

5-1-2023

## Advanced Integrative Therapy: Origins, Research, Theory, and Practice

Gregory P. Brown  
*University of Nevada, Las Vegas*

Elizabeth V. Pace  
*New Orleans, Louisiana*

Tabatha Bird Weaver  
*Newberg, Oregon*

Follow this and additional works at: [https://oasis.library.unlv.edu/psychiatry\\_fac\\_articles](https://oasis.library.unlv.edu/psychiatry_fac_articles)



Part of the [Psychiatric and Mental Health Commons](#)

### Repository Citation

Brown, G. P., Pace, E. V., Weaver, T. (2023). Advanced Integrative Therapy: Origins, Research, Theory, and Practice. *Energy Psychology: Theory, Research & Treatment*, 15(1), 31-43.

Available at: <http://dx.doi.org/10.9769/EPJ.2023.15.1.GB>

This Article is protected by copyright and/or related rights. It has been brought to you by OAsis: UNLV's Repository for Research, Scholarship, and Creative Activity with permission from the rights-holder(s). You are free to use this Article in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Article has been accepted for inclusion in Psychiatry & Behavioral Health Faculty Research by an authorized administrator of OAsis: UNLV's Repository for Research, Scholarship, and Creative Activity. For more information, please contact [digitalscholarship@unlv.edu](mailto:digitalscholarship@unlv.edu).

# Advanced Integrative Therapy: Origins, Research, Theory, and Practice

Gregory Brown, Kirk Kerkorian School of Medicine,

University of Nevada Las Vegas, USA

Elizabeth V. Pace, New Orleans, Louisiana, USA

Tabatha Bird Weaver, Newberg, Oregon, USA

## Abstract

Advanced Integrative Therapy (AIT) is a novel therapy grounded in Energy Psychology combined with cognitive and somatic therapy techniques. As more research is being conducted into the efficacy of AIT and other trauma-based therapies, there is a need to define the modality more clearly for researchers, the clinical community, and potential clients. This article aims to discuss the theory behind AIT and its mechanism of action, compare it with other somatic

trauma and Energy Psychology techniques, and explore the gap in the available data and knowledge of AIT. Additionally, a case study will be discussed to report on the potential clinical effectiveness of AIT in treating trauma-related dissociation.

**Keywords:** Advanced Integrative Therapy, AIT, trauma, healing, psychology, energy psychology, cognitive somatic therapy, somatic

**Gregory Brown, MD,** is a professor of psychiatry at the Kirk Kerkorian School of Medicine, Department of Psychiatry and Behavioral Health, University of Nevada Las Vegas, where he is also the director of residency training, in addition to maintaining an active private practice. **Elizabeth V. Pace, LPCS,** is a mental health therapist in private practice in New Orleans, Louisiana. **Tabatha Bird Weaver, MA,** is a licensed professional counselor, licensed marriage and family therapist, and certified alcohol and drug counselor in private practice specializing in complex trauma, neurodiversity, and recovery. **Correspondence:** Gregory Brown, MD, Kirk Kerkorian School of Medicine at UNLV, Department of Psychiatry and Behavioral Health, 3014 West Charleston Blvd., Suite 130, Las Vegas, NV 89102. **Disclosure:** The authors declare no conflict of interest.

thereby bring lasting healing for those suffering from traumatic symptoms (van der Kolk, 2015).

Advanced Integrative Therapy is commonly described as an Energy Psychology (EP) intervention but can also be compared to other somatic therapies. EP is a type of therapy that combines cognitive interventions with somatic techniques that influence human bioenergy systems. It is used in many therapeutic settings, ranging from performance enhancement to severe traumatic distress. EP practitioners view symptoms as systemic, interactive bioenergetic patterns. This means that there is constant and complex communication among neurobiological processes, electrophysiology, consciousness, and bioenergy systems. These systems include stimulation of meridians, chakras, and the biofield, as well as subtler systems of the body such as neuroception. The interaction between these systems during EP interventions appears to increase the speed and/or thoroughness of treatment by interrupting electrical or chemical pathways between the locus of distress in the body and the brain. This results in normalized cortisol levels (Church et al., 2012) and balance between the sympathetic and parasympathetic nervous systems

Advanced Integrative Therapy (AIT) is a trauma treatment, and it is the stance of AIT's progenitor, Asha Clinton, MSW, PhD, that trauma is the cause of most psychological disorders (Clinton, 2010). In Bessel van der Kolk's seminal work on trauma, *The Body Keeps the Score*, he notes that trauma is experienced in the body, including an overactive "threat" response; thus, a trauma treatment that does not include somatized feelings, emotions, and sensations may fail to treat trauma thoroughly and

(Bach et al., 2019), which thereby allows a thorough adaptive integration of the experience, thus reducing symptoms of depression, anxiety, and posttraumatic stress, as well as other concerns.

A systematic review and meta-analysis published in 2015 (Nelms & Castel, 2016) concluded that Energy Psychology interventions are effective for treating depression, as one example, with an average effect size of  $d = 0.82$ . Another article regarding agoraphobia (Irgens et al., 2017) found that Energy Psychology was as effective as or more effective than traditional psychotherapy. The most common Energy Psychology methods are Emotional Freedom Techniques (EFT), Thought Field Therapy (TFT), Tapas Acupressure Technique (TAT), and Advanced Integrative Therapy (AIT).

While cognitive behavioral and exposure-based interventions may relieve some of the psychological symptoms from past traumatic events, research has found that psychotherapy or language-based interventions require a substantial capacity for cognitive processing, which many severely traumatized clients do not possess (Kuhfuß et al., 2021). For clients whose ability for cognitive processing is compromised by increased negative affect or limbic system overactivation, talk therapy may be ineffective or even counterproductive at times, and exposure therapy may be too confrontational.

## Somatic Therapies

Somatic Experiencing (SE) is described as a “body-oriented therapeutic approach that treats post-traumatic symptoms by changing the interoceptive and proprioceptive sensations associated with the traumatic experience” (Kuhfuß et al., 2021). Similarly, AIT is a gentle, body-oriented therapeutic approach that focuses on reducing the client’s residual sensory distress associated with past traumatic experiences. The mindfulness of somatic disturbance and its associated sensations in the body downregulates the fight-or-flight response in the ANS and desensitizes and reprocesses traumatic memories, as it is associated with hand placement in AIT.

## Preliminary Evidence and Research on AIT

### Case Studies

Two case studies have been published to date that focus on the efficacy of AIT. The first case study, published in 2021 in the *International*

*Journal of Healing and Caring*, was a retroactive case report in which the clinician utilized compassion-focused therapy, Eye Movement Desensitization and Reprocessing (EMDR), and AIT (Pace, 2021). The relative effectiveness of the treatment modalities was compared using the Subjective Units of Distress (SUD) rating associated with traumatic memories.

The client concluded that, of the three treatment modalities, AIT was what ultimately allowed her to extinguish the stored emotions attached to the trauma. The client reported that AIT allowed her to become more cognizant of her body and her emotions, which in turn helped increase her confidence and self-efficacy. She stated, “Embodiment allows me to know whether or not relationships are safe places for me to grow,” and reported that AIT increased her feelings of trust in herself (Pace, 2021).

Given that this was a retroactive case study utilizing three different treatment modalities, it is useful to note the similarities in memory reconsolidation and reprocessing between AIT and EMDR sessions.

The second AIT case study, published in 2021 in *Energy Psychology*, was a hermeneutic single-case efficacy design that documented remarkable outcomes from seven sessions of AIT (Bird Weaver, 2012). The client reentered treatment for an increase of anxiety, relational distress, and fibromyalgia experienced when she accepted custody of a sibling’s child. The client’s progress was assessed using the PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013) to measure post-traumatic stress disorder (PTSD) symptoms; the International Trauma Questionnaire (ITQ; Cloitre et al., 2018) to measure C-PTSD symptoms according to the criteria of the World Health Organization International Classification of Diseases, 11th revision (ICD-11; WHO, 2021); the Child-Parent Relationship Scale (CPRS; Pianta, 1992) to measure connection and conflict in the caregiver-child relationship; and the Subjective Units of Distress (SUD) scale (Wolpe, 1969) to rate the client’s current level of distress or discomfort. The clinician also used the self-report questionnaire Helpful Aspects of Therapy (HAT; Llewelyn et al., 1988) and the Change Interview (CI) method (Elliott et al., 2001) to measure client experience and perspective.

The client demonstrated dramatic and global improvement after treatment with AIT. This client

scored near the upper threshold on both the PCL-5 and the ITQ-11 at the start of treatment. Within three AIT sessions, the client no longer met diagnostic criteria for PTSD or C-PTSD. Additionally, the CPRS showed dramatic changes in intergenerational relationship satisfaction: the scores of conflict and connection inverted.

This study provided a brief overview of AIT theory and protocols, as well as detailed notes of the trauma content that the client processed in easy-to-follow tables. As this was an individual case study, generalizability of this type of result is unknown. However, the data in this study do imply that AIT was the primary driver of change, as the client had previously been treated numerous times with other therapy modalities with minimal progress in symptom reduction. In the client's own words, "I was headed in a direction of crashing and burning—in a significant amount of pain, always exhausted, always emotionally triggered, always feeling hopeless and overwhelmed, and just continuing to feel worse and worse. Once we started AIT, I very quickly progressed to feeling the way that I feel now. So undoubtedly, there's no question that this is what did it" (Bird Weaver, 2021).

## Books

Two recent books have made particular reference to AIT-based treatment. In *Treating Trauma with Energy Psychology*, Catherine Folkers, MSW, provides a series of documented case reports in which AIT was used as a primary treatment modality for phobias, PTSD, complex trauma, borderline personality, and psychosomatic conditions (Folkers, 2022). The publication also reviews the basic concepts of AIT and elements of its application.

In *Sacred Medicine: A Doctor's Quest to Unravel the Mysteries of Healing*, Lissa Rankin, MD, describes the AIT model and case examples, in addition to providing the Quick AIT Protocol for practical self-use. Rankin is a medical doctor who has shifted into alternative medicine for growth and self-healing. She describes AIT as: "a complete energy psychotherapy with Jungian roots, aspects of Gestalt therapy, some self-psychology, and influences from Buddhism and Sufism. AIT is based on a set of protocols and other methods with a psychodynamic, cognitive-behavioral, and transpersonal theoretical treatment for trauma and its resultant mental, physical, emotional, foundation that provides thorough, deep, and relatively

painless and spiritual health challenges" (Rankin, 2022, p. 277).

## Therapist Response Study

A recent study (Brown et al., 2022) surveyed AIT-based therapists to assess their perspective of therapeutic response with AIT clients. Seventy-six responses were received from experienced AIT therapists, a large percentage of whom had used the modality within the past few months with active patients. In 77% of the sessions, the therapists were able to extinguish patterns of negative emotions rooted in multiple past events rather than single events. Over 75% of the events were identified as originating in childhood or being chronic in nature.

The sessions began with an average SUD score reported as 8.3 out of 10 (with 0 being no distress and 10 being the greatest distress imaginable). In 92% of cases, a single session of AIT effectively reduced the SUD score to either 0 or 1, which on average took about three rounds of AIT sessions. Any associated physical sensations, when present, were also fully extinguished in a similar percentage of individuals. The study outcome was based on the client-reported changes in SUD scores and the therapist's perception of treatment efficacy. As such, one may consider a potential positive bias on the part of the therapist respondents in regard to the study findings.

## Proposed Mechanisms of Change

### Energetic Systems

While there is a plethora of evidence demonstrating the efficacy of energetic interventions on both physiological and psychological systems, the specific mechanisms of change are only recently emerging with new research. Studies of acupoints identified by traditional Chinese medicine (TCM) have demonstrated chemical changes in the hypothalamic-pituitary-adrenal and endogenous opioid systems (Brown et al., 2009), as well as molecular changes in spinal glial cells (Chen et al., 2020). Such changes in the spinal cells would, in turn, influence the myelin sheaths of local muscle cells that are traced to the spinal cord, midbrain, and hypothalamus/pituitary axis (Ezzo & Streitberger, 2006.). One study of Emotional Freedom Techniques (EFT) of veterans found epigenetic changes in genes related to inflammation and immunity (Church et al., 2018).

EFT makes reference to the meridian system of acupoints, articulated by TCM. In contrast, AIT references the chakra system. The seven primary chakras are located within the nervous system, in both the brain and the spine (Malimas et al., 2023). They are connected with a complex series of pathways that move energy throughout the body, called *nadis*, which means “little rivers.” The three main nadis located on the centerline of the body are correlated to the central nervous system of the spinal cord and the autonomic nervous systems (sympathetic and parasympathetic; Agrawal et al., 2021).

Chakras are traditionally conceptualized as discs of energy that move (spin) to support the flow of energy within the individual. Nadis are pathways within the chakra system that guide the energetic information from chakras throughout the body. Historically, there has been concern about differentiating between the meridians of TCM and chakras; however, modern researchers are beginning to correlate meridians with the nadis of the chakra system (Niharika et al., 2013). This integration may suggest the movement toward a more cohesive model between these two systems (Jun et al., 2020).

The chakra system was introduced in India from tantric yoga traditions (Feuerstein, 2001). It was used as a guide for practitioners to attain higher states of consciousness and health (Motoyama, 2003). Then in 1879, Helena Blavatsky of the Theosophical Society introduced chakras to Western thought. The chakra system has continued to influence thought through the human potential movement, through the work of Ram Dass and Abraham Maslow in the 1960s and 1970s (Leland, 2017). The early 20th-century Western hypothesis that the chakras are associated with specific mood states and developmental tasks originated with psychiatrist Carl Jung (1996). His work was simplified as a map for psychological healing and personal development later in the century (Judith, 2004).

Further research established that chakras could be delineated and perhaps correlated to human anatomy and physiology, which provided a foundation for biofield-based therapies (Gerber, 2000). Motoyama (1981) documented that chakras emit photoelectric and high-frequency oscillations when activated. Likewise, Hunt and colleagues (1977) documented distinct chakric frequency bands between 100 Hz and 1 KHz.

The 21st-century hypothesis suggests that chakras are central to human health and well-being. It further suggests that the chakras are accessible

to human awareness. Ultimately, Moga (2022) concluded that there is enough evidence regarding chakras to warrant further study, rather than dismissing the idea.

Studies by Rokade (2017) and Sweta et al. (2018) correlated the heart and root chakras to major neurological plexuses, supporting the hypothesis of neuroanatomical impact. Rowold and Hewson (2020) confirmed Hunt’s (1977) frequency bands and found two more for a total of 10. Jalil et al. (2015) found that each chakra radiates a unique band of frequencies from 29 MHz to 86 MHz, with the highest frequencies found at the third eye and crown chakras.

While originally housed in spiritual practices, chakras also provide an interoceptive map to the central nervous system (Loizzo, 2016). They do not require accommodation in traditional biophysics (Kafatos et al., 2015; Srinivasan, 2010).

While the research of chakra systems falls short of that related to meridians, the emerging data have identified further interventions and mechanisms of change in several areas: physiology (Rokade, 2017; Sweta et al., 2018), neuroscience (Phillips et al., 2020), microbiology (Movaffaghi & Mohammad, 2009), neurobiology (Maxwell, 2009), obstetrics and gynecology (Huang, 2020), embryogenesis (Balkrishna et al., 2018) and human and artificial consciousness (Chaturvedi, 2019; Cooper et al., 2020).

## Memory Reconsolidation

Psychotherapist Bruce Ecker (2012, 2015) introduced a biologically based discussion of how negative emotions attached to a traumatic memory become stored in the brain, as applied to psychotherapeutic intervention. He elucidated a sequence of psychotherapeutic events by which the intensity of that emotion could be substantially reduced or extinguished.

The sequential requirements include: first, bringing into awareness the memory trace connected to the negative emotion; second, changing the physiological state such that the new positive emotional state (parasympathetic) is no longer compatible with the original negative emotional state (sympathetic) while the aspects of the memory trace remain in awareness; and third, allowing the memory to return to long-term memory storage while maintaining its new association with the positive emotion.

This general sequence of events in the therapeutic process provides a neurobiological account for what can at times be a dramatic change in emotional tone achieved in therapy, such as in EMDR, as well as in certain forms of hypnosis, classical behaviorism as applied, and Energy Psychology. This is a general mechanism not specific to a particular psychotherapeutic technique.

Functional MRI scans have demonstrated a unique role of dual attentional awareness and/or bifocal processing in successfully processing and extinguishing negative emotions associated with traumatic memory (Wittfoth et al., 2020). The physical sensation of tapping in EFT, combined with the memory trace, is thought to create a dual level of attention that aids in the processing of phobic stimuli. Bifocal processing in AIT would involve the physical sensation of hand placement at various points of the body, while focusing on the memory or trauma.

## Parts Integration

AIT theorizes that a person is composed of three structural parts: the conscious self, the body, and the ego, which governs the former two parts. In addition, there is the unconscious self, and beneath that, the client's Center, which is their own deepest, wisest Self. Clinicians utilize AIT to support the client in connecting to their own Center (Clinton, 2010). "The ego is connected to the Center by a bridge through which questions, prayer, information, experience, inspiration, wisdom, guidance, emotion, creativity, and much more, can be communicated. This connection is called the Ego-Center Bridge" (Clinton, 2010, p. 63).

AIT also includes references to "aligning the client's being for transformation." This is based on the therapeutic assumption that traumatized persons do not achieve lasting relief from their trauma symptoms because there are "unconscious" parts that prevent release of stored trauma (Clinton, 2010).

In the early phase of treatment, AIT practitioners identify and extinguish clients' core beliefs that may block the progress of therapy. This initial phase is referred to as the Alliance, or the Agreement, and it is designed to bring conscious and unconscious perspectives into alignment in support of growth and change (Clinton, 2010).

Through the client befriending and integrating these "parts," the client is able to live more

fully in the present. The Internal Family Systems Theory articulates that different parts of the person can split off as a result of the need to cope with circumstances of early life. These parts, labeled as protector parts, function as the building blocks to healing in the present day (Anderson et al., 2017). By finding relief and peace from the negative thoughts, feelings, sensations, and memories from early periods of life, AIT allows clients to integrate all their parts to live as a whole version of themselves in their present-day lives.

## Information Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) has demonstrated effects beyond that of medication in the treatment of PTSD (van der Kolk et al., 2007). EMDR posits that traumatic events become "stuck" in the brain and body as memories, sensations, emotions, and cognitions. Utilizing bilateral stimulation allows the client to desensitize and reprocess these traumatic events so that one may remember the experience with a more tolerable and neutral state of mind, without the distressful emotions and sensations attached to the original memory (Shapiro, 2001).

Bilateral stimulation can be visual, tactile, or auditory. The specific mechanism of action underlying the dual attention stimuli/alternating bilateral stimulation (DAS/ABS) element of EMDR therapy is highly debated. Psychiatrist Paul Miller in the *Journal of Medical Hypotheses* opines that DAS/ABS allows for a "stochastic resonance" or "white noise" effect that can allow stored traumas to enter conscious awareness and then be desensitized, reprocessed, and released (Miller et al., 2018).

AIT also utilizes DAS in that it incorporates tactile stimulation of different parts of the body while verbally repeating the treatment phrase out loud. While EMDR utilizes side-to-side bilateral stimulation (BLS), AIT utilizes top-to-bottom tactile stimulation, starting at the crown of the head and ending at the base of the tailbone, also known as the "root" energy center. AIT's hand movement gives the client the cue on where to put the focus on their body and to bring their attention to emotions or sensations that arise when they repeat the treatment statement at each energy center (Clinton, 2010). The basic protocols of both AIT and EMDR combine a form of treatment phrase with the DAS/ABS.

## Embodiment and Dissociation Treatment

*“Traumatic symptoms are not caused by the ‘triggering’ event itself. They stem from the frozen residue of energy that had not been resolved or discharged; this residue remains trapped in the nervous system where it can wreak havoc on our bodies and spirits.”*

—Peter Levine (1997, p. 3)

One of the most promising aspects of somatic therapies such as AIT is its capacity to treat dissociative disorders. Dissociation is a common symptom in patients with trauma, especially attachment traumas of neglect or abuse (van der Kolk, 2015).

In *The Body Keeps the Score*, van der Kolk (2015) states that some of the most difficult clients to treat are those that numbed into hypo-arousal, commonly referred to as the “freeze response.” These clients may be difficult to recognize as dissociated, especially if dissociation is adaptive in their present-day lives.

Common clinical presentations include: operating on “autopilot,” not feeling present in daily life, shutting down in the face of conflict, difficulty with identifying emotions, flat affect, memory loss, emotions of sadness and despair, physical symptoms of exhaustion and burnout, and social withdrawal. Psychologist Sandra Paulsen describes these clients as presenting in therapy with the “front porch” of the self. These clients appear to be able to engage in traditional talk therapy but do not receive lasting benefits because they are only performing the actions they believe to be required of them. This is a recreation of patterns that created safety for them in childhood.

Clients who experience traumatic dissociation can attend “talk” psychotherapy for years without experiencing relief from their dissociative symptoms and their deepest traumas (Paulsen & O’Shea, 2017). In our experience, a gentle somatic therapy such as AIT may provide an effective means of treating trauma-related dissociation.

Gently returning the client’s focus to the body provides the controlled desensitization to the threat response evoked by traumatic memories. The function of this embodiment is to show, not tell, the client that while their nervous system experiences emotional discomfort, there is no actual danger in the present. This can be done before treating traumatic memories as a way to build distress tolerance in AIT.

## Historical Elements

Psychiatrist Carl Jung devoted his career to the development of a depth psychology, which he entitled “analytic psychology” to differentiate it from Freud’s psychoanalysis. Jung referenced a larger sense of wholeness internalized within each individual. He described this inner awareness to be the experience of the divine image, which he referred to as the Self.

This definition of the term “Self” is substantially different from that associated with self-psychology or object relations theory. This internal awareness of the complete wholeness of a person as a reflection of the introjected sense of the divine was the completion of what Jung called the “individuation process,” which was the goal of therapy.

The process required a series of steps that involved integration of what is perceived to be another “part” of consciousness, separate from the ego. Examples include integration of the shadow into the ego, and later the integration of the contrasexual element of the psyche known as the *anima* or *animus*. The latter integration opens the ego-Self axis and thus appreciation of this larger sense of being.

Much of this language is preserved in AIT, although the term Self is replaced with the term Center. AIT also references internal archetypes including the shadow, anima, and animus in various protocols available. Asha Clinton specifically references Jung and his work as helping inform some of the concepts of AIT (Edinger, 1992; Jung, 1969; Wilmer, 2018.).

The philosophy of AIT assumes that archetypes are universal and part of the collective unconscious, such that each person is born with the full panoply of archetypes (Clinton, 2020). Through life experiences, the qualities of archetypes and their opposites are activated and/or introjected and shape personality and meaning-making.

A Jungian practice used by AIT that impacts client experience and autonomy is the use of active imagination both within and outside of the session. Active imagination (AI) is used by the client within session to identify cognitive and somatic structures that are attached to traumatic experiences. Outside of sessions, the client uses AI for additional self-exploration.

AIT additionally provides a set of meditations for home practice to install positive patterning for use in meditation or the de-escalation of triggered experiencing and activation (Clinton et al., 2014).

## Energy Psychology

AIT credits Thought Field Therapy, created by Roger Callahan (1985), for the innovative applications of kinesiology and for the recognition and extinguishing of “psychological reversals” prior to treatment of trauma. Emotional Freedom Techniques, developed from TFT by Gary Craig (Craig & Fowlie, 1985), is credited for the format of the Quick AIT Protocol, as well as the integration of elements of exposure therapy with memory, emotion, and bodily sensation.

### AIT’s Areas of Focus

AIT has multiple applications that allow for the processing of either single events or more sophisticated patterns of events. When working with patterns, many individual events may be efficiently extinguished at the same time.

The first and most straightforward use of AIT would be to extinguish the negative emotions related to single events. The general sequence described in the basic manual (Clinton, 2010) is termed a “three step” and involves performing the AIT sequence on the first historical event with a similar emotional tone (Originating Trauma), followed by the current event (Initiating Trauma), and then their connection (Connecting Trauma).

Traumatic events can lead a person to develop a negative belief about themselves or the world as a compensatory response. AIT provides a protocol to eliminate negative underlying beliefs followed by a strengthening of a positive belief. This process is identified in the Core Belief Matrices (Clinton, 2018). This process is not entirely dissimilar from the EMDR process of identifying a negative core belief and replacing it with a positive one.

The specific verbiage used in AIT therapy may account for its ability to extinguish patterns of events that occurred over the course of a lifetime. The language phrase for this is “all the times and all the ways I felt X when Y happened to me, up until now.” This phrasing is unique with AIT and allows for the conscious mind to enlist the subconscious and unconscious mind to filter entire sequences of events of this pattern, thereby providing a substantial symptom relief (Clinton, 2010). It also provides efficiency in real time.

AIT offers the capacity for the individual to install positive belief structures. Clients are encouraged to practice it daily at home between

sessions once a positive belief is identified (Clinton, 2010).

The Quick AIT Protocol is a rapid extinguishing mechanism clients can use on their own between sessions to reduce negative emotions that arise. The Quick AIT format is discussed in the following section and is similar in format to EFT (Clinton, 2010).

### The Basic Process of Quick AIT

Either while in session or independently, Quick AIT is a simple process that can be easily learned and used. Each energy center is related to a chakra and has a specific hand placement, as illustrated in Figure 1.

### The Quick AIT Protocol

1. The client chooses a memory, aspect, emotion, somatic experience, etc. (now called issue) they would like to treat. The client is instructed to focus on the chosen issue and to remember relevant details, including any emotions and sensations. They are encouraged to allow the emotion or sensory experience to arise to awareness.
2. The client uses a SUD scale of 0 to 10 to describe their current level of distress and the client’s answer is always accepted.
3. The client is instructed to treat any reversals they intuit or expect by massaging their “sore points” located on the chest wall beneath the hollow of the throat and 3 inches on each side of the sternum centerline. Basics text: first find the little indentation at the base of the throat. From that point, bring your fingers out about 3 inches to each side.
4. The client states a short phrase that summarizes the facts of the current issue. This phrase will be repeated internally or spoken at each energy center listed in this process.
5. The client identifies the location to which they will hold a hand throughout the protocol. This is called the stationary hand; the client may switch hands if they choose to do so. The ideal energy center to hold is frequently the one closest to the epicenter of somatic disruption or discomfort.
6. The client will guide the non-stationary hand through each of the energy centers from the crown of the head to the base

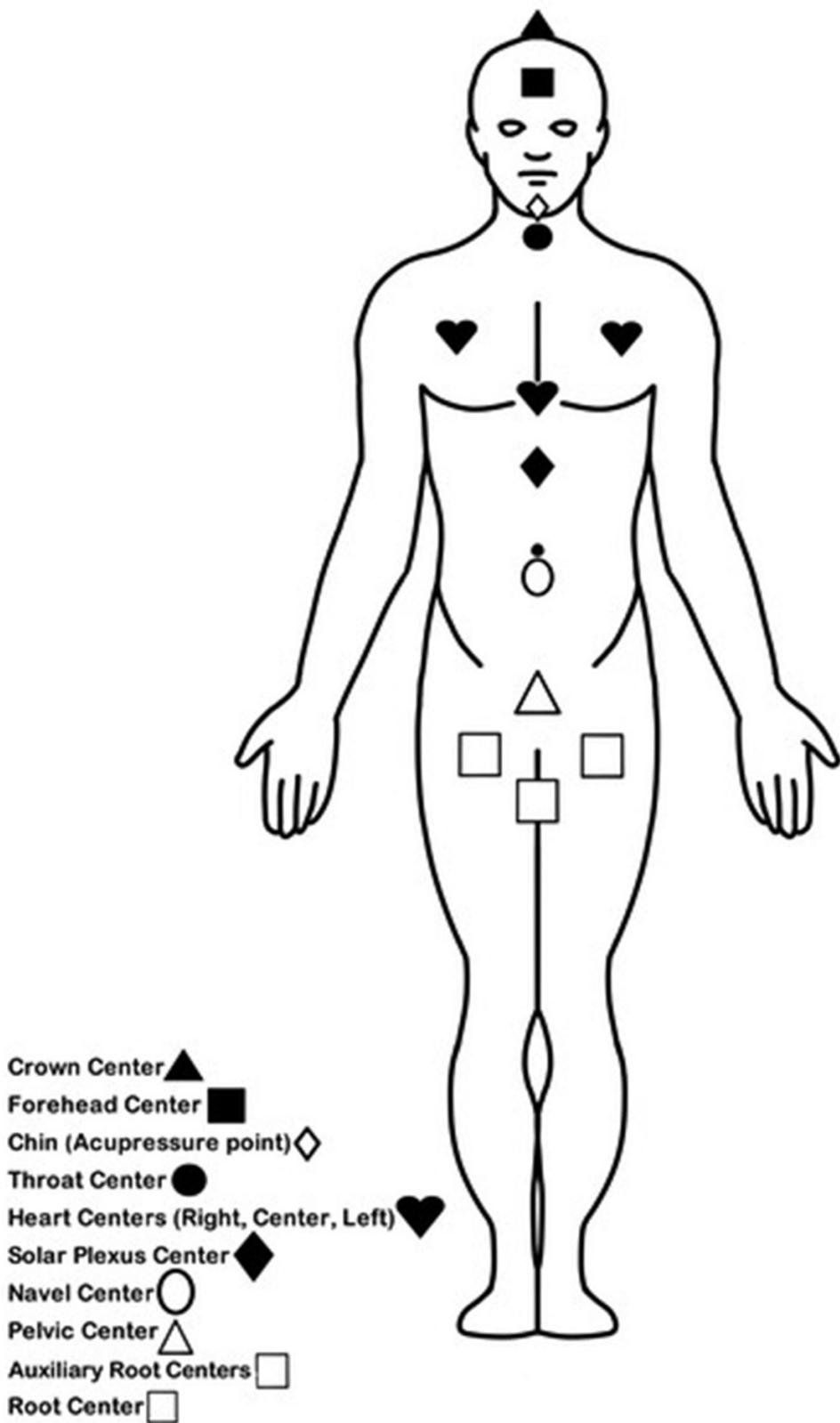


Figure 1. Energy centers used in AIT (illustration by Paul Weaver, 2021).

of the spine while repeating the chosen phrase at each center.

7. To guide and mirror the client, the clinician (when in session) will also hold the energy centers on the clinician's body as the client holds theirs, beginning with the crown energy center. Each energy center is held for the length of at least one breath.
8. After one round (the previous sequence) is completed, the client will take a grounding or extinguishing breath, then return their focus to the chosen issue and to their current emotional and sensory experience. They will then use the SUD scale to score their current distress level. Further intervention is based on their SUD assessment as follows:
  - a. If there is a reduction of 2 points or more but has not yet gone down to 0, do another round.
  - b. If there is a reduction of 1 point or less, or if the SUD has gone up, rub the sore spots for about 2 minutes to correct any potential lingering psychological reversals.
  - c. If treatment for reversals does not improve the SUD score sufficiently, the client should investigate whether another aspect of the issue has come up.
    - i. If another aspect has emerged and the SUD rating of the original memory is now 2 or less, it is appropriate to redirect focus to the new aspect and begin another round of treatment.
    - ii. If the SUD level of the original memory is above 2, it is best for the client to complete further treatment rounds on the original memory until the SUD is 2 or less, and then switch to the new aspect.
  - d. If the client reports a lingering SUD level of 1, repeat the phrase a few times with one hand on the stationary energy center and the other on another energy center as identified by the client as a secondary point or per clinical judgment. A full round is not necessary if the SUD level reaches 0.
  - e. The client completes the number of rounds necessary for the issue and its aspects to reach a SUD level of 0.
9. When the client's SUD level has reached 0, offer gratitude for the change by saying "Hallelujah!" or an equivalent.

## The Larger Vision of the Complete AIT Process

### Gaining Alliance

The Alliance/Agreement: One of the basic protocols that AIT clinicians receive in their training and are encouraged to utilize with clients early in treatment is the "Agreement Protocol." It is a list of 24 core beliefs, which could be described as "blocking beliefs." These beliefs such as, "It's impossible to be healed" or "It's not safe to be healed," are described by Clinton (2010) as needing to be "used at the beginning of treatment to ensure that the client's underlying unconscious beliefs about healing and transformation are positive before treatment is begun."

Any therapist who works with trauma and dissociation knows that there are clients who are afraid, and sometimes even certain, that treatment will not work. Many clients are anxious that trauma treatment will make them feel worse than they do already. Extinguishing blocking beliefs, such as "I'll be deprived if I'm healed," allow the client and therapist to clear the way for a conscious, unconscious, and embodied agreement that healing and transformation are possible, desirable, and deserved (Clinton, 2010).

### Aligning Being for Transformation

After treating, or extinguishing, these blocking beliefs and working to strengthen their healthy opposites (e.g., from "I must be perfect" to an adaptive belief "It's plenty good enough to be human"), the client is ready to align all systems in their body for transformation. This includes making the agreement that their unconscious self is willing to allow them to use AIT to heal all the wounds they choose to heal in different systems in their body, for example, the musculoskeletal system or the nervous system. The language is about agreement and consent, making note that the client is allowing for AIT to heal all the wounds they choose to heal. For those clients that have struggled with dissociation, trauma splitting, or having maladaptive coping strategies or "protector parts," letting the client discern what they are ready to release and what they do not choose to change may be quite empowering.

### Protocols: Mastering AIT Practice

An addition to Basic AIT, there is a manualized set of treatment approaches for complex issues. The use of protocols and matrices allows

AIT practitioners to access a skill set for treating early attachment rupture and other traumas from early life prior to the development of clear language capacity. Other protocols allow for the treatment of ancestral or intergenerational trauma, which may not be linked to explicit personal memories, but instead may be linked to somatic consequences in the body.

### Case Example

A client presented to the clinician (author E.P.) after his previous therapist retired. He requested therapy related to grief issues surrounding his father's death from amyotrophic lateral sclerosis when the client was 12 years old. After 10 sessions of talk therapy, including history taking and five sessions of AIT in a period of three months, the client's Dissociative Experiences Scale (DES-II) score was reduced by 53.6% from 43.93 to 20.36. At six-month follow-up after 14 sessions of AIT, the client's DES-II score reduced by 61%, from 20.36 to 7.86, which is essentially a normal score found in the general population (Carlson & Putnam, 1993). At nine-month follow-up, the client's DES II scores rose to 11.07. The total change in his DES-II scores over nine months of AIT was 32.86 points, a 74.8% decrease in symptom severity.

The client reported that he had been in talk therapy for years but had been unable to find adequate relief from his trauma because he was unaware he was dissociating. The patient also shared his perspective on AIT and how it differs from traditional talk therapy. He was previously in talk therapy for five years.

It [AIT] has this somatic component, moving through the stations on the body, that has a very real effect of pulling me out of the fear rising from my thoughts, feelings and emotions. It feels like direct access to my feelings. Sometimes in talk therapy it felt like I was talking in loops. The structure of AIT also pulls me out of that rumination cycle that I would get into in talk therapy. In AIT, it always feels like we're moving through things, which is satisfying to me. In my talk therapy, there was a focus on what I thought about things. And in AIT, there's a focus on how I feel. This is a paradigm shift for me in my life and experience. (Transcript of Session #72)

### Learning More

As there are substantially fewer AIT practitioners than other modes of Energy Psychology, those interested may consult the Advanced Integrative Therapy Institute (AITI) website, where a full series of basic and advanced course material is on the calendar. Hands-on experience with at least a basic level of training in AIT is the most effective way to learn the technique. In addition, the website for the Association for Comprehensive Energy Psychology (ACEP) has a complete list of all the research conducted in Energy Psychology from the 1990s to the present. This includes article citations related to AIT. To find a practitioner of AIT, there is a partial list at the AITI website. Additionally, many practitioners will list this modality in their listing site at the ACEP website.

### Discussion

This article attempts to describe the history, foundation, and scope of practice of AIT, from the theoretical to the practical. AIT has evolved from a variety of philosophies and treatment models ranging from Jung's analytical psychology to EFT to elements of somatic therapy and kinesiology. As there is currently a shortage of peer-reviewed research conducted on AIT, the general purpose of this article was to define and thereby introduce AIT to fellow researchers, clinical mental health professionals, and laypersons.

Salient information that emerged from the present review includes: (a) what AIT is, including one treatment protocol; (b) a review of the small body of peer-reviewed literature and studies that are currently published about AIT; (c) proposed mechanisms for action of the body-based/energy component; and (d) the obvious need for more research studies to be conducted on the efficacy of AIT as an effective trauma treatment.

The current working hypothesis for AIT's mechanism of action may be subject to change as more research is conducted into this therapeutic intervention. It is certainly beyond the scope of this article to defend scientifically the existence of chakras, and the authors acknowledge that more data exist related to meridian systems in the literature. The possible correlations between the nadis as energy channels connecting chakras to the body and the meridian-based TCM system is an intriguing possibility for potential integration of models, at least in theory.

Although AIT uses the language of chakras to facilitate the therapeutic process, it may be found that its effectiveness is in part due to split awareness, memory reconsolidation, somatic processing, bilateral stimulation, or any number of potential considerations. The question of the cause of effect deserves considerable attention and future research. Before Alexander Fleming knew how penicillin worked, he was aware it was effective in curbing the growth of bacteria (Tan & Tatsumura, 2015). How AIT works will continue to become clearer as thorough research that includes biometric measures is conducted into this treatment method.

EFT, which is an evidence-based Energy Psychology treatment method, emerged into the public consciousness as a result of extensive peer-reviewed studies and an ever-growing body of research with over 100 studies demonstrating its efficacy (Bach et al., 2019). Research into the effectiveness of AIT is in its nascence, but thanks to past and ongoing research conducted in other Energy Psychology methods there is a research “roadmap” on how to proceed. The potential for future research into AIT appears promising.

The richness of the model and the preliminary results of the few case studies and a survey of therapists (Brown et al., 2022) suggest that this modality deserves substantial additional study. Coauthor G.B. is currently conducting a randomized clinical trial (RCT) comparing EFT and the Quick AIT Protocol to further develop data. This trial also includes the biometric measure of heart rate variability.

Additional case studies and RCTs comparing AIT with trauma-focused cognitive behavioral therapy or EMDR could further assess the effectiveness of this relatively novel Energy Psychology method.

## Conclusion

Dr. Asha Clinton is quoted as saying, “Trauma is anything that fractures human wholeness.” As clinicians, the authors of this article recognize that the need for gentle, effective, and evidence-based trauma treatment methods has never been more urgent. Although AIT is in its infancy and much more clinical experience and research are required, the initial data provide some optimism. The most obvious limitation of this review is the meager amount of research data currently available regarding AIT. The function of this paper is to garner interest into AIT, as well as to open up avenues for further research.

## References

- Agrawal, G. A., Upadhyay, S., & Sakshi. (2021). Study of Trividha Nadis; Ida, Pingala and Sushumna Nadi: A Review Article. *World Journal of Pharmaceutical and Medical Research*, 7(2), 555694.
- Anderson, F., Sweezy, M., & Schwartz, R. (2017). *Internal family systems skills training manual trauma-informed treatment for anxiety, depression, PTSD and substance abuse*. PESI Publishing & Media.
- Bach, D., Groesbeck, G., Stapleton, P., Banton, S., Blickheuser, K., & Church, D. (2019). Clinical EFT (Emotional Freedom Techniques) improves multiple physiological markers of health. *Journal of Evidence-Based Integrative Medicine*, 24. doi:10.1177/2515690X18823691
- Balkrishna, A., Sharma, V. K., & Sharma, N. (2018). Chakra genesis, a correlation between evolution of chakras and embryogenesis. *Journal of Yoga and Physiotherapy ISSN*, 2476–1303. doi:10.19080/JYP.2018.06.555694
- Bird Weaver, T. (2021). The use of Advanced Integrative Therapy with C-PTSD and intergenerational trauma transmission: A case study. *Energy Psychology: Theory, Research, and Treatment*, 13(2), 23–38. doi:10.9769/EPJ.2021.13.2.TBW
- Brown, C. A., & Jones, A. K. (2009). Physiological mechanisms of acupuncture: Beyond placebo? *Pain*, 147(1), 11–12. doi:10.1016/j.pain.2009.09.014
- Brown, G. P., Batra, K., Hong, S. S., Sottile, R., Bakhru, R., & Dorin, E. (2022). Therapists’ observations in reduction of unpleasant emotions following Advanced Integrative Therapy interventions. *Energy Psychology: Theory, Research, and Treatment*, 14(1), 12–21. doi:10.9769/EPJ.2022.14.1.GB
- Callahan, R. (1985). *Five minute phobia cure: Dr. Callahan’s treatment for fears, phobias, and self-sabotage*. Enterprise.
- Carlson, E. B., & Putnam, F. W. (1993). An update on the dissociative experiences scale. *Dissociation: Progress in the Dissociative Disorders*, 6(1), 16–27.
- Chaturvedi, D. K. (2019). Relationship between chakra energy and consciousness. *Biomedical Journal of Science and Technical Research*, 15(3), 1–3.
- Chen, T., Zhang, W. W., Chu, Y. X., & Wang, Y. Q. (2020). Acupuncture for pain management: Molecular mechanisms of action. *American Journal of Chinese Medicine*, 48(4), 793–811. doi:10.1142/S0192415X20500408
- Church, D., Yount, G., & Brooks, A. J. (2012). The effect of Emotional Freedom Techniques on stress biochemistry: A randomized controlled trial. *Journal of Nervous and Mental Disease*, 200(10), 891–896. doi:10.1097/NMD.0b013e31826b9fc1
- Church, D., Yount, G., Rachlin, K., Fox, L., & Nelms, J. (2018). Epigenetic effects of PTSD remediation in veterans using clinical Emotional Freedom Techniques: A randomized controlled pilot study. *American Journal of Health Promotion*, 32(1), 112–122. doi:10.1177/0890117116661154
- Clinton, A. (2010). *Advanced Integrative Therapy: The basics*. Advanced Integrative Therapy Institute.
- Clinton, A. (2018). *The AIT core belief book: All the cognitions you’ll ever need to promote transformation and healing*. Advanced Integrative Therapy Institute.
- Clinton, A. (2020). *Depth treatment* (5th ed.). Advanced Integrative Therapy Institute.
- Clinton, A., Folkers, C., & Soberman, G. (2014). *Mastering AIT practice* (5th ed.). Advanced Integrative Therapy Institute.

- Cloitre, M., Shevlin, M., Brewin, C., Bisson, J., Roberts, N., Maercker, A., Karatzias, T., & Hyland, P. (2018). The International Trauma Questionnaire: Development of a self-report measure of ICD-11 PTSD and Complex PTSD. *Acta Psychiatrica Scandinavica*, *138*(6), 536–546. doi:10.1111/acps.12956
- Cooper, N., Clarkson, J., Phillips, K. T., & Hall, C. J. (2020). Consciousness and the Amit Ray's quantum attention function of the brain. *Brain*, *6*, 14. doi:10.13140/RG.2.2.24159.48805
- Craig, G., & Fowle, A. (1995). *Emotional Freedom Techniques: The manual*. Gary Craig.
- Ecker, B. (2012). *Unlocking the emotional brain: Eliminating symptoms at their roots using memory reconsolidation*. Routledge.
- Ecker, B. (2015). *Memory reconsolidation in psychotherapy: The neuropsychologist special issue*. CreateSpace.
- Edinger, E. (1992). *Ego and archetype*. Shambhala.
- Elliott, R. (2014). Hermeneutic single-case efficacy design. In K. Schneider, J. Pierson, & J. Bugental (Eds.), *The handbook of humanistic psychology: Theory, research, and practice* (2nd ed., pp. 351–360). Sage.
- Elliott, R., Slatick, E., & Urman, M. (2001). Qualitative change process research on psychotherapy: Alternative strategies. In J. Frömmer and D. L. Rennie (Eds.), *Qualitative psychotherapy research: Methods and methodology* (pp. 69–111). Pabst Science.
- Ezzo, J., Streitberger, K., & Schneider, A. (2006). Cochrane systematic reviews examine P6 acupuncture-point stimulation for nausea and vomiting. *Journal of Alternative and Complementary Medicine*, *12*(5), 489–495.
- Feuerstein, G. (2001). *The yoga tradition: Its history, literature, philosophy and practice*. Hohm.
- Folkers, C. (Ed.). (2022). *Treating trauma with energy psychology*. Outskirts.
- Gerber, R. (2000). *Vibrational medicine for the 21st century: A complete guide to energy healing and spiritual transformation*. William Morrow.
- Huang, W. L. (2020). Chakra's energy deficiency as the main cause of infertility in women. *Obstetrics and Gynecology International Journal*, *11*(2), 83–91. doi:10.15406/ogij.2020.11.00493
- Hunt, V., Massey, W., Weinberg, R., & Hahn, P. (1977). A study of structural integration from neuromuscular, energy field, and emotional approaches. *Bulletin of Structural Integration*, *5*, 19–37.
- Irgens, A. C., Hoffart, A., Nysæter, T., Haaland, V. Ø., Borge, F., Pripp, A. H., Martinsen, E. W., & Dammen, T. (2017). Thought field therapy compared to cognitive behavioral therapy and wait-list for agoraphobia: A randomized, controlled study with a 12-month follow-up. *Frontiers in Psychology*, *8*, 1027. doi:10.3389/fpsyg.2017.01027
- Jalil, S. Z. A., Abdullah, H., & Taib, M. N. (2015). Detection of endogenous electromagnetic field of the human body. *ARPN Journal of Engineering Applied Sciences*, *10*(20), 9650–9658.
- Judith A. (2004). *Eastern body, western mind: Psychology and the chakra system as a path to the self*. Celestial Arts.
- Jun, F., Bok, B. H., & Lin, Z. (2020). Study on the correlations between chakra system and ayurvedic medicine. *International Journal of Ayurveda and Pharma Research*, *8*(4), 73–76.
- Jung, C. G. (1969). *Man and his symbols*. Doubleday.
- Jung, C. G. (1996). *The psychology of kundalini yoga: Notes of a seminar by C. G. Jung, with S. Shamdasani*. Princeton University Press.
- Kafatos, M. C., Chevalier, G., Chopra, D., Hubacher, J., Kak, S., & Theise, N. D. (2015). Biofield science: Current physics perspectives. *Global Advances in Health and Medicine*, *4*(1\_suppl), 25–34. doi:10.7453/gahmj.2015.011.suppl
- Kuhfuß, M., Maldei, T., Hetmanek, A., & Baumann, N. (2021). Somatic experiencing—effectiveness and key factors of a body-oriented trauma therapy: A scoping literature review. *European Journal of Psychotraumatology*, *12*(1), 1–17. doi:10.1080/20008198.2021.1929023
- Leland, K. (2017). The rainbow body: How the western chakra system came to be. *Quest*, *105*.2, 25–29.
- Levine, P. A. (1997). *Waking the tiger: Healing trauma—the innate capacity to transform overwhelming experiences*. North Atlantic Books.
- Llewelyn, S. P., Elliott, R., Shapiro, D. A., Hardy, G., & Firth-Cozens, J. (1988). Client perceptions of significant events in prescriptive and exploratory periods of individual therapy. *British Journal of Clinical Psychology*, *27*(2), 105–114. doi:10.1111/j.2044-8260.1988.tb00758.x
- Loizzo, J. (2016). The subtle body: An interoceptive map of central nervous system function and meditative mind-brain-body integration. *Annals of the New York Academy of Sciences*, *1373*(1), 78–95. doi:10.1111/nyas.13065
- Malimas, S., Yosravikul, K., Jiarawattananon, M., & Makmoon, T., Khiwwichai, R., Raksakorn, I., ... Saokarn, A. (2023). Exploring the interconnection between chakras and the nervous system through the Buddhist meditation approach and a revised understanding of the chakras system. *International Journal of Novel Research in Healthcare and Nursing*, *10*(1), 140–145. doi:10.5281/zenodo.7821110
- Maxwell, R. W. (2009). Neurobiology of chakras and prayer. *Zygon*, *44*(4).
- Miller, P. W., McGowan, I. W., Bergmann, U., Farrell, D., & McLaughlin, D. F. (2018). Stochastic resonance as a proposed neurobiological model for Eye Movement Desensitization and Reprocessing (EMDR) therapy. *Medical Hypotheses*, *121*, 106–111. doi:10.1016/j.mehy.2018.09.010
- Moga, Margaret. (2022). Is there scientific evidence for chakras? *International Journal of Healing and Caring*, *22*(2), 39–45.
- Motoyama, H. (1981). *Theories of the chakras: Bridge to higher consciousness*. Theosophical Publishing House.
- Motoyama, H. (2003). *Theories of the chakras: Bridge to higher consciousness*. New Age Books.
- Movaffaghi, Z., & Mohammad, F. (2009). Biofield therapies: Biophysical basis and biological regulation? *Complementary Therapies in Clinical Practice*, *15*(1), 35–37.
- Nelms, J., & Castel, D. (2016). A systematic review and meta-analysis of randomized and non-randomized trials of Emotional Freedom Techniques (EFT) for the treatment of depression. *Explore: The Journal of Science and Healing*, *12*(6), 416–426. doi:10.1016/j.explore.2016.08.001
- Niharika, N., Hankey, A., & Nagendra, H. R. (2013). Effects of yoga practice on acumeridian energies: Variance reduction implies benefits for regulation. *International Journal of Yoga*, *6*(1), 61–65.
- Pace, E. (2021). Efficacy of Advanced Integrative Therapy in treating complex post traumatic stress disorder: A preliminary case report. *International Journal of Healing and Caring*, *21*(2), 35–53.

- Paulsen, S., & O'Shea, K. (2017). *When there are no words: Repairing early trauma and neglect from the attachment period with EMDR Therapy*. CreateSpace.
- Phillips, K., & Cooper, N. J., Hall, C., & Clarkson, J. (2020). Neuroscience and neuropsychology models of brain based on Saint Amit Ray's 114-chakra system. *Neuropsychology Review Journal*, 9(27), 1–10. doi:10.13140/RG.2.2.26134.57927
- Pianta, R. (1992). *Child-Parent Relationship Scale (CPRS)*. Retrieved from <https://education.virginia.edu/faculty-research/centers-labs-projects/castl/measures-developed-robert-c-pianta-phd>
- Rankin, L. (2022). *Sacred medicine: A doctor's quest to unravel the mysteries of healing*. Sounds True.
- Rokade, S. D. (2017). Role of anahata chakra and cardiac plexus in cardiac activity. *Indian Journal of Medical Research Pharmaceutical Sciences*, 4(1), 23–26.
- Rowold, J., & Hewson, P. D. (2020). Biofield frequency bands—Definitions and group differences. *Global Advances Health Medicine*, 9, 1–10.
- Shapiro, F. (2001). *Eye Movement Desensitization and Reprocessing (EMDR): Basic principles, protocols, and procedures*. Guilford.
- Srinivasan, T. M. (2010). Energy medicine [editorial]. *International Journal of Yoga*, 3, 1.
- Sweta, K. M., Awasthi, H. H., Godbole, A., & Prajapati, S. (2018). Physio-anatomical resemblance of inferior hypogastric plexus with muladhara chakra: A cadaveric study. *AYU International Quarterly Journal of Research in Ayurveda*, 38(1–2), 7–9.
- Tan, S. Y., & Tatsumura, Y. (2015). Alexander Fleming (1881–1955): Discoverer of penicillin. *Singapore Medical Journal*, 56(7), 366–367. doi:10.11622/smedj.2015105
- van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin.
- van der Kolk, B. A., Spinazzola, J., Blaustein, M. E., Hopper, J. W., Hopper, E. K., Korn, D. L., & Simpson, W. B. (2007). A randomized clinical trial of eye movement desensitization, fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: Treatment effects and long-term maintenance. *Journal of Clinical Psychiatry*, 68(1), 37.
- Weathers, F., Litz, B., Keane, T., Palmieri, P., Marx, B., & Schnurr, P. P. (2013). *The PTSD Checklist for DSM-5 (PCL-5)*. Retrieved from [https://www.ptsd.va.gov/professional/assessment/documents/PCL5\\_Standard\\_form](https://www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form)
- Wilmer, H. (2018). *Practical Jung: Nuts and bolts of Jungian psychotherapy*. Chiron.
- Wittfoth, D., Pfeiffer, A., Bohne, M., Lanfermann, H., & Wittfoth, M. (2020). Emotion regulation through bifocal processing of fear inducing and disgust inducing stimuli. *BMC Neuroscience*, 21(1), 1–13. doi:10.1186/s12868-020-00597-x
- Wolpe, J. (1969). *The practice of behavior therapy*. Pergamon Press.
- World Health Organization (WHO). (2021). 6B41 Complex post traumatic stress disorder. *International classification of diseases 11th revision*. Retrieved from <https://icd.who.int>