety, inhibitions, depression, and irritability, were able to overcome emotional difficulties. Several studies have been launched in France to evaluate TiPi and other somatic sensing approaches addressing PTSD, phobias, autoimmune, and other gut-related disorders. While these approaches have been effective in various studies, to date, no study has been published in the arena of bipolar illness or schizoaffective disorders.

Deepak Chopra, MD, a proponent of Consciousness, proposes the Qualia science theory where he posits that we experience the world as *Qualia* - the everyday quality of our living experience — that the only way we know reality is through the subjective experience of the quality of feelings that define our experience of reality and shows how the universe operates as the domain of consciousness. (*Chopra, D., Kafatos, M.C.* (2014) From Quanta to Qualia: How a Paradigm Shift Turns into Science. Philosophy Study Vol. 4, Number 4, pp. 287-301).

The Adverse Childhood Experiences (ACE) Study conducted on more than 45,000 adults showed a strong relationship between the breadth of exposure to early childhood risk factors for several of the leading causes of death in adults. These disease conditions included ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease, as well as poor self-rated health and vitality. (Felitti et al. May 1998).

The 5-year <u>Human Connectome project</u> gave us new sophisticated imaging and dataset techniques and revealed billions of sets of wiring between the brain's neurons and pathways in the human brain and the totality of this is called the *Connectome*. (Sebastian

Seung Connectome: How the Brain's Wiring Makes Us Who We Are. (2012, p. 25) Professor of Computational Neuroscience at MIT.). "By validating the client's model of the world and negative feelings, a therapist can enable neurotransmitters associated with the negative state to be released from the subcortex and the existing neural networks activated. It ensures that the client fires the neurological pathway several times in therapy, making it easier to re-access once the session has ended. This process reinforces the "notproblem" state. reinforcina positive patterning." neurological (James Lawley NLPtCA Conference-2012)

Psychoneuroimmunology (PNI) studies show undeniable evidence of how our thoughts, feelings, and stressors impact our nervous, immune, and endocrine systems. It focuses on how the individual psyche and our responses to stimuli through our interaction with the world around us induce positive or detrimental changes in our physiology. We can assert that the mind and its functions are not separate from the body or the brain as physical tissue systems and structures. (Len Wisneski, Lucy Anderson - April 2005 - The Scientific Basis of Integrative Medicine)

Neuroscience evidence shows of neuroplasticity in the brain which indicates how the brain can develop new neuronal pathways of communication and patterns to override old patterns through exposure to new mental stimuli, and positive practices and generate creative leaps of insight. We can optimize the brain and its patterns and wiring by diving into our inner creativity to perceive our life and its challenges opportunities. (Adult as Neuroplasticity-More than 40 years of research https://www.hindawi.com/journals/np/2014/541 870/ | Eberhard Fuchs^{1,2} and Gabriele Flügge)

The limbic system theory while criticized still guides research in neuroscience. Fear is often said to be dependent upon a set of circuits that have as their hub the limbic area called the amygdala and this area shows the most response in functional imaging (fMRI) studies. This same circuit controls the behavioral and physiological responses elicited by the threat; these responses are often called fear responses.

(2017, Feb - Ladoux, Brown https://www.pnas.org/doi/epdf/10.1073/pnas.1 619316114)

The inclusion of placebo effects in medicine and clinical trials has been documented and is an acknowledgment of how powerful belief systems are and their impact on health. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6013051/). This confirms the mind-overmatter causality.

Several studies showing the power of prayer and healing with hands are also documented (<u>Power or Prayer with remarkable healing</u> results).

Dr. Bruce Lipton's work on the impact of epigenetics - nature vs. nurture and its impact on psychology and physiology upended the idea of genetic determinism. (2017, December

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 6438088/). His work on the nocebo effect posits how a *negative* belief can result in illness and that beliefs are translated into neuropeptide/transmitter chemistry that desupport our vitality and that *every* single living cell has the power of perception and memory-the memory apparatus of cells being in the cytoplasm medium of the cells. (https://www.brucelipton.com/insight-cellular-consciousness/).

The relevance of emotional dysregulation in psychiatric diseases through the amygdala or bed nuclei stria terminals (BNST) structures of the brain, reinitiates the same traumatic response stored as a reference point in memory even if the original trauma event has been forgotten or suppressed. (*M A Lebow, A Chen -2016, Feb* - Overshadowed by the amygdala: the Bed Nucleus of the Stria Terminalis emerges as key to psychiatric disorders).

The concept of memory *engrams* describes the neural substrate for storing memories. It is hypothesized that traces of long-term memory in the brain, are not static but *dynamic* and that all sensory experiences activate a subset of cells that undergo off-line, persistent chemical and/or physical changes to become an engram. Subsequent reactivation of this engram induces memory retrieval. (*Takamiya et al. April 2020* -Dynamics of memory engrams).

New imaging technologies have allowed researchers to look at the level of individual neurons and their biochemical and physiological changes and the circuits within which they operate. (*Tonegawa et al. Aug*

<u>2018</u> -The role of engram cells in the systems consolidation of memory.)

Any stimulus received internally or externally activates neurochemical /neuropeptide signals (Borbely et al. December 2013 Neuropeptides in learning and memory). There is a disproportionate number of patients with stress-related disorders who do not respond to current drugs, and research into new treatment approaches has revealed evidence that neuropeptides are not only involved in the physiology of stress but may also be clinically important. (Tarapati Rana et al - March 2022-Exploring the role of neuropeptides depression and anxiety).

Neuropeptides travel through the bloodstream and target specific receptor sites including the complex neuronal networks now identified in the heart (now referred to as the heart-brain) and in the gut known as the gut-brain. (Peter Holzer & Aitak Farzi, December 2014-Microbial Endocrinology: The Microbiota-Gut-Brain Axis in Health and Disease pp 195–219Cite as Neuropeptides and the Microbiota-Gut-Brain Axis.

This has significant implications in the study of auto-immune and chronic inflammatory bowel diseases. (Song et al. June 2018 - Association of Stress related disorders with subsequent autoimmune diseases). We now know that the cognitive brain is overwhelmed in fight/flight/freeze/faint response, and these stress responses are stored as a sensory imprint in the body's efferent pathways of the peripheral nervous system as well in the brain's neuronal wiring pathways, or engrams for future access. When triggered by any sensory stimulus event that resembles or initiates a similar stressor, it retrieves or reinitiates the same emotional response.

Rupert Sheldrake, in his 1981 book *A New Science of Life*, presented his theory of morphic resonance-the influence of past forms on present ones happens through the morphogenetic field through a kind of vibratory resonance which is in a realm of potential in the vital energy body. When applied to Quantum psychology, we take into consideration the vibration of thoughts, and feelings, as well as inherited and collective influences held in a field of memory- the collective unconscious.

Benjamin Libet's delayed choice experiments report a time lag of half a second between receiving a stimulus and verbally reporting the experience which implies that the readiness potential in the brain initiates the volition process unconsciously, at least 350ms before the person was aware of wanting to act (Delayed choice experiment - Libet et al. 1979) which is the time for multiple reflections of the stimulus in the mirror of memory. As a result, the primary experience or even secondary experiences with some freedom of choice becomes *preconscious* when we identify with our memory, our ego. (Goswami, Amit Ph.D. Physics of the Soul-2001).

Many new holistic approaches, burgeoning in the field of trauma therapy, including somatic and body-sensing therapeutic approaches, however, there isn't enough data available on clinical trials from research conducted, in these patient populations. There are also significant gaps in the literature on these approaches. (https://www.ncbi.nlm.nih.gov/pmc/ticles/PMC8 276649/)

Emotional Hyperarousal

The stress response called fight/flight/freeze is a heightened state initiated which invokes survival/fear-based many instinctual responses. When the stimulus of the threat (both real or imagined) has passed, thoughts emerge to bridge feelings, and sensorial responses, and for the conscious mind to make meaning and understand the experience of the event. In states of emotional shock, the conscious mind shuts or slows down or goes into a holding pattern while the subconscious mind continues to record details of the event. It is important to note, that the idea that memory is stored in a specific tissue system or region of the brain is debatable and many neuroscientists have yet to locate specific the physical storage apparatus of memories.

The construct of a subtle energy /vital energy body is not new. The energy in this construct is not biomechanical or chemical energy but rather is a more subtle form of energy that is responsible for the animating life force principle that moves through all layers under the blueprint of intelligence that governs every cell. This construct includes concepts of the Chakra, Nadi, and Marma system, as well as the subtle layers called sheaths and how mental impressions are stored in the mental layer as energetic subtle memory impressions of conditioning. The movement of this subtle

energy moves through subtle channels and pathways in the chakra-nadi system and correlates with chemical signaling systems of the endocrine and nervous systems. This movement of energy arises, as feelings, and subsequently gives rise to conscious thoughts to give meaning at the mind level and cascades into an emotional response to the event which reflects in brain wave activity monitored in EEG readings.

Anxiety and panic attack disorders occur when individuals re-experience memories of past trauma, and/or experience a heightened fearbased stress response and feel unable to regulate their emotional response subsequent behavior. They report feeling overwhelmed and experiencing negative physiological effects, during traumatic memory recall. The modern definition of trauma (wound) includes any event or instance which generates a stress response within the psyche - a hyper-aroused emotional or behavioral state that exceeds one's ability to process it or regulate it in the moment of that experience and results in a disconnection from self. (3)stays trauma response in our subconscious as we get on with the process of life - we shut down feelings and thoughts because it is too painful to deal with. In some cases, when emotional difficulty is experienced and exceeds the client's threshold of comfort, the conscious cognitive mind shuts down as a coping mechanism to lessen the experience of suffering.

Early childhood trauma is widely prevalentand the trauma is often experiencing mental, physical, emotional, or sexual abuse or abandonment by a parent, caretaker, or family member, within the school, places of worship, or within the community. When the trauma triggers persist in the client's environment, disassociation from reality occurs - which is widely the case in clients with PTSD, schizoaffective disorders. and major depressive disorders. Sometimes our conditioning involves specific socio-cultural trauma that is inherited trans generationally and held in the collective unconscious. (4)

In states of psychosis, what may appear to be a simple stimulus, can set off a patient into deep states of anxiety, feeling out of control accompanied by visual, auditory, or tactile delusions even extending into disassociation as a coping mechanism to reduce the intensity of sensations or unpleasant feelings that arise and play out outcomes either in real life or in their mind. The hyper-arousal of emotions over some time, rewires neuronal pathways, informing our psycho-physiology of a state of

high alert. This sense of a lack of safety then cascades into dysregulation of signals in the central nervous system affecting the Heart-Brain, Gut-Brain axis, and Hypothalamic-Pituitary-Adrenal axis (5)

The gut-brain axis correlates to the Navel chakra and the HPA has its origins in the third-eye chakra. The imprints of these hyperarousal states are held in the regions of the chakras in the vital energy body, and cascade into the physical correlates, impacting the immune, nervous, and endocrine tissue systems.

The Role of Awareness of feelings

Feeling, thinking, and emoting are inherently natural and define the penultimate human experience. Feelings in the vital energy body as a quantum experience (quanta here defining the first quantity), can be perceived as felt sensorial experiences within the physical body. Feelings arise as a subtle movement of energy, and correlate to a sensate experience like vibration, tingling, temperature changes, tightness, tension, pressure, and stagnation, to name a few. (6) These sensorial experiences form the basis of many somatic sensing therapies. All such experiences go through the filters of memory and perception, in the apparatuses of the brain and vital energy body.

We can guide patients, into an exploration of their feelings, emotions, and thoughts and empower them to move into awareness of how sensations or interoception cues in the body can inform them of their feelings. This awareness of how their subjective experience of triggers as sensations in their body can prove to be invaluable to release any held tension or predictions of threat stress and generate a quantum leap in thinking to create insights into their experience of life. Rather than focusing on the problem state of the negative emotions, we can help highlight how the dysregulation or difficulty shows up in the body physically and how to address it at the moment the difficulty arises.

The optimal solution to exit the constantly reinforced negative feedback loop is to introduce a 'future-oriented' state with new positive habits and behaviors which is when the brain and body can learn that they can come out of this high-alert mode and allocate energy to the rest-digest-repair mode of the parasympathetic nervous system. We can

initiate this positive bio-feedback loop response through awareness meditation techniques, breath practices, bio-energetic feedback, applied kinesiology, frequency, aromatherapy, visualization, hypnogogic /trance states, and viscerosomatic sensorial presence. A sustained negative bias response generates an excessive meand a tendency towards centeredness addiction and pleasure-centered circuits of satiation in the brain. These emotional dysregulation patterns induced by daily challenge stressors become part of our operating system in the world.

When feelings are triggered by a sensory stimulus generating a stressor over some time, it results in a hyper-aroused emotional set of symptoms that have been characteristic in PTSD as well as depressive disorders but are not limited to these conditions. (7)

The insular cortex of the brain receives the most interoception cues and serves as a mindbody connection point where body sensations are associated with the source of complex social emotions but also as the receiver, assessor, and integrator of body and gut sensations. It has been suggested that faults in signaling through the neural pathways or misinterpretation of the body's signals generated and the brain's interpretation and prediction of those signals, may underlie conditions of anxietv. depression. schizoaffective disordered states, PTSD, etc.

Mind, Gunas and Dosha

Through our reincarnation memories, we inherit the impressions, and conditioning of past lives as well which are stored in non-local memory of the collective unconscious. The brain sets the context for a negative connotation about the feeling arising at the time of the event and also ensures a negative emotional circuit brain component based on conditioning. The vital energy correlates of the brain and the nervous system encompasses the entire body informing the organism as a whole. The nature of Consciousness itself is Quantum - the domain of all possibilities waiting to be expressed through collapsed waves of actuality. We experience our feelings as quantum movements in response to a stimulus experienced by the mind. The mind is faculty for our perceptions of our experience. We can generate modifications through the vital energy body to disrupt any patterns of habit or conditioning to some degree with intention and attention.

The Ayurvedic concept of 3 Guna or qualities -Sattva, Rajas, and Tamas, are essential constituents of the mind. Of these, Rajas and Tamas when imbalanced, have the potential to cause the most mental disorders. Sattva is pure in quality due to its characteristic of positivity and is responsible for fundamental creativity. Rajas are the movement/activity and passion/drive, which gives intense situational creativity while Tamas is inertia, heavy and stagnant, and stuck. The psyche is a dynamic interplay between the 3 Gunas. In every individual; the cognitive, and affective aspects of the mind are guided by the predominance or the prevailing imbalance of any of the three Gunas. The Guna of Sattva which is high ideal states or fundamental creativity shows up where disassociation occurs in the mind and the client is no longer rooted in reality. When Rajas is dominant, we can see states of hyperactivity, over intellectualization, excessive emotional outbursts of anger, excitement, and disposition to aggression. In a slowed-down state of mental activity, Tamas is predominant and is characterized bγ inertia, stubbornness, depression, ignorance, lack of interest in life activities, etc. An imbalance of the 3, results in a lack of mental balance and integration in the level of the psyche as the first step in the pathogenesis of psychiatric conditions. We can identify imbalances as Doshas (mind-body defects) as distortions or imbalances in these Gunas. The etiology of all disorders is rooted in an imbalance of the Doshas through poor eating habits, and lifestyle factors and are said to cause a loss of intellect through a disturbance in the heart. This, in turn, results in a disturbance of Citta (or individuated consciousness) The ability to discern and discriminate is lost and disturbances of the mind begin at the subtlest levels of the body's vital energy constructs which gradually interact with the physical, and psychological, socio-economic factors and environmental stressors. This begins to manifest at the gross level and is expressed as instability, disharmony, and incoherence.

Quantum Psychology

Quantum Psychology is based on the fundamental premise that non-physical, non-dual Consciousness is primary. The Oneness nature of this Consciousness is beyond time-space causality constructs and is defined as the all-encompassing domain of potential possibilities out of which the agency of Consciousness chooses to collapse into the domain of manifest reality which we perceive as reality on the material plane.

Meditation and awareness practices can help bring about psychoneurological changes through the chakra system namely at the heart and navel chakra. Qualia - the individual and unique instances of subjective conscious experience, and its sensorial experience, which arises in the vital energy body where feelings arise and express in the physical layer as sensations and empower the individual into their transformational journey and happiness. We can redefine psychology as a science of happiness as a goal for people who suffer from mental illness (psychosis and neurosis) who are at the lowest level of happiness and for those who experience psychosis and persist in states of fear that may never experience any happiness. Perspectives can shift for those who engage in do some consciousnessexpanding and meditation practices, and a transition from neurosis can come about with healing approaches to create a transformation of their environment so that they can feel safe in it. We can help override the negativity bias of our brain with appropriate mindset interventions and body-based awareness to create awareness of time and space where they no longer have to posture defensively.

Unconscious or preconscious memory cannot be accessed at will and reinforced. However, when an external stimulus is involved, the collapse event can be recalled, but vaguely, since there were only feelings to produce the cognitive experience. The memory is fuzzy with no sequencing for which we need the mind and our memory-making apparatus through which all perceptions go through. The fuzziness of memories robs the victim of being able to sequence their experience of events properly. Any small part of the original stimulus is sometimes able to evoke the entire memory with dire consequences. (1)

In the case of sustained traumatic events, the heart chakra with its correlation to the immune system adapts into a defensive posture while feelings of unworthiness and low self-esteem are held in the solar plexus or navel chakra. Teaching a client how to bring their awareness into these chakra areas and dismantling the pathological emotions by reinforcing their sense of self-esteem, and learning to live in a heart-centered approach can radically improve their quality of life. Through positive mental hygiene practices and emotional regulation techniques, we can help enhance the flow of Prana into healthier states out of held patterns of stagnation within the body.

Trauma is sometimes inherited through our ancestral makeup, and while we may not be able to move past the experience of it, we can

learn to move through it and with it, by reclaiming a sense of self and empowerment to allow trust and to feel happy. With new skill sets and tools, we can allow our mind-body to be at ease, to explore our way in the world, to feel, and think and make new meaning. Our ability to do this exists as potential, within the domain of Consciousness, that consciousness can choose from. Consciousness exhibits nonlocality - allowing you to communicate with yourself instantly through feelings. relationship and identification of Self within, in the world out there, generate, meaning within us. It is because Consciousness chooses, that it creates this subject-object split (The subject is "I" who experiences, and the object is the experienced material world). There is a subject-object split that occurs when we notice the Self/ the first person "I" as the observer or experiencer of what we observe experience.

The brain as a macro-organ needs agency to cognize, know and perceive the Self through the faculty of the non-physical mind through its vital energy field. Thinking, feeling, intuiting, and reasoning all arise as experiences, in response to the stimulus perceived and the mind tries to make meaning out of it along with the sensory input of the 5-sensory world. We can see how this sense of agency which is consciousness, is in a tangled hierarchy with the organ and vital energy field of the brain. The appearance of an external material world "out there" is a product of our sensory perception and this perception is in a circular relationship with the memory of these experiences and perceptions. This circularity of I the Self - experiencer and I the selfperceiving the world out there- experiencing the object constantly reinforces the trapped sense of I the Self experiencing the world through the brain and is the tangled hierarchical nature of the quantum brain. The farther the separation of self from the world, the more ego personality takes hold.

Chakras in the Vital Energy Body

In the 7-chakra system, the lower 3 chakras (root, sex, and navel chakras) are associated with lower-level feelings associated with the emotions of survival fear, sexuality, and self-worth or self-esteem. The higher 4 chakras (heart, throat, third eye, and crown) are associated with higher feelings and the transformation process on a subtler level. The movement of subtle energy within a chakra is associated with the transformation of psychophysical energy into transformative spiritual

energy. With proper attunement, training, and practice we can connect to this subtle flow of energy within us often felt as sensations or feelings. The proper flow of the subtle current of vital energy flow, Prana, or the animating life forces, impacts not only our physiology but also our psychology.

Healthy and balanced Chakras are said to correlate with healthy cognition and behavior contribute to the balance neurotransmitters as well as hormonal health. An imbalanced chakra system stunts the flow of Prana through the Nadi pathways resulting in an equally imbalanced expression in the psychological states of the mind. The corresponding movement of sensations and feelings in the body when our awareness is focused also correlates to the movement of Prana through the body. We know when we feel hungry, happy, thirsty, sexually aroused, or when we are in the creative flow state, or a sense of expansion, or feel fear, excitement, inspiration, the need to sing, dance, pray or feel sleepy. While materialists will argue that these are a result of complex chemical, hormonal, and neurotransmitter signaling, the awareness of these feelings cannot be explained. Each chakra as stated earlier is a morphogenetic field that holds vibratory energy and has a counterpart in the physical tissue system(s) which correlate to each chakra. Feelings arise specifically in each chakra and we experience the movement of the vital energy or Prana in that part of the vital energy body. This is key in our approach to Quantum Psychology. Feelings arise at each chakra but the feelings that arise at the heart and navel chakra play a key role in the relationship to our sense of identity of our Self. (15)

The heart chakra is considered the primary seat of the Self and to include another outside of the identity of this Self, there must first arise a feeling of inclusion, generated by the suspension of the immune function of defense. This eliminates the feeling and thought of ME, as separate from others. This heart chakra resonance of inclusion allows us to tend to and befriend others and appears to be inherently stronger in women than in men. Similarly, the navel chakra (Taoist reference to the lower Dantien or the "Hara" in Japanese philosophy), is where our feelings of self-power, self-worth, self-esteem, security, and self-love reside. This is also a state of autonomous feeling that arises that is associated with the identity of Self. The navel chakra governs the organs and tissue systems of sexuality and creativity and self-maintenance. In contrast, this sense of self is stronger in men than it is in women. We

can consider the possibilities if the feelings that arise at the heart chakra are in a tangled hierarchy with the navel chakra similar to the thinking within our brain, we can see how we can override old patterns of dysregulation here. We can achieve a self-referential collapse of feelings in this navel-heart system—both self-love and love for the other-loving the other means loving ourselves. The basis of this circularity is feelings and if we allow the feelings that arise in the vital energy constructs of these two chakras, an identity of Self develops at the heart and navel in a tangled hierarchy. ⁶⁴⁾

Research Methodology and Approach

The scope of this study tests the hypothesis and validity of applying Quantum Science principles in a therapeutic approach. Emotional regulation techniques using interoception were applied to determine its efficacy to see if it has an impact on clients diagnosed with bipolar disease-2 (BD II) (8), chronic depression, and /or schizoaffective disorders (9), to help improve their quality of life and reduce the intensity of psychotic episodes and paranoid delusions. It was designed as a quantitative, single-subjectcase study; Single-case research design (SCED) (64) experiments are used in applied fields of psychology and human behavior where the subject serves as their control rather than using another group or individual, allowing for flexibility and cost-effectiveness. Using repeated measurements to understand a client's variability, helps researcher leverage the understanding of that variability to determine effects of therapeutic the applications. Measurements were based on a scale of 1-5, using a questionnaire /survey administered verbally at the beginning of each client-researcher meeting. Self-assessment questions were designed and formulated, based on a combination of emerging measures offered by the American Psychiatry Association (APA) as well the GAD-7 anxiety questionnaire (10). These self-assessment measures were administered during the initial interview to establish a baseline against which subsequent assessment questions responses were gathered to monitor and characterize the individual's progress status. The client self-reported through the same set of questions weekly for 16 weeks, so that data could be collected consistently.

The study subject is a 52-year-old American woman, who works as a chemical engineer, and received a mixed clinical diagnosis of

bipolar Type II (11)depressive disorder and/or disorder (9). The client schizoaffective experienced an intense psychotic break in 2018 and was hospitalized for several weeks, administered, anti-depressants, and sleep aids, and monitored briefly for her medications, by a psychiatrist every 3 months. She approached this researcher for help with symptoms of anxiety, delusions and hallucinations, and poor quality in workplace relationships.

After discussing the goals and objectives of this study, the duration, and commitment required, with the study subject, she signed off on a consent form, acknowledging that some or all parts of the study may be published in articles, books, and journals only referencing the client anonymously or by an alias or initials. Livestream video meetings were held twice a week for approximately an hour and started with the self-reporting questionnaire before Quantum Science-based healing and emotional resolution approaches were used. Assessments and evaluations were done at the beginning of every session and based on the subject's self-reporting of symptoms week over week for 16 weeks.

Emotional Resolution Approach

One of the first steps then is to address the triggered responses that show up as feelings and emotions and condition our behavioral responses. When guiding the client out of a hyper-aroused emotional state, and into states of calm, stillness, and receptivity, we are also helping co-facilitate a shift in perspectives and a quantum leap in thinking, with insights for new meaning in their actualized reality.

Using EmRes® ⁽¹²⁾ (Emotional Resolution) utilizes an individual's interoceptive awareness for viscerosomatic quieting. This work is based on the latest neuroscience studies published by Lisa Feldman Barrett, Bruce McEwen, Joseph Ledoux, Bessel Van Der Kolk, Antonio Damasio, and François Roustang.

A trained EmRes practitioner applies this simple, brief and specific therapeutic approach by guiding the client to feel their interoceptive imprint - their bodily sensations - when triggered by the stimulus of a threat stress event, memory, or any behavioral response. Without needing to access the original trauma or memory but simply focusing on the present-day trigger response, we can help them regulate and balance their emotional states can be utilized to bring about incremental improvements in how a patient perceives and reacts/responds to an emotional trigger.

In the client interview process, several rootcause questions were asked- what life was like growing up as a child, and what seemed to destabilize her. She mentioned that she was criticized and punished or yelled at by her primary caretaker /parent, was told to stay quiet/shut up quite often, and to not be seen around when adults were talking. As a child whose worldview is very me-centric, it invalidated her feelings and also informed her inner-child that it wasn't ok to be herself or feel curiosity or explore feelings that came up or that she wasn't worthy of attention. The adaptation response minimized not only her experience of herself, and her emotions but also renders her as being non-existent. She was able to see how this pattern in her early childhood colored her ability to interact in the world and or being hyper-vigilant with her monitoring of others' attitudes and responses towards her. This is an example of how fundamental or situational creativity in action can arise in a healing session for Quantum healing to occur.

This small step begins to override the negativity bias patterns that formed specific neuronal circuits and responses. From a feeling place within their hearts and navel chakra, the client can be coached into feeling compassion for themselves and others in an expansive state of self-love and including all others.

For many, feeling safe and secure in their body can become a monumental obstacle. This takes much patience, attention, and focus for the practitioner, and a commitment to healing, from the client. The EmRes® process helps the client consciously cognize that the perceived danger based on the prediction from the past trauma is no longer relevant or applicable thereby rendering it obsolete. It allows the body to integrate traumatic information without feeling charged. We guide the client, into a sensorial awareness, of their present-day reality rather than basing their responses on the reference to the memory. This process has also been used successfully to address chronic physical issues since it helps address the underlying emotional dysregulation factors in a chronic condition. We are helping them discharge and release patterns of held-in tension and stagnant/stuck energy in the vital energy body.

As practitioners, we allow the client to approach their difficulty on their terms- rather than leading them, using the present-day trigger, to access the body's reference of these stored imprints from the past. Many emotional challenges can be perceived as trauma or in

varying degrees of difficulty. This experience varies from person to person as well as by gender, age, intellectual ability, emotional intelligence, etc. One's ability to withstand and deal with stress is a measure of our resilience and has many factors that contribute to it. We are neither placing any expectations of specific outcomes nor do we intend to re-trigger the client into a childhood ACE event or the event of original trauma such as sexual abuse, violence, etc. We can help establish clarity around not only the emotional difficulty that experiencing but also their relationship with it.

When a vibrational resonance comes up for the client with the trigger and generates their predictive response through the questions asked. It is important for the practitioner, to stay attentive, and adopt keen observation and listening skills for verbal and non-verbal cues from the client.

We are uncovering the client's unconscious patterns by helping them override a predictive response, by facilitating their awareness of their feeling experience and how and where this feeling shows up in their body's sensing/feeling abilities. The process is repeated as often as is necessary or until the client no longer feels triggered by the stimulus in their narration and it leverages the brain's neuroplasticity, to strengthen interoceptive awareness while feeling safe in their environment. By guiding the client into their sensorial awareness or presence, we can help update these false predictions held in memory as reference points to perceptions of a new stimulus triggered which generates the same set of responses to this new stimulus.

As a solution-oriented therapy, instead of focusing on the problem or symptoms, we are focused on updating the body and brain's prediction updates. It helps reinforces positive neurological patterning, with a new updated model of sensorial response which becomes easier to access once the session has ended. When the client accesses the emotional trigger stimulus in a future state, the neurological potential is created for the change to happen. There is evidence that the neurological repatterning provided in the previous session is sustained to some degree and works to support the client to move forward in a transformed state. The feeling states in the vital energy body change and the neural network correlates shift subsequently resulting in a shift in mental perspectives.

Results, Discussion, and Conclusions

At the end of the 16-week study period, the subject showed significant improvement and experienced a complete lapse hallucinations(Figure 3) as well as a reduced state of paranoia(Figure 1) around co-workers in stark contrast to her prior state of daily functioning. The client's mental health challenges are ongoing, but she has demonstrated a renewed interest in life, improved socialization, and a willingness to participate in self-care practices. She has developed better skills when challenged by day-to-day stressors notably in the workplace but shows poor compliance to adhere to any prescribed mental hygiene practices of meditation, or breath practices taught which were assigned as weekly homework. The client continued to report experiencing emotional difficulty in her workplace and with her co-workers but at a reduced frequency of lesser intensity. She struggles to maintain her focus and carry forward learnings and cognitive awareness of her emotional resolution. She is better able to articulate and distinguish between her delusional thoughts and factual events and is aware that her predilection for these delusions is not serving her well. She acknowledged that she isn't able to eliminate her fear of being criticized by her co-workers, but she did indicate that they had lessened somewhat, and have now begun to develop feelings of empathy for her coworkers. Based on the client's subjective vital experience, these energy awareness practices have helped create a positive resonance for this client. When prompted to name her emotions around these sensations, she consistently identified them as "feeling very sad" and identifies that she has felt this sadness since childhood.

A Quantum healing therapist may find it intimidating to take on clients who suffer from severe mental disorders as it can involve learning how to calm a client out of a severe mental health crisis, sufficiently enough to inculcate and integrate these practices into their daily life regimens. More often than not, it becomes imperative to help the client, initially for a duration of some time, to help them cognize and identify their states of emotional dysregulation in response to their emotional triggers some of which can be small to medium triggers. Through this process, we can help direct their attention through mindful observation - to be witness to their feelings and interoception cues during times of difficulty, without suppressing or repressing

these sensations or becoming involved in them. We are empowering them into their subjective experience of feelings without reaction. With repetition, the client learns to adapt through a lessened state of emotional hyper-arousal. In effect, a new set of neuronal wiring pathways through these positive responses to stimuli, cascade from the conscious states into supramental states. The client feels inspired by new learnings and understandings with insights that arise around the stimulus and/or their responses. This helps them overcome mental habits or loops and moves them into higher states of aspiration.

The study has promising results but may require a large-scale study with detailed statistical data may be warranted to confirm these preliminary findings. The study also highlighted the lack of ability to empirically measure the influences of beliefs, conditioning, and expansion of Consciousness which were difficult for the client to report.

[THE RED DOTTED LINE IN THE FIGURES BELOW REPRESENTS THE BASELINE OF EACH SYMPTOM AT THE START OF THE STUDY IN FEB 2021, THE BLUE GRAPH SHOWS MEASUREMENTS AT THE END OF THE STUDY IN OCT 2021]

Figure 1 -Monitored symptom- Delusional thoughts

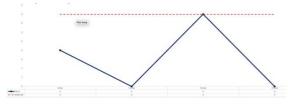


Figure 2 - Monitored symptom- Anxiety



Figure 3 - Monitored symptom-Hallucinations-Visual

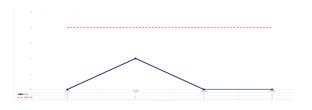


Figure 4- Monitored Symptom-Hallucinations - audio



Summary

We can seek to improve the present-day baselevel human condition through Quantum Science principles and apply this to emotional and stress management approaches. It is evident, through this research that vital energy practices using emotional resolution through interoception cues, breath control, and meditation practices can bring about small and marked improvements in a client's state of mental health. It can provide a framework to address habits and conditioning that reinforce the sense of alienation and separation. The complexity and unknowns in this clinical diagnosis are well beyond the scope of this research.

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