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Mindfulness, Trauma, and Trance

A Mindfulness-Based Psychotherapeutic Approach

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Introduction

While there is a surging interest and need for integrating mindfulness in the fields of health and Western medicine, the understanding of how to bring it into psychotherapy is still in its infancy. Contrary to popular belief, mindfulness is not just an adjunct to therapy but an orientation to be held and applied within the relational healing process. Mindfulness has been defined in the West as a flexible cognitive state (Langer, 1989) that is cultivated by drawing fresh distinctions about the situations that present themselves. For the purpose of this chapter, mindfulness is defined as an unbiased experiential state of awareness that is used to develop insight (*sati* in Pali, the language of early Buddhist writings from India), compassion, wisdom, and essential truth. When employed in psychotherapy, mindfulness helps the therapist to look at and investigate both the therapist's and the client's mind–body and energy flows. This approach empowers the client to draw upon information in the conscious and unconscious mind, and remain present with thoughts, feelings, and sensations, experiencing and exploring them rather than avoiding them.

A patient who is guided by the therapist to use mindfulness-based practices within a session may experience a quality of trance similar to that induced by hypnotherapy. The patient's consciousness can shift out of the normal waking state into a very deep state of relaxation characterized by theta waves. Healing and transformation can then occur as a result of state-dependent learning. Guided by the therapist, the patient is able to feel emotions typically associated with trauma, such as fear or sadness, without becoming panicked or disassociating. Simultaneously, the client is able to perceive space between the self and what is being experienced, accessing what is called the observing or witnessing self. Awakening the observing self helps the patient to remain present when experiencing uncomfortable emotions rather than avoiding them

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or becoming engulfed by them. The patient feels a sense of control over the experience, no longer perceiving it as overwhelming. In this state, the patient begins to develop the ability to choose new responses to feelings and memories.

While mindfulness-based psychotherapy as described in this chapter has roots in Buddhist psychology, its applications can be secular with an integration of mindfulness, trance, and cognitive modalities. It is our intention to open an inquiry into its relevance and practical application in the field of trauma. We believe almost everyone has experienced trauma to some degree, whether that trauma is personal or cultural. The dictionary defines trauma as an experience that is deeply disturbing, shocking, and upsetting, so much so that it may continue to affect a person long after the traumatic event. The word "trauma" derives from a Greek root meaning "wound," and just as with a wound, the effects of trauma are not healed instantly but healed via a healing process that requires time and repetition of healing modalities and actions. Until a trauma is healed, the shock, fear, anger, or grief continues to be experienced—although often unconsciously—in the four realms of a person's experience: the body, the cognitive mind, the emotional mind, and the individual energy field (these realms and how they are interrelated will be explained later in the chapter).

The memory of a trauma can trigger emotional distress, but it's important to note that the default mode of a traumatized nervous system is to experience pain, suffering, fear, and anxiety, and to anticipate catastrophe and disaster. This mode is referred to as posttraumatic stress disorder (PTSD). PTSD occurs when a trauma is not processed consciously and healed. It is exacerbated by the brain's natural bias toward the negative, a phenomenon that may be due to the evolutionary need to be hyperalert to signs of danger (Ito, Larsen, Smith, & Cacioppo, 1998).

The feeling of being "stuck" after a trauma, unable to move past it and decouple it from strong emotions of fear, grief, shame, or anger is a result of the mind being locked in both the past (what happened) and the future (what will happen as a result of the past experience), not experiencing the present. This has also been called a state of being mind*less,* instead of mind*ful* (Carson & Langer, 2006). The mind reaches into the past to reference a prior wound and then anticipates it reoccurring in some form at an indeterminate point. The result is an upsurge of overwhelming anxiety. The mind's experience is reflected in the neural networks of the brain, the connections between neurons that are used habitually to process information about events and experiences. The mind's activity reinforces established neural networks, which support the mind's habitual responses. The result of this mindlessness is a continual dysregulation of the mind and body.

At the base of every trauma is emotional suffering. The mind is antagonized by the memory of the suffering and operates in a continual cycle of avoidance in order not to reexperience the trauma. Avoidance can also be thought of as aversion. Aversion is one of the primary hindrances to the states of well-being and equanimity: We tend to avoid and resist any experiences that will cause pain and suffering. If we can't avoid the suffering, we will gravitate toward something that is pleasurable so as to distract ourselves.

In mindfulness-based psychotherapy, the cultivation of mindfulness starts with the therapist using awareness within the relational process as a basis for beginning the

process of healing. The cultivation of an intrapersonal and interpersonal awareness empowers the therapist to observe their own mind–body energy flows, attune to the experience of the client, and foster a resonance that leads to connection and trust, which is at the foundation of relational healing.

To heal from trauma, the client must cultivate a new relationship with the seemingly intolerable experience. Thirteenth-century Sufi poet, Rumi, said, "Don't turn your gaze away. Look toward the bandaged place. That's where the light enters." In mindfulness-based psychotherapy, the client experiences a radical shift in perception due to a process called mindful inquiry. Mindful inquiry is a gentle investigation into each moment (that is, what is being experienced in the here and now) and into the thoughts, emotions, and sensations that arise and how they are experienced: somatically, emotionally, or perhaps energetically as an area in the mind–body that feels heavy, dense, or cold.

Traumatized patients may experience numbness, a deadening, or a feeling of being constricted, cut off, or shut off. If the client applies mindfulness to an absence of feeling, or a sense of emptiness, a feeling may then arise, which can be noted and witnessed with heightened concentration and reported to the therapist. The therapist can say, "What are you feeling in this moment?" and guide the client to bringing awareness to that feeling or sensation. From here, a memory or emotion or insight may emerge within the client, which can then be shared with the therapist. For example, a patient joined her therapist in mindfulness meditation for the purpose of potentially identifying trauma hidden from her subconscious mind with the instruction to calm her body with mindfulness and breathing. After practicing the mindfulness exercise, she reported remembering having been raped by a family member. She explained that this memory must have been repressed, as she genuinely had not recalled the incident when filling out an extensive intake form and doing an initial interview before beginning therapy.

Mindfulness-based psychotherapy sets a positive healing pathway for the client to be able to contain, tolerate, regulate, and redirect painful and unbearable affects. In fact, there has been an increase in neuroscientific research pointing to the efficacy of mindfulness in developing the areas of the brain responsible for learning, memory, empathy, compassion, affect tolerance, and regulation as seminal pathways to mind/body healing. For the therapist, mindfulness becomes both a foundation for inquiry and a useful lens through which to objectively view and observe the client's experience of trauma and response to it. For the client, mindfulness offers a path toward greater self-awareness and healing as the client's ability to tolerate traumatic stress as it arises improves.

In this chapter, we will briefly touch on the roots of mindfulness-based psychotherapy in Buddhist psychology and explore its philosophy and practice in relationship to trauma. We will also address why a mindfulness approach can facilitate state-dependent learning (which occurs within a hypnotic trance or other altered state of consciousness), experience-dependent learning, and relational-dependent learning as a result of neuronal shifts. These changes in brain functioning contribute to mental and emotional wellness as well as a reduction in emotional reactivity.

We'll then consider the transformative paradoxical shift that occurs as the client moves from experiencing trauma as a pathological affliction to perceiving that the

trauma presents a wholesome/positive opportunity for deepening empathy, self-compassion, lovingkindness, and wisdom both individually and relationally. These qualities eventually become introjected and permanently internalized as character traits. Consequently, the client develops mindstrength: the ability to experience reduced emotional reactivity and more quickly calm a strong negative reaction. Ultimately, the experience of trauma may even lead a client to a deeper exploration of the meaning of suffering and the nature of the human experience. The client may not only heal the trauma but use it as an impetus for self-growth.

Finally, we will explore contraindications to bringing mindfulness practices into the psychotherapeutic encounter. First, however, it's important to lay out the foundation of Buddhist psychology, which is at the root of mindfulness-based psychotherapy.

Long-term benefits of mindfulness-based psychotherapy

The long-term benefits for the patient treated with mindfulness-based psychotherapy are multiple. The patient may:

- become aware of, and accepting of, new abilities, personas, and talents;
- become more ambitious, spurred on by a deepened sense of optimism and increased confidence, self-awareness, and self-esteem;
- acquire inner self-body wisdom;
- develop new perspectives and an enhanced sense of freedom and possibility as well as a greater awareness of opportunities (e.g., the client may feel empowered to leave a very unhealthy relationship and move across the country, or end a job with an abusive employer and go back to school as preparation for a new career);
- develop greater control over thought processes and emotions, and reduce reactivity;
- develop a greater capacity to be relationally sensitive, attuned to what others are experiencing as well as what the self is experiencing;
- develop a greater sense of safety, belonging, and support as the patient;
- develop healthier relationships and emotional boundaries, along with a balance between a self-oriented point of view and an other-focused point of view;
- heal from trauma.

The Fundamentals of Buddhist Psychology

While mindfulness is predominantly applied in psychotherapy as a secular and universal approach, it's important to give a brief overview of its foundations in Buddhist psychology to provide a deeper understanding of its applications. Although Buddhism is generally regarded as an organized religion, some see it as a philosophy that can be integrated into all walks of life. The fundamental teachings of the Buddha have been captured in what is known as the Abhidharma, or "higher teachings." For the remainder of the text, we will be referring to this as "dharma" for ease of reference. Buddhist psychology integrates the dharma into its approach to create a model of mind.

Mindfulness

Mindfulness, that is, remaining aware of what is happening in the present moment instead of diverting one's awareness elsewhere, is at the heart of Buddhism and Buddhist psychology. Regardless of how painful the present may be, we remain mindful, knowing that if we do so, circumstances will naturally change because transformation is the nature of reality. Thus, we remain fully present with whatever we are experiencing, confident that no suffering can last indefinitely.

The development of mindfulness practice has several benefits in psychotherapy:

1 Mindfulness makes it easier to call the mind back to focused attention when it is distracted.
2 Reactivity is minimized, and emotional responses of anger and fear become less frequent and less intense.
3 Avoiding, clinging to, and being attached to unwholesome thoughts are reduced, making it easier to bring about healing through the application of positive antidotes, that is, healing states of mind.
4 Concentration is improved. The brain learns to become quiet and needs less activity. The mindful brain learns to use less energy and effort in situations that require focused attention.
5 Self-awareness is increased as the self is awakened.
6 Compassion for self and others, as well as the desire to serve and help others, is amplified.
7 Awareness of and appreciation of the present moment are improved, as we experience a greater sense of vitality, enthusiasm, contentment, and fulfillment.
8 We become more open to and accepting of change.
9 We become more mindful of others' experiences, verbal cues, and nonverbal cues. Consequently, it is easier for us to be empathetic, sympathetic, and compassionate toward others.

Thus, both therapist and client benefit from the cultivation of mindfulness. Additionally, when the therapist cultivates mindfulness within the session and outside of it, and encourages the client to do the same, the intersubjective field starts to become a more fertile ground for healing.

Perception and reality

According to dharma, we can relieve suffering by training ourselves to exercise voluntary control over our perception and by training the brain to be less reactive and biased. This approach has been applied in Cognitive Behavioral Therapy (CBT; Carson & Langer, 2006; Langer, 1989), Dialectical Behavior Therapy (DBT; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991) and positive psychology (Seligman & Csikszentmihalyi, 2000). In the case of trauma, cultivating voluntary control over perception undercuts the brain's reactivity, eliminating the perception that a situation is dangerous when it is actually not a threat in the present moment.

It is especially important to remember that our thoughts may not be factual and do not determine reality. To do otherwise is to open ourselves to the possibility of developing an affliction. A mental affliction is a painful thought that reoccurs after a trauma, creating a distortion in perception or memory, causing us to focus our attention on the affliction and perpetuate it. Sorrow over a loss is not an affliction, but it can become one if it results in a low-grade feeling of sadness or hopelessness that is experienced chronically. Anger becomes an affliction when it results in continual frustration, hostility, and rage. Embarrassment can be a light experience, but it becomes an affliction when it leads to darker emotions like humiliation or shame. Other afflictions, such as anxiety, agitation, or restlessness, can also begin as short-lived emotions that become habitual.

This often happens after a trauma when the mind becomes rigid and fixed on a single perspective (Carson & Langer, 2006). The affliction may or may not have a theme or belief associated with it, such as "Things never seem to go my way" or "I have no control over my life." Afflictions often lead to a chronic perception of emptiness or dissatisfaction that the afflicted person is likely to attempt to eradicate through addictions to work, food, sex, shopping, gambling, or alcohol and drugs. The client who suffers a mental affliction may feel that regardless of circumstances, happiness is impossible unless more of something can be attained. The theme or belief in happiness being elusive reoccurs. For example, if someone experienced the trauma of war, the thought "When I get back home, then I'll be happy" may become "When I get back home and get a job, then I'll be happy," which may then become "When I get married, I'll be happy" and later "When I get a divorce, then I'll be happy."

After a trauma, the brain responds to repetitive, afflictive thoughts by activating neuronal networks associated with them, reinforcing the thought pattern. Unless action is taken to alter the habitual response, the brain will avoid, repress, or deny afflictive states. The mind may respond with self-criticism, igniting deeper shame and exacerbating the trauma. All of these responses lead to suffering.

To recalibrate the perception of reality, we have to disidentify with this mindless state. As Buddhist teacher, Sharon Salzberg, says:

> What we are observing is the process of thinking. When we see that a thought is not solid, that it has no substance, and that the meaning of the thought does not necessarily affect an association or reaction, it's as if we have observed the very nature of change. If someone then has the thought "I am a very sick person," the fact of the thought's content does not seem so striking. The mind intuitively recognizes the nature of thought; that it simply comes and goes. With this particular approach, we don't try to change a bad thought to a good thought, but rather to see the nature of the thought itself. (Goleman, 2003)

We can play with this disidentification of thoughts in using imagery. With imagery, we can see thoughts as clouds in the sky to illustrate how thoughts are continually passing by and are neither fixed nor concrete. This perception of impermanence helps us to recognize that often, we can receive relief from the afflictive mind states that come with trauma by remaining present with them rather than resisting and repressing.

At the heart of the Buddhist psychological view is the idea that there is no permanent self to be fixed, changed, or healed. Mindfulness allows us to be aware of what we are experiencing, accept it, gain insights and understanding, and feel compassion for ourselves and others. In Buddhist psychology, we do not attempt to change the self, only to liberate it from its unwholesome view of itself. We can look at the self as if it were an ocean: The waves are the everyday experiences of thoughts, emotions, and sensations, while the ocean is awareness itself, a combination of one's individual awareness and awareness shared by all. Like waves, painful, afflictive states arise, peak, and fall away, leaving the ocean itself unchanged. All pain and suffering are impermanent waves, and we can achieve healing through mindful attention and conscious action in the present.

The four realms of experience

Over the past number of years, there has been an agreement between Eastern and Western traditions that there are strong connections between the mind's experiences and the body's experiences (Levine, 1997; Ogden, Minton, & Pain, 2006; Porges, 2011; Siegel, 2012). We feel it's helpful to conceptualize the relationship as comprising four levels or realms in which we experience the pain of trauma: the emotional/feeling realm, the mental/cognitive realm, the physical realm, and the energy realm. Trauma can be experienced at more than one level simultaneously.

- *The emotional/feeling realm*. The emotional/feeling realm is where unwholesome, afflictive emotions such as anger, sadness, and grief arise. According to Buddhist psychology, emotions are actually energies that are either stagnant or in motion and constantly expanding or contracting.
- *The mental realm*. In the mental realm, we experience afflictive, unwholesome beliefs and thoughts. Often, the emotional/feeling realm and the mental realm experience a state of unwholesomeness simultaneously. The cognitive and psychological experiences are influenced by the beliefs and thoughts of others, including our parents, primary caregivers, teachers, religious and spiritual teachers, friends, and neighbors.
- *The physical realm*. The physical realm is the physical body. Often, we are unaware that afflictive sensations in the physical body, commonly perceived as pain, aching, or muscle tension, may originate in or be present in one or more of the other realms.
- *The energy realm*. Buddhist psychology recognizes a realm of experience that is made up of energy. In this realm, there may be blocks or constrictions in the flow of energy affecting the neuromuscular structure in the physical realm, the mental realm and its cognitions, and the emotional realm, where the blocks or constriction may cause afflictive emotions. The ideal state of the energy realm is vibrancy and radiance. The Dalai Lama has said that consciousness exists outside of the brain–mind–body, and thus, during meditation, it's possible to directly influence this energy body and, simultaneously, create a core sense of well-being and bring about direct and immediate changes in consciousness.

In postpsychoanalysis Western psychology, Wilhelm Reich identified the energy realm as being composed of bands of energy that circle the physical body and cause muscles, nerves, and arteries to contract, leading to physical ailments. Reich explains that where there's a painful, afflictive, unwholesome sensation, one or more of these energetic bands are restricting the flow of energy, blood, and lymph fluid. The result is a tightening of the muscles, constriction of blood vessels, and shallow breathing.

Bringing mindful attention to an affliction can make us aware of trauma we are holding on to, as all four realms are interconnected and influence each other. For example, emotional pain can turn to physical pain; if the chest is filled with grief, the diaphragm may contract, causing a feeling of tightness or difficulty breathing. This contraction may continue; for example, a patient (whose case will be explored more later in this chapter) was in a very serious accident in which a train struck her car and crushed it. Immediately afterward and for many months, she was afraid to take a deep breath because she feared it would cause her pain. She had tightened her diaphragm during the accident and, according to Reich's theory, had tightened the energy band around her diaphragm, causing the muscle to remain contracted. Another way to describe it is that she was holding on to the pain of the trauma in more than one realm of experience. The patient was, in a sense, waiting to exhale and let go of her fear. We say someone who is anxious is "tightly wound" or "frozen in fear." In such a case, the emotional and energy realms, and perhaps the physical realm also, are experiencing constriction.

According to Porges (2011), a researcher in the area of stress response, whenever we perceive danger, our nervous systems provide the mobilizing defenses of fight or flight. His research shows that we create a sense of safety by using the ventral vagal system, which involves eye contact, vocalization, and facial expression to engage others relationally. However, he also points out that we have an immobilizing defense system that allows us to freeze—a response that is experienced as part of the dorsal vagal system.

Patients who have suffered trauma often experience qualities of being split off, shut off, cut off, walled off, dissociated, or frozen in a state of numbness (Alexander & Rand, 2009). When a patient describes feeling constricted, tightly wound, disconnected, numb, or frozen, the therapist can suggest the use of mindfulness and trance combined with somatic experiencing. Somatic experiencing therapy is a method developed by Peter Levine, author of *Waking the Tiger* (1997), for the direct treatment of trauma using the breath as a method to help the patient learn how to unwind from a frozen sympathetic nervous state and to access a healing state that turns on the parasympathetic nervous system. The parasympathetic response allows the patient to disengage and discharge suppressed and constricted traumatic memories, feelings, sensations, and emotions that are being held in the mind–body, that is, in more than one of the four realms of experience (Levine, 1997)

First, the therapist can guide the patient into mindful awareness and trance. Next, the patient should breathe slowly and mindfully, filling the abdomen like a balloon before releasing the breath slowly. At first, breaths will be somewhat shallow due to the constriction of the abdomen, but they will deepen as the patient breathes mindfully. Ten or 15 such breaths will often be all that is needed. Afterward, the patient is likely

to feel an increased range of emotion in the diaphragm as well as feelings of calm and relaxation.

In mindfulness and psychotherapy, we are also guided by a four-step process that comes out of Buddhist psychology to heal these afflictive states:

1 Mindfully observe the afflictive or mindless state.
2 Continue to experience the affliction despite any discomfort. Do not shift the awareness away from the experience.
3 Accept what is, despite its intensity and the discomfort you are feeling. Do not try to push the pain away due to aversion, or cling to it, becoming overwhelmed by the experience and losing the ability to observe it.
4 Drop all negative judgment and continue to observe the experience moment to moment as it begins to transform naturally.

The wisdom behind this says that impermanence is the nature of reality, so all experiences will transform in time without our having to exert effort to change it.

Mindfulness-Based Psychotherapy (MBP)

MBP is an experiential therapy and process-oriented approach in which the therapist helps the client to observe, explore, contain, organize, and learn from their moment-to-moment experiences—including thoughts, feelings, emotions, and sensations. It can be used to heal trauma, change afflictive and unwholesome patterns, and open the patient's awareness to new choices and possibilities.

Trungpa Rinpoche sums up the birth of Buddhist psychology, which is the basis of mindfulness-based psychotherapy, in the introduction to his 1975 book *Glimpses of the Abhidharma:* "Many modern psychologists have found that the discoveries and explanations of the Abhidharma [the ancient classic textbook on the teaching of Buddhist psychology and meditation in which the Buddha details the observation and inquiry into the nature of the mind] coincide with their own recent discoveries and new ideas; as though the abhidharma, which was taught 2,500 years ago, had been redeveloped in the modern idiom." One of the new idioms is The Now Effect, a reference to accessing a state of awareness in which we perceive choice, possibility, and opportunity, and break away from our habitual ways of thinking and behaving, opening up to new, consciously chosen responses. In this view, mindfulness-based psychotherapy strips away the spiritual and religious language of Buddhist psychology while holding on to the essence of the philosophy and practice. People who are averse to spiritual or religious approaches can nevertheless access the wisdom and techniques of Buddhist psychology.

Mindfulness-Based Psychotherapy (MBP) incorporates the best of Buddhist psychological principles and builds on it with methods taken from mindfulness-based stress reduction (MBSR), mindful cognitive modalities (Carson & Langer, 2006; Hayes & Smith, 2005; Linehan et al., 1991), and tools from other mind–body healing therapies (Levine, 1997; Ogden et al., 2006). In mindfulness-based psychotherapy, patients are encouraged to use mindfulness within the clinical session as well as at home as part of

a mindfulness practice. The home practice is essential because the patient finds that they can learn to navigate troubled terrain not just during sessions but also during daily life, even when recalling traumatic memories. MBP helps patients to self-regulate when experiencing stress because they are able to remain present in the moment, consciously choosing to calm the nervous system or to remain patient as it resets itself. Clients get access to a mindset more open to self-acceptance and personal change (Langer & Moldoveanu, 2000). Mindfulness practice breaks habits of thought that cause suffering, freeing the patient from the pain of the past as well as from the uncomfortable longings for different circumstances in the present. With mindfulness, we can choose more adaptive perspectives. For example, what once seemed like a fatal past mistake is now seen as a valuable lesson to be learned.

Mindfulness helps the patient to see through the pain of attachment and illusion, free the mind of its cravings, and return to a state of mindfulness, that is, the natural state of wisdom and well-being in which a diamond-like sense of clarity is experienced. One is able to become immersed into the process of observing the mind and seeing the cycles of what arises, abides, and then falls away.

In mindfulness-based psychotherapy, the therapist can guide the patient to use state-dependent learning techniques such as mindfulness meditation or hypnotic trance. With greater awareness and choice, there is also the possibility to integrate other hypnotic suggestions to induce antidotes or healthy induced mind states, allowing the patient to experience trauma in a new context of safety as they are able to observe the trauma objectively as it is being reexperienced. In applying the antidote, the patient retrains the brain to activate neural networks associated with calm, optimism, and a sense of possibility when the memory is brought back into consciousness. At the same time, the patient deactivates the neural networks associated with fear, anger, loss, and grief. We'll explore the integration of mindfulness and trance later in the chapter.

After the patient returns to an ordinary state of consciousness, CBT and gestalt therapy, as well as other psychodynamic modalities, can be used to explore what was experienced and what can be learned and integrated into their understanding of the self.

Mindfulness-based psychotherapy in the context of the history of psychology

In the past, many psychological historians have held that there were four formative forces in the field of psychology: Freudian-Psychodynamic, Behavioral, Humanistic-Existential, and Transpersonal. However, we identify 10 forces, which include Buddhist psychology as the first and Mindfulness-Based Psychotherapy as the latest.

1 the Teachings of the Buddha (Buddhist psychology);
2 Behavioral Psychology;
3 Freudian Psychoanalysis;
4 Humanistic-Existential Psychology;
5 Transpersonal Psychology;

6 Postmodern, Narrative, Object Relations;
7 Self-Psychology and Intersubjectivity;
8 Cognitive, including CBT and DBT;
9 Holistic, Behavioral, and Integrated Medicine (e.g., Ericksonian, EMDR, EFT, Sensorimotor Psychotherapy, Integrative Body Psychotherapy, Somatic Experiencing);
10 Mindfulness-Based Psychotherapy, an integrative, holistic, mind–body-energy approach that draws upon theory, methods, and skills from Buddhist psychology and any of these earlier forms of therapy.

Buddhist psychology provides a rich foundation for healing, but it is not necessary to subscribe to a Buddhist philosophy or worldview to practice mindfulness-based psychotherapy. In the past, psychologists have described how mindfulness can be applied to psychotherapy (Germer, 2005; Shapiro, Schwartz, & Bonner, 1998). We identify four specific ways the therapist can integrate mindfulness into their approach:

1 The *Mindful Therapist* practices mindfulness and tunes themself each day by using mindfulness practices, similarly to how musicians tune their instruments before they play.
2 The *Mindfulness-Oriented Therapist* implicitly or explicitly brings into the sessions attitudes and philosophy based on mindfulness. Mindful therapists implicitly bring mindfulness into the sessions, whereas mindfulness-oriented therapists may use a more cognitive approach to mindfulness within the session regardless of whether or not they have a formal mindfulness practice of their own.
3 The *Mindfulness-Based Therapist* has a personal mindfulness practice and guides the patient to use mindfulness practices at home and within the session.
4 The *Integrative Mindful Therapist* practices mindfulness on their own, brings dharma into the sessions, guides the patient into using mindfulness in session and at home, and incorporates an understanding of neuroscience: Whenever mindfulness is practiced regularly, a person can bring about changes in the brain that lead to greater self-awareness, empathy, learning, memory, and reduced emotional reactivity. This new application of mindfulness in psychotherapy is due to neuroplasticity and our ability to use the mind to change the brain.

In mindfulness-based psychotherapy, we study and observe the structure of the mind as well as its content, purpose, and function. The client initially learns to cultivate mindful awareness with the intention of gaining mastery over the ongoing difficulties in navigating painful life experiences. In time, mindfulness becomes habitual and assists in development of self-awareness and self-acceptance as well as offering other benefits (which will be explored later).

To practice mindful awareness, the client does an experiential inquiry of the mind–body to become conscious of what arises, exists, and then falls away. Initially, healing of the self may take place only within the intersubjective field during sessions. Over time, however, the client begins to change the relationship to whatever experiences are arising within the mind and responds to uncomfortable feelings, memories, thoughts,

and sensations by generating positive states such as self-compassion, gratitude, and forgiveness. In applying these wholesome states of mind to self-experience, the client ultimately begins to cultivate greater self-acceptance. As Arnold Beisser says, there is a paradox in that change occurs not when we try to become what we are not but when we accept what we are.

Developing the skill of observing and categorizing builds a stronger sense of self that carries over to the client's everyday life. Fostering mindfulness, the client becomes more aware not only of their own experiences but also that of others. Mindfulness improves intuitive abilities, helping the client to more easily recognize and interpret verbal and nonverbal cues from others. The client develops greater comfort while alone and, consequently, within relationships.

Mindful inquiry eventually leads to enlightened liberation or mindful insight and a decrease in pain and suffering. Symptoms of suffering are resolved, and the client arrives at core wisdom, the state of wise mind in which there is a sense of clarity and purpose. The client also develops greater mindstrength: flexibility, focus, and control over reactivity. Mindstrength is the ability to control one's thoughts, affect states, and emotions, and is cultivated through mindful inquiry.

However, prior to understanding the clinical applications of mindfulness in psychotherapy, we must establish the foundation of therapeutic and relational presence.

Client–patient relationship in mindfulness-based therapy

The postmodern psychotherapeutic approach emphasizes the exchange between therapist and patient in the intersubjective or relational field, focusing on transference and countertransference as they unfold over time. When both the patient and the therapist practice mindfulness alone and during sessions together, each experiences a heightened awareness of the field of interaction in addition to increased awareness of their own awareness. Having awareness of awareness causes us to cultivate a metacognitive view in which we have an experience but at the same time witness ourselves having the experience. When the practice of mindfulness is both employed as a daily discipline and used as a therapeutic tool to spotlight, highlight, and detail what is happening both inside the patient and between patient and therapist in the intersubjective field, the tool of mindfulness becomes like a powerful laser. Both patient and therapist gain access to information that has been repressed by the conscious mind.

Mindfulness can help a patient become aware of commonly repressed emotions such as anger, sadness, or grief. However, in addition, it can bring conscious awareness to the past event or events that are associated with these emotions, allowing both the patient and therapist to work with this information to bring about healing using the patient/client relationship (Lambert, 1992; Norcross 2011). Psychiatrist, Theodore Reich, said, "When therapists develop the ability to be fully present, they develop the capacity to listen therapeutically as if they were listening through a third ear." When the therapist can experience presence, it has an energetic impact on the client. Someone who truly feels listened to, cared about, and understood is more likely to feel safe, accepted, and loved. Therapeutic presence allows for trust to develop more quickly and opens the door for a greater effectiveness in psychotherapy.

A mindful therapist experiences presence. Remaining aware in the present moment allows access to feelings and information that are often outside of conscious awareness. Intuition and attunement are enhanced as the therapist becomes more aware of the experiences of the self and the client as well as more aware of what is happening in the intersubjective field. A mindful therapist is more apt to pick up on a client's nonverbal and verbal cues that there is territory to be explored, and to know when to encourage the client to continue experiencing unwholesome feelings, thoughts, and emotions, and when to take a break from them and generate a mind state of safety and calm that serves as a temporary emotional oasis.

Presence is a necessary foundation for change. Humanist psychologist, Carl Rogers, said, "It was not until I accepted myself exactly as I was that I was free to change." It is not until the therapist and client are fully present, accepting what is transpiring in the present, that change happens. Avoidance merely postpones the possibility of healing. One finds oneself, and accepts oneself, when fully present in the moment. As unresolved issues, emotions, and biases arise in the therapist's mind, they can be dealt with consciously so as not to unduly distort the intersubjective field and reduce therapeutic presence.

While reducing a client's stress, resolving the client's trauma, or cultivating positive states in both the client and ourselves may be goals, we also need to practice mindfulness. Mindfulness practice allows us to train the mind to temporarily let go of expectations for the future that can distract from presence and its healing powers. Healing happens in the present moment as we accept the experience of the self.

In Western psychotherapy, we acknowledge a personal self or ego that suffers with specific neurotic or traumatic character flaws. Oftentimes, people like to categorize themselves as a handsome person, a wealthy person, an athletic person, an old person. This narrow categorization of the self can lead to a narrowing of perspectives and possibilities, and ultimately opens us up to suffering. Buddhism would identify this self as the "small self" while identifying one's core consciousness as fluid, ever-changing, and the authentic self on which we should place most of our focus. Even so, Buddhism teaches that ultimately, even the authentic self is an illusion because when we are deep in a meditative state and able to experience the authentic self, we recognize that its essential nature is emptiness. In Buddhism, this state is called "no self."

However, in applying mindful psychotherapy for the treatment of afflictions, we can stay true to the Buddhist psychological view that there is no "self" to be changed or fixed if we accept that, as Jack Engler, said, "[Y]ou have to be somebody before you can be nobody" (Wilber, Engler, & Brown, 1986). We learn to recognize the impermanence of the experiences of the small self, that is, one's identity, and recognize the importance of the real self or authentic self. When we are able to experience the authentic self, our temporal experiences in everyday life seem insignificant, and achieving this experience can be a goal. Cultivating an authentic self is also seen in Western psychotherapy as a means toward the healing nature of self-acceptance (Carson & Langer, 2006). However, our primary task as psychotherapists is to assist our patients with positive self-development and the repair of the sense of self. They may then choose to be guided toward the path of ego dissolution, self-realization, and, eventually, the disidentification with the real self and identification with the authentic self, or "no self." In doing so, the client is opened up to a greater perspective and wisdom.

Mindful presence and healing

The therapist's mindful presence enhances the possibility of healing in four ways:

1 When the therapist cultivates mindfulness, it becomes easier to teach the client mindfulness and the process of self-inquiry. Most people traveling to a new land would rather have a guide who has traversed the territory, not just one who has studied the map.
2 The therapist can be aware of their own unhealed trauma arising into consciousness and have the psychological resources to choose to set it aside. As we practice relating to our own difficulties with mindfulness, the mind becomes better able to spot them more readily and remain present with them until the memory or feeling dissipates naturally.
3 The therapist's mindful presence fosters wholesome, healing attitudes or mind states, including compassion and acceptance. This allows the therapist to remain committed to observing his mistakes and being accountable so both therapist and client can work toward developing a wholesome intersubjective field where healing can occur.
4 The therapist experiences comfort with uncertainty and the state of not knowing, and accepts the client's behavior without becoming tempted to fix it. This is a major asset, as falling into the "fix it" trap shuts down curiosity and openness on the part of both therapist and client. Modeling comfort with uncertainty helps the client develop the same ability. As we become comfortable with uncertainty, we are more likely to break out of habitual avoidance, cultivate courage, develop patience and tolerance of distress, increase self-efficacy and hope, and foster trust within the relationship. The element of trust within the intersubjective field helps the client develop trust in themself.

Three practices for developing therapeutic presence

Therapists can access moments of presence in the "in-between spaces" of their day between clients and working on their self-care and development of mindfulness, which will lead to cultivating therapeutic presence. The following are three practices that can help in this development: the mindful pause, the self-compassion pause, and remaining present with uncertainty.

The mindful pause Every hour, pause and ask:

- What's going on outside of myself and what is going on inside of my self?
- What are my feelings about what is occurring with my self and others?
- By bringing mindful attention to my experience, what choices do I need to make to attend to my feelings, thoughts, and behaviors?
- Now that I am mindful, what actions might I choose to take or not take to increase presence, attention, and self-care?

The mindful pause can be combined with other practices such as mindful breathing, mindful check-in, or STOP (Goldstein, 2012; Goldstein & Stahl, 2010).

Self-compassion pause As therapists, we all encounter moments of emotional pain and difficulty. At times, we could all use a self-compassion pause during which we acknowledge the difficulty in caring for ourselves when so much of our focus is in helping others. To make this self-compassion pause naturally arise as we go about the day, we need to practice it.

To take a self-compassion pause, rest your hand on your heart, and take a few deep breaths, tuning in to this area of your body. Then, say to yourself, "Breathing in, I acknowledge the pain and difficulty that are here. Breathing out, I fill my heart and mind with self-compassion."

Remaining present with uncertainty Uncertainty is a given for the client and the therapist. Learning to be present with not knowing may be one of the foundations to good therapy but one that many of us have not been taught.

The following is a four-step practice called "ACE," drawn from *The Now Effect* (Goldstein, 2012a, 2012b), that you can apply in therapy with yourself and with your clients in order to learn how to be present with not knowing.

> Accept the reality that uncertainty or not knowing is present. Allow the uncertainty without trying to analyze it or figure it out. Acceptance will pop you out of the unconscious process of trying to avoid uncertainty.
>
> Collect your attention and focus in on your breath. Just take a few deep breaths to help steady your mind and focus on being present.
>
> Expand attention into the body. Inquire into this feeling of uncertainty by getting a sense for what this "not knowing" feels like physically. Is there heaviness to it? Do you experience it as a constriction in the chest, or maybe a flurry of energy throughout the body? What emotion is behind the not knowing? Is it fear, anxiousness, shame, or maybe excitement? What thoughts or images are you noticing appearing and disappearing in your mind as you explore what uncertainty feels like to you? Are you feeling pressured to resolve the uncertainty and fearful that something terrible will happen if you don't know what to do, think, or say? Is there a memory from your childhood that causes you to feel fearful and threatened when you are uncertain? Does uncertainty form in your mind an image of a bleak future in your mind?
>
> As you move through the ACE practice, you start to get some distance from the uncertainty, allowing you to observe it rather than be immersed in it. You can gain perspective, make the choice to remain curious, and begin to feel a sense that everything will be okay despite your uncertainty.

Nine clinical attitudes of mindful presence

There are nine attitudes to foster within mindful presence to create a trusting and healing environment that serves as a wholesome model for the client. These include acceptance, openness, beginner's mind, and nonstriving.

Acceptance

This attitude involves acknowledging, understanding, and appreciating things as they are and feeling kind, friendly, and warm toward ourselves and others. An attitude of acceptance ensures that the client does not feel judged by the therapist.

Openness

An attitude of openness involves a deep understanding of the nature of change as impermanent and helps us to greet change with compassion for ourselves and others, and a willingness to discover new insights. In this space, we are more flexible, open to multiple perspectives.

Allowing

An attitude of allowing is related to acceptance and openness. With this attitude, we can simply allow things to be as they are, with no need to try to let go of whatever is present. This helps the therapist to remain present with the client's present feeling state and lead the client in mindful inquiry rather than trying to change or fix the feeling state.

Beginner's mind

An attitude of beginner's mind allows us to see things as new or fresh, as if for the first time. It awakens our curiosity so that we drop the assumption that we already know all there is to know about a familiar situation or set of circumstances. Kleinian psychoanalyst, Wilfred Bion, coined the phrase "thoughts without a thinker" to describe the experience of being fully present, free of inherent preconceptions. When we engage in beginner's mind, we enter a space that quantum physics refers to as to as a superpositional field. It is a space of pure potentiality where creativity is able to unfold.

Nonstriving

An attitude of non-striving is free of grasping to what one doesn't have and free of aversion to change or to what arises in the moment. Non-striving means being present rather than focused on what might be. A non-striving attitude allows the therapist to be present in the relationship yet maintain the potential for countertransference.

Nonjudging

An attitude of non-judging involves impartially observing any particular thought, feeling, or sensation rather than judging it as good or bad, right or wrong, fair or unfair. This is not to say that we never evaluate a situation; it's just to understand that there are

often multiple perspectives, and we can gain the freedom to consciously choose how to evaluate based on context rather than it being automatic (Langer, 1989, 2005).

Patience

An attitude of patience involves the capacity to listen deeply with kindness, acceptance, and respect. The therapist's patience creates space for the client and therapist to conduct a deeper inquiry that can lead to essential insights and, ultimately, transformation.

Empathy

Empathy was defined by psychologist, Carl Rogers, as the ability "to sense the [patient's] private world as if it were your own" (Rogers, 1962; Rogers & Stevens, 1967).The therapist is empathetic but can differentiate between the client's experience and the therapist's. Psychoanalyst, Heinz Kohut, said that empathy is a mode of scientific observation, a metacognitive view of both the patient's self and therapist's self-experience. Empathy has been shown to be increased through mindfulness practice (Shapiro et al., 1998).

Self-compassion

An attitude of self-compassion involves self-love without self-blame or self-criticism. The therapist's self-judgment, worries, or perception of failure when therapy is difficult can impede the ability to cultivate a healing presence.

The Seven Stages of Mindful Inquiry to Be Used Within Therapy or by the Client at Home

One of the core tools used to cultivate insight and healing states of mind in mindfulness-based psychotherapy is mindful inquiry. Mindful inquiry is a moment-by-moment noting of thoughts, feeling, emotions, and sensations. It is part of the practice of mindfulness and helps one to gain mastery over one's thoughts, feelings, emotions, and physical and energetic sensations. It includes a conscious scanning of the mind–body, "sweeping" through the entire mind–body field to discover what is being experienced in any particular spot within that field. For example, an emotion may be experienced as a constriction, heaviness, or coldness hovering over a specific area of the body. To conduct a mindful inquiry with a client, whether using a technique associated with state-dependent learning, experience-dependent learning, or relational-dependent learning, a therapist should encourage the client to remain present with whatever is experienced in the here and now, and focus attention on that experience. Then, the client can be guided through all seven stages of mindful inquiry

sequentially or to focus on any one of these stages: Concentration Training, Cultivation of the Witnessing Mind, Investigate, Categorize, Open Mind, Wise Mind, and Equanimity.

Concentration training

Concentration training is the development of the skill of awareness via focusing on whatever is the object of attention, whether it is the breath, body, emotion, sound, or thought. Concentration training is also known as Satipatanna training (*Sati* is the Pali word for insight).

Cultivating the witnessing mind

The witnessing mind is the observing ego, that aspect of consciousness that, with increased awareness training, can mindfully observe what is occurring moment to moment before reacting to external or internal stimuli. Cultivating the witness or observing ego empowers the self to be active and not reactive.

Categorization

Once noted, experiences are categorized, and the individual becomes aware of reoccurring patterns of thoughts, feelings, and sensations, and observes cycles and waves of mind–body activity, including affective flow. Emotions are recognized as having three components: sensation, thought, and reactive feeling. Categorization is especially helpful for discovering hindrances of the mind such as anger, lust, jealousy, and so on. It's important to be aware of these patterns and hindrances, and observe them.

Investigation

Investigation is looking deeper into what is being experienced in the moment. To investigate requires curiosity and a willingness to explore an experience no matter how uncomfortable. When investigating, we bring awareness to the sensation of the feeling that arises in us, note it, and observe it with fresh eyes. We find the courage to investigate because we trust that the unconscious is ultimately leading us toward healing, creativity, and self-awakening, even if the path to those goals involves discomfort.

Open mind

Open mind is the state of expanded awareness in which thoughts, feelings, and sensations have space to appear and disappear without our being pulled into generating feelings and thoughts about them. In open mind, we do not identify with anything that begins to arise during the process of mindful inquiry. We are able to access our core of creativity and tap into a deep internal reservoir of creativity for healing, resiliency, growth, and transformation.

Wise mind (wisdom)

Wise mind, or wisdom, is a stage of mindful inquiry in which the mind is empowered to observe before reacting. In wise mind, it is easier to make choices that are in synch with *bramaviharas,* Sanskrit for "sublime attitudes" of lovingkindness, compassion, empathetic joy, and equanimity. In wise mind, we experience a sense of order, and harmony with all actions and reactions. We act as a Bodhisattva, an awakened being who does no harm and brings compassion, healing, and transformation. Wise mind is also the essence of the mindful therapist. According to positive psychology, we can attain enhanced creativity and optimism, as well as a greater sense of possibility; both therapist and client are able to access these once in the state of wise mind.

Equanimity

Equanimity is a balanced state of mind in which we do not identify with the small self, and we experience a sense of interconnection with nature and all that exists.

Mindstrength in psychotherapy

By practicing mindful inquiry, we begin to develop something called mindstrength: the ability to very quickly and easily shift out of a reactive mode and become completely present in the moment, experiencing the full force of one's emotions while simultaneously recognizing that they are temporary and will soon dissipate. Mindstrength is mastery over thoughts and feelings, and involves recognition of whether the products of the mind are useful tools for self-discovery or merely distractions. The more we cultivate mindfulness, the easier it is to stop running away from difficult feelings; to make the choice to break out of denial, stagnation, and suffering; and to act with mindful intention. Cultivating mindfulness is similar to working out in a gym, but instead of building muscle, we build mindstrength (Alexander & Rand, 2009).

An adult patient was sexually molested as a child. She began therapy to heal persistent states of emotional dysregulation and the maladaptive coping pattern of binge eating, as she wanted to be free from the constant traumatic hijacking of her mind and body. The patient was instructed to focus on her breath and to allow internal phenomena to unfold and simply to become a witness.

After a few sessions, the patient began to recount her story of trauma. A flood of anxiety and sensations of tightness and constriction arose along with the thought, "I can't handle this." As the sessions continued, the therapy integrated a mindful pairing: noting the triggered response and bringing compassionate attention to it so that it could be investigated without the patient feeling a powerful need to distract herself from it. This type of mindful pairing creates new learning because reactivity can arise within a new context of acceptance and curiosity.

In time, the patient experienced a state of open mind: She recognized the impermanence of her mind and body's reactivity. She had discovered the space between the stimulus and her mind's response to it, and chose to gently calm her neural reaction and strengthen her self-compassion, leading her into a state of wise mind. Her

posttraumatic stress began to transform into posttraumatic growth. Now, when her anxiety about the trauma arose, a natural sense of curiosity and gentleness arose with it as she focused her attention on sensations of fear. It was as if the "mindful pairing" of the traumatic arousal state with the states of mindfulness and self-compassion had now been classically conditioned. She was developing mindstrength.

Mindfulness and Trance: Clinical Applications for State-Dependent, Experience-Dependent, and Relational-Dependent Learning

While the applications of mindfulness into psychotherapy have been discussed in many forums, the integration of mindfulness and trance in psychotherapy is unique. Mindfulness and trance can be applied clinically together to allow a traumatic reaction to arise within new contexts or states of mind. To explain how mindfulness and trance are applied to psychotherapy, we must first provide an overview of state-dependent learning, experience-dependent learning, and relational-dependent learning.

State-dependent learning

State-dependent learning is learning that occurs when the unconscious mind is directly engaged via altered states of consciousness, such as a hypnotic trance or a state of relaxation and awareness achieved through mindfulness meditation. Unlike the waking state, trance and deeply focused meditation states can be—but are not necessarily—inwardly focused. In deep states of both absorption and trance, a neuronal shift occurs as the person moves from an alpha wave brain state to a theta wave brain state via a structured induction or a guided meditation. Whatever learning, healing, or shifting that takes place in an altered state of consciousness is profound because the unconscious mind becomes engaged in the inner learning process, resulting in new neuronal connections. Memories of trauma can be brought back into the conscious mind, recontextualized, and reexperienced without pain as the conscious mind mines them for helpful information. As Sigmund Freud said, the unconscious mind comprises 80% of our awareness. The conscious mind is the mere tip of an iceberg, unable to make sense of our experiences without help from the rich resources of the unconscious mind.

According to transpersonal philosopher, Ken Wilber, there are four states of consciousness recognized within the field of integral psychology: the waking state, sleep state, dream state, and deep sleep state (Wilber, 2007). However, there are many other states of consciousness, including peak states, meditative bliss states, and states in which we experience oneness or cosmic unity. These particular states can be triggered by mindfulness, hypnosis, yoga practice, intense prayer, or other forms of meditation that facilitate altered states of consciousness. All of them can be used to access the unconscious and to induce state-dependent learning.

Having directed the patient to enter an altered consciousness or trance state, the therapist can guide someone for whom trauma has caused the nervous system to

become disregulated, resulting in severe PTSD, to retrain the brain and form new neural networks supportive of well-being, safety, and integration of the self.

In one case study, a woman in her midtwenties, who had been an incest victim and suffered from severe PTSD as well as periodic panic attacks, disordered eating (overeating), sleep disturbances, and a chronic low-level depression, was treated using mindfulness meditation and hypnotherapy. Over a period of 6–9 months, she was able to restructure and reregulate her unhealthy, dysfunctional pattern of hyper arousal. Initially, she was constantly bombarded with sympathetic nervous system activity and thus in a perpetual state of fight or flight.

She received ongoing hypnotic therapy sessions that integrated mindful inquiry as part of meditation (a technique we will explore later in this chapter), and practiced meditation outside of her sessions as well, totaling 20 min twice a day in mindfulness meditation. In sessions, the therapist was able to guide the patient in engaging the unconscious mind in state-dependent learning. The therapist would instruct the patient first to enter mindfulness and then to go into hypnotic trance to access internal unconscious healing. They worked together in this manner for over 36 sessions. Trance and mindfulness helped her reduce sympathetic nervous activity while simultaneously activating new neural networks in the brain responsible for experiencing relaxation. She relearned how to regulate her nervous system, which freed her of painful symptoms of panic and immobilization, and allowed her develop a new core sense of well-being and the capacity to self-sooth. She was able to move out of a chronic disregulated state of constricted and frozen emotional experience, and into a wider and more wholesome range of emotional affective expression.

In both mindfulness and therapeutic hypnosis, as the patient shifts from a waking state into a relaxation or trance state, the brain waves shift from alpha to theta. This shift causes an opening to neuronal pathways in the brain that were once closed off by traumatic experience. Memories and emotions that have been suppressed can be accessed.

In Figure 33.1, each mind state listed here can help provide entry into a state of mindful relaxation or safety that can then develop into a deep-level trance. Once the patient has accessed one, two, or three of these access states, the therapist can instruct them to gain entry into any of the healing, transformative mind states in the resources of the core self (see Figure 33.2). Accessed through the core self and open-mind consciousness, these resources are available to serve as antidotes to afflictive states and can lead to healing, learning, and transformation (Figure 33.2).

In another case, a 45-year-old executive female working in the design business came into treatment suffering from severe migraines, headaches, and irritable bowel syndrome. She said the headaches began around the age of her 16th birthday. She said she had exhausted all Western medical treatment approaches and was at a dead end, living in chronic pain. Her employment was in jeopardy, so her internist referred her for hypnosis. In the first session, she was instructed in a basic concentration relaxation mindfulness meditation practice, and it was suggested that she practice at home each day for 20 min until the next session. In the second session, she practiced mindfulness for 15 min, and when she was in a state of deep relaxation, the therapist made a transition to induce a hypnotic trance. In the trance, she was instructed to ask her unconscious mind to assist her in finding an internal healing resolution for her symptoms

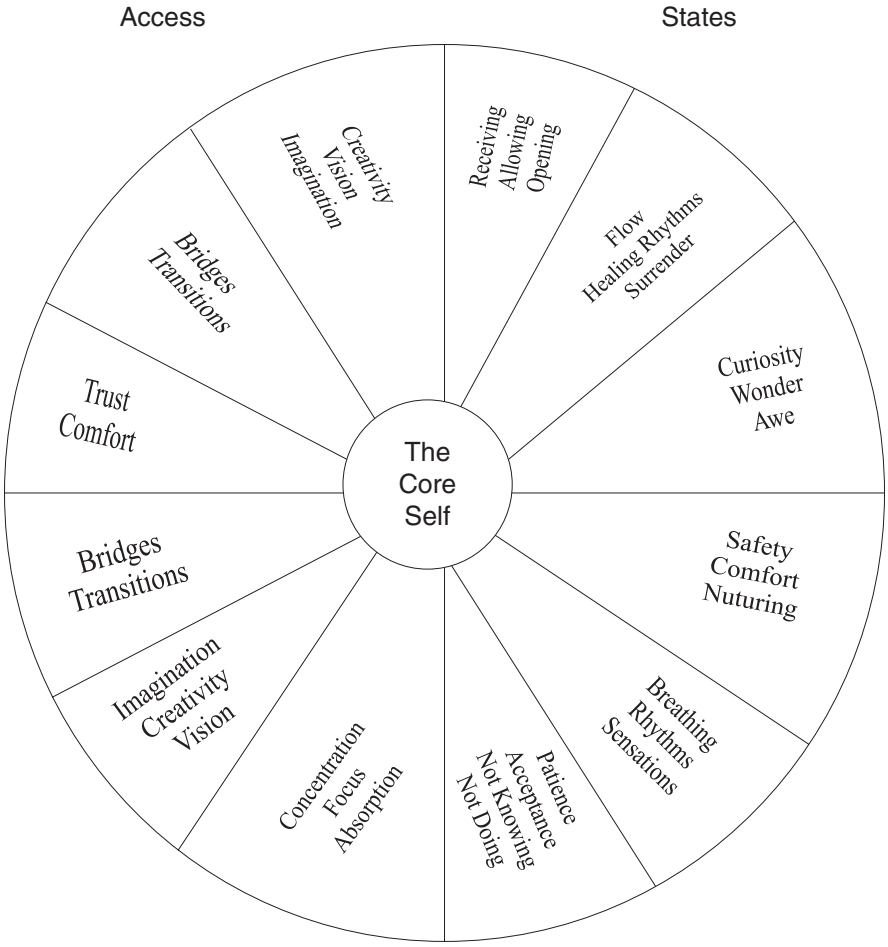

Figure 33.1 Contacting the core self. Alexander 2008 © Ronald M. Alexander.

but to utilize the hypnotic trance to primarily relax, let go, and enjoy the experience of learning to go deeper. During this hypnotic trance while she was deeply relaxed, her upper body, head, arms, and hands began to twitch and shake. She was instructed to go with it and pay attention to what was unfolding in her mind's eye.

She began to twitch, shake, and sob deeply as the therapist listened and observed patiently allowing her internal process to unfold moment by moment and trusting that her unconscious was up to something really important. After a while, she started to speak and said that she had been powerfully reliving an experience of a boating accident that she and her best friend had had at age 15 the summer shortly before turning 16. She remembered they went out in a canoe on a lake in Michigan, and a storm came up and knocked them both out of the boat. It rained so hard that they both quickly developed hypothermia, and as hard as she tried to keep her friend holding on, she watched her friend slip away under the water. She recalled being washed to shore by huge waves, and when the rescue workers arrived, her friend was pronounced dead.

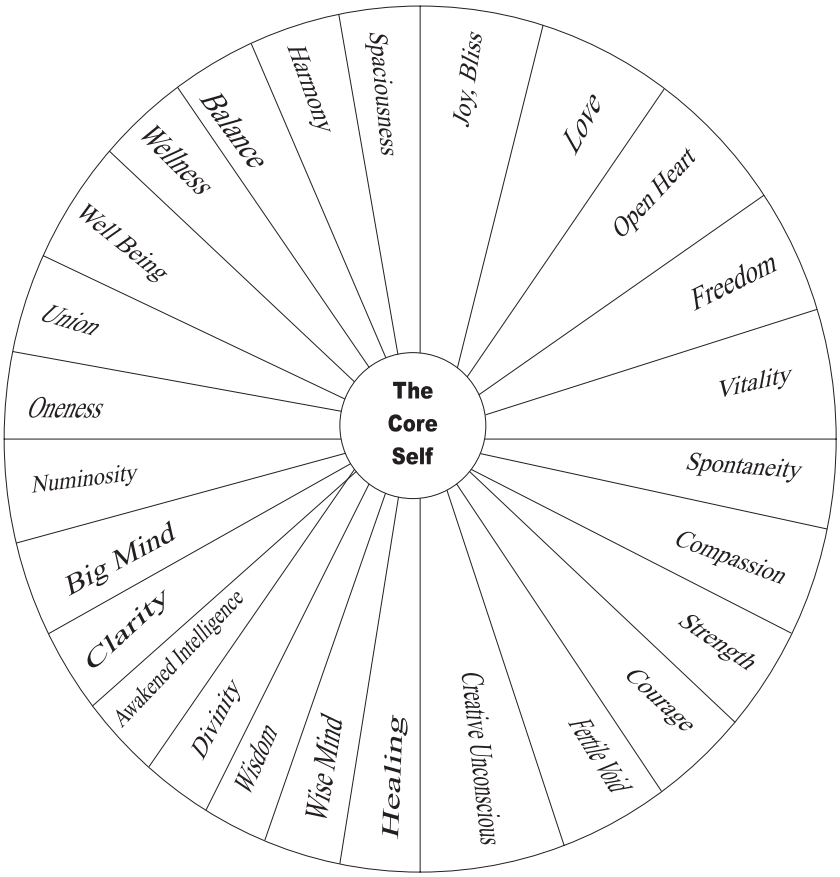

Figure 33.2 Resources of the core. Alexander 2008 © Ronald M. Alexander.

After being released from the hospital and interviewed by the police, she was sternly told by her parents never to speak of this accident again.

The painful and traumatic event then became suppressed and stored in somatic cellular memory experience as a retroflection of unprocessed neuroaffective experience lying dormant to manifest shortly after in the form of migraine headaches and irritable bowel syndrome. Therapy continued for another 3 months, utilizing hypnotic trance as well as daily mindfulness meditation practice, and during month 4, she became symptom-free of both issues. This is an example of how both methods of mindfulness meditation and hypnosis can work together to create state-dependent learning by enabling the patient to access internal resources and to turn on the parasympathetic nervous system for both memory retrieval and emotional reregulation. Thus, a traumatic event that long went unresolved, once brought to awareness and worked through by paying attention to symptom and utilization of the unconscious for healing resolution, was most effective for her healing.

Using mindfulness as a primer to train presence and then using hypnotic imagery to induce state-dependent learning can have profound effects on trauma recovery. A

35-year-old male entered treatment requesting meditation training and self-hypnosis to find out why he was still afraid of the dark and had had insomnia since early adolescence. He was also referred by his general practitioner for mindfulness training and hypnotic treatment. He explained that he felt something really terrible had happened to him while he was traveling with a priest who was a close friend of the family, but he had no memory, only a vague association. What prompted his association was that he was visiting a physician for a yearly physical, and he looked up on the ceiling and noticed the color of the ceiling, and then needed to run to the bathroom and relieve himself.

During the first several months of the treatment, the initial approach was to teach mindfulness meditation and to instruct him to practice at home and to focus on the experience of receiving comfort and safety. During the third month of work, he was instructed to go into a hypnotic trance by first using guided meditations that consisted of stories where children were protected from harm and kept safe by sacred temple dogs and lions of protection at the temple gates. He enjoyed the imagery of these animals, and he would report that knowing they were present, he could relax and let go into a deeper trance. He reported remembering that he was traveling with a priest who was a close member of the family. They were in a hotel room, and the priest was molesting him. He opened his eyes and noticed the ceiling was painted sky blue with clouds. He then dissociated and could only recall singing a childhood song to himself, a lullaby to fall asleep by.

He never spoke to anyone about this painfully traumatic experience, as he felt so much shame and guilt that somehow he was responsible for this event, and shortly after developed fear of the dark as well as insomnia. After several more months of hypnotic treatment where core effects of rage, anger, hatred, sorrow, grief, guilt, and shame were released, he reported that he was no longer afraid of the dark. He was able to sleep shortly after entering his bed and that the lullaby he sang the evening of his molestation he no longer found to be a comfort.

The power of both mindfulness meditation and hypnosis to uncover and assist this patient in bringing a healing resolution for both fear of the dark and a lifelong sleep disorder was a powerful demonstration of the integration of these methods. Again, the use of state-dependent learning to access unconscious material once repressed and once brought to consciousness and worked through can enable the healing resolution of past trauma.

Experience-dependent learning

Experience-dependent learning occurs in the waking state in an ordinary state of consciousness. It involves the somatic self, breath, and movement. As with state-dependent learning, it provides a new context for reexperiencing trauma, which allows for healing and learning. In experience-dependent learning, the therapist can draw from a plethora of methods to engage the patient to shift out of the familiar pattern of talking as the primary modality for healing in therapy and into new actions that can reactivate dormant neural networks or even create new ones.

A client who was a young female executive reported being intimidated by her boss's angry abusive outbursts. She had developed a stomach ulcer, and when he would yell at her, she would freeze up and lose her voice. The therapist asked her then to speak loudly and assertively to her boss. She described her father as a raging tyrant who had bullied and verbally abused her. She was able to connect to the fear she was experiencing in her body and recognize that she was disconnecting from her own power. The experience-dependent learning, guided by her therapist who took her from verbal therapy to a somatic experiential modality, helped her reconnect with her power and recover her voice.

In another example of experience-dependent learning using a somatic experiential modality, a patient had been jumping from one topic to another. The therapist suggested the client pause and put her left hand on her chest over her heart and begin to breathe slowly and consciously for several minutes. In less than a minute, however, the patient began to cry as she began to release her affect. The jumping around in topics was her brain's way of avoiding the feeling of sadness. Shifting the experience into a somatic one allowed her to have the insight that she could feel her emotion without trying to distract herself.

The therapist can also guide the patient into using a body scan, in which the patient's attention is drawn to each area of the body, from head to toe, to observe what is being experienced. A patient reported that she had been traumatized years previously by being beaten and raped on a first date after being drugged by the attacker. For many years afterward, she experienced what she described as numbness throughout her entire body. "It's as if I'd been given anesthesia," she explained. After several months, she was able to let go of the "under anesthesia" feeling and regain a sense of body awareness.

Relational-dependent learning

Relational-dependent learning is used in couples or group therapy. It combines state-dependent and experience-dependent learning as the patients shift from an alert, waking state to an altered state of consciousness and back. It can be used to engage both the conscious and unconscious mind for the purpose of mind–body healing. Whether working with a couple, family, or a group, the therapist can suggest that the patients explore the inner world of the unconscious mind.

One effective way to bring about relational-dependent learning is to instruct a couple to look into each other's eyes. A dynamic connection occurs and causes shifts in the unconscious as each partner begins to engage internal resources that assist in the healing process. We refer to this as the relational dependent response (RDR). We have discovered while conducting couples therapy that when the therapist suggests to the couple that they stop talking, close their eyes, and engage their unconscious minds, there's a dramatic increase in both patients' receptivity to guidance and new information and insights. Dan Siegel and others have posited that this deeper level of change is brought forth by engaging the mirror neurons in the brain that are responsible for empathy, which allows us to become attuned to others and make deeper connections.

The RDR is strongest when a patient or couple are in a state of mindful inquiry, and the parasympathetic nervous system is engaged, relaxing the stress response and reducing reactivity, fear, and anger. Mindfulness and trance are both effective therapeutic methods for bringing forth the RDR.

Ericksonian hypnosis

Therapeutic hypnotic trance has been categorized as either authoritarian or permissive, also known as Ericksonian. The authoritarian approach originated in the early French school of hypnotic therapy developed by Charcot and involves therapeutic directives and posthypnotic suggestions. When inducing a trance, the therapist guides the patient into a suggestive state to facilitate exploration of the unconscious and restructuring of the patient's thought processes. The therapist gives specific, formal directives such as, "You feel your eyelids getting heavier" and "The difficulty you have sleeping will go away." Despite the suggestible mind state of the patient, the therapist may encounter resistance.

Conversely, in an Ericksonian or permissive approach to hypnotherapy, developed by Milton Erickson, the cooperation principle is central. Rather than use authoritarian directives, the therapist guides the patient in a less formal or rigid way and embraces all therapeutic resistance as if the patient were attempting to cooperate with the healing process. So, for example, if the therapist suggests that the patient's eyelids are getting heavier, but the patient does not shut their eyes, the therapist might respond by saying, "You can also go into a trance with your eyes open." Thus, the therapist acknowledges the patient's autonomy and recognizes that despite the resistance, the unconscious is, nevertheless, participating in the mind/body healing process. Traumatized patients often are heavily defended and need to be in control of the therapy process to compensate for when control and self-autonomy were stolen or taken from them in the traumatized situation. Whatever choices the patient makes, the therapist responds with acceptance. Resistance becomes redefined as cooperative, creative, autonomous action. Learning, healing, transforming, and changing occur as the patient cooperates in opening up to a suggestible mind state. Both mindfulness and trance create the possibility for a patient to relax, let go, and turn on the parasympathetic nervous system, thus creating an optimal state of positive healing through arousal and then deep-level relaxation. The therapist's directives allow for a patient's need to move more slowly into an altered state of consciousness in which the patient is vulnerable yet safe, secure, and mindfully aware.

Ericksonian hypnotherapy is particularly helpful when a patient's ability to trust has been damaged as a result of a prior trauma, as it offers a chance to heal, transform, and reregulate the nervous system instead of confrontations, interpretation, or authoritatively demanding it of the patient, which can trigger resistance and impede the healing process.

The permissive approach is characterized by indirect language involving embedded suggestions for how the unconscious might respond. Central to the approach is expressing to the patient that he or she "may or may not" have a particular experience, whether it is the breath slowing down as relaxation increases or a reduced frequency

of pain during sex after the session is completed. "You might have this experience—or not," suggests the therapist, allowing the patient to feel they have choices in the process of healing.

In Ericksonian hypnotherapy, the therapist can also use metaphor as a tool for guiding the patient into reframing experiences in a more wholesome way. One therapist created a guided visualization of rock climbing in working with a victim of sexual trauma. The guided hypnotic visualization incorporated a story about a woman who was climbing mountains, and fell and was deeply injured. In his narration, he explained to the victim that the rock climber was bruised but that her injuries were mainly internal. The clinical and therapeutic use of metaphor access the creative healing unconscious. In this way, the therapist subtly signaled the patient's unconscious to further identify this person as someone who has been "internally injured" as a result of a mishap that occurred when "climbing" in preparation to "ascend a peak." The specific references to ever-higher peaks helped the client to imagine herself overcoming her trauma and ascending to whatever heights she chose, metaphorically and literally.

Using antidotes to heal dissatisfaction, longing, self-judgment, and loss

Intentionally suggesting certain mind states can create a healing conditioning between the wholesome and unwholesome emotion. We do this by intentionally recalling and recreating a specific wholesome emotion or feeling such as satisfaction, gratitude, or joy.

A therapist can guide a patient into applying an antidote to difficult states of mind using the following steps, which incorporate mindfulness, trance, and somatic experiencing:

- Instruct the patient to focus on the sensation of inhaling and exhaling with the breath until the mind is calm enough to begin the process of mindful inquiry.
- Instruct the patient to report what the inquiry reveals.
- If the patient reports feeling discomfort in the form of an emotion, memory, or sensation, instruct the patient to focus attention on that experience and simply observe it. Allow the patient to remain in this state of observation for no more than 60–90 s, closely monitoring their response.
- If the patient does not report that the unwholesome mind state is naturally shifting, suggest the application of a specific antidote.
- Instruct the patient to generate this positive mind state. Consider, too, asking the patient to anchor the positive antidote in the body. For example, you might ask, "Can you show where in your body you feel this positive antidote, and place your hand on the spot?"
- If the patient is unable to generate a mind state that serves as an antidote, repeat the process until they are able to do so.

Application of an antidote can be used again and again for the healing of trauma. In time, the patient's unwholesome feelings, sensations, and thoughts will be less intense and will arise less quickly within the mind. The patient will be better able to maintain

a space between the stimuli and the response, and will be better able to tolerate the experience before applying an antidote or waiting for the unwholesome mind state to transform on its own.

There are several healthy mind states that serve as antidotes to mental afflictions, including:

- *equanimity*, a state of feeling calm, relaxed, and at peace with whatever is being experienced;
- *optimism,* an outlook that inspires us to make meaning out of negative events and perceive them as learning opportunities that are part of a spiritual curriculum;
- *confidence*, a sense of being able to handle situations by balancing the need for control with a sense of surrender;
- *joy or happiness,* a state that produces beta-endorphins (neurotransmitters that serve as the body's natural opiate) and lower cortisol levels, which leads to emotional and physical healing as well as improvements in immune response (Davidson et al., 2003);
- *lovingkindness,* a state of feeling friendliness and love for ourselves and others as we recognize our interdependence with them;
- *acceptance,* a state in which we have surrendered to the reality of what is.

Additional wholesome mind states include enthusiasm, vitality, energy, faith, intelligence, self-respect, considerateness, conscientiousness, nonviolence, satisfaction, gratitude, and compassion.

To apply an antidote to an unwholesome state, the patient can be guided to recall a memory of feeling the wholesome state and holding on to that emotional experience. For example, a patient who feels fearful can recall a memory of feeling safe and secure. If the patient can't identify a memory that would evoke the wholesome state, suggest the patient create an imaginary scenario that would evoke it. Imagining oneself in a beautiful, lush flower garden or by the clear, still waters of a tropical lagoon might elicit a feeling of peacefulness. Similarly, a mental picture of one's desk with all papers neatly arranged in folders marked "completed" might evoke a sense of order when one is feeling anxious about work-related issues. Table 33.1 lists several common antidotes that can be induced as mind states to counteract specific unwholesome states.

The antidote of compassion

While many therapists would agree that compassion is at the heart of psychotherapy, Eastern traditions have found step-by-step practical ways to build the compassionate muscle. In fact, thanks to Western science, we now know that compassion is not simply a mindset, view, or emotional experience; it is reflected in the brain's wiring. Matthieu Ricard is a Buddhist monk and author who, along with 150 other monks, had practiced meditation for thousands and thousands of hours before volunteering to be hooked up to fMRI machines by Dr. Richard Davidson, a Harvard-trained neuroscientist at the University of Wisconsin (Davidson et al., 2003), as part of a research study on meditation. As Richard began to practice a compassion meditation, he found

Table 33.1 Common antidotes for mind states to counteract specific unwholesome states.

Unwholesome state	*Wholesome antidote*
Fear	Safety
Feeling split into pieces	Cohesion
Abandonment	Acceptance, belonging
Isolation	Unity, oneness
Revenge	Forgiveness
Holding on	Letting go
Confusion	Clarity
Contraction	Expansion
Pain	Joy
Trauma	Bliss
Anger	Equanimity, tranquility
Hate	Love, embracing, acceptance, tenderness, forgiveness
Desire	Satisfaction, contentment, equanimity
Envy	Inspiration, admiration, appreciation
Greed	Generosity, expansion, abundance
Frustration	Patience, forgiveness, tolerance
Emptiness	Fullness, satiety, wholeness
Sadness	Happiness, joyfulness, freedom
Grief	Acceptance, vitality, completion
Unworthiness	Worthiness, actualization
Self-criticism	Compassion, acceptance

a substantial shift in brain activity to the left prefrontal cortex, an area associated with mediating stress responses and resiliency.

The clinical applications of compassion and other healthy mind states deserve a little more attention here because of their effect of mediating the stress response associated with trauma. Self-compassion may be considered the primary antidote to the fear response that is part of the stress cycle. It's not only a form of radical acceptance of the here and now, but a 180° shift from the brain's avoidance strategy that keeps us stuck. Compassion can be defined as a state of empathy with the intention to help in some way. While compassion may naturally arise in the practice of mindfulness, often times it can be suggested and induced through certain practices. As we intentionally cultivate self-compassion, we begin to neutralize the nervous system's reactivity to the trauma response.

In one case, a female patient had suffered a severe accident that left her permanently disabled, with one leg shorter than the other. For years, she had not looked at her mangled ankle and felt pervasive anxiety as well as anger, and often judged herself harshly. In their sixth session together, her therapist had the client close her eyes, put her hand on her heart, and visualize the accident while silently repeating self-compassionate phrases such as, "May I be free from suffering, may I be healthy in body and mind, may I be free from fear, may I be at peace."

At one point, she opened her eyes and looked at her ankle for the first time. She acknowledged the difficulty that she had been through and how hard it has been. That

was experiential state of self-compassion in action. The client continued to acknowledge that this was the first time she experienced self-compassion since the accident. The therapist continued, "What would the days, weeks and months ahead look like for you if you experienced self-compassion more often?"

Trauma causes a dramatic loss of balance and trust. By approaching what she was afraid of, the client was able to experience growth and insights. She continued to use this technique for generating self-compassion and self-trust whenever she began to react to the past trauma in the present, and ultimately developed wise mind and mindstrength. This is the miracle of mindfulness and is something that is available to everyone, but just like riding a bike, mindfulness takes intentional practice and repetition. The patient can then begin to foster other positive mind states that mediate the stress response and bolster resiliency, including self-trust, gratitude, hope, altruism, equanimity, and connection.

We help clients focus on positive and wholesome experiences, and support them in developing qualities that initially help them flip the switch when the trauma reactivity arises. Eventually, the client adopts these qualities as personal characteristics and is able on their own to mediate the stress response naturally.

Antidote exercises

The following exercises are designed to replace an unwholesome mind state with a more wholesome one. The therapist can lead the client through these exercises within the session; the client can then repeat them at home as needed.

Satisfaction meditation (Alexander, 2008) Sit in a meditative posture, focusing on your breathing and silently thinking "in" and "out" for each respiration. Continue focusing on your breathing for several minutes until you are in a state of calm mindfulness.

Visualize yourself sitting at a table with a large glass of clear, sparkling water before you. Feel your thirst, your sense of lack, and your wanting. Then, reach for the glass and begin to drink from it. As you drink, this magic glass never empties. You feel the sensation of cool, satisfying water quenching your thirst as you drink. Drink with deep, satisfying gulps until you feel sated.

Now, become aware of a beam of warm, energizing light, a light of infinite knowledge and wisdom, shining all around you and infusing you with all you will ever need to know. Radiate in this light of wisdom, becoming one with it.

As you experience the sensation of being satisfied, feel yourself glowing with white light. Know that you are an illuminating beacon, shining brilliantly with the light of wisdom, love, and acceptance. Feel this light inside of you, radiating outward. You have more than enough light inside of you. Experience it. Notice what it feels like to be satisfied, to be so filled with light that it flows forth from you, giving you a deep sense of satisfaction.

Remain present with this feeling of satisfaction.

Gratitude practice (Goldstein, 2012a, 2012b) Think of a moment today or in the last week when you received something, such as a meal, the beauty of the sun, a smile,

support from a coworker, or help from a stranger. It could be something you normally consider mundane. Picture where you are and whom you are with, pausing the video in the moment of receiving. As you recall the memory, have awareness of the feeling of receiving. Begin to feel a sense of gratitude. Notice how you feel in your body. Allow your feelings of receiving and gratitude to increase and become as big as they can get. As one client of Elisha Goldstein's said, "Allow the glow to grow."

Discard an unwholesome self-judgment (Alexander, 2008) Work through these five steps to discard an unwholesome self-judgment.

1 *Identify and label the judgment.* Give it a simple name or theme, such as "inadequate provider," "insincere," or "people pleaser."
2 *Discover the quality of the judgment.* Ask yourself, "What is this self-judgment causing me to think or feel about myself in this moment?" Does it make you feel ashamed, angry, or guilty, for example? Notice whether the feeling is wholesome and supportive of your well-being, or unwholesome, making it difficult for you to enter a state of spaciousness, openness, and trust.
3 *Find a remedy for the unwholesome thought or feeling.* Ask yourself, "Would I like to think or feel something different? What thought or feeling could I generate to shift myself out of this unwholesome state?"
4 *Formulate a new thought, image, or feeling, and begin to hold on to it firmly.* Experience it in your mind's eye and in your body. Feel a wholesome sensation, such as relaxation, excitement, or expansiveness.
5 *Assess whether you've shifted.* Ask yourself, "Have I shifted out of the feeling, state, or thought that was unwholesome and let go of my negative self-judgment?" If you have, then enjoy the new sensations, feelings, and thoughts you've generated as a remedy. If not, go back and repeat steps 1–4.

River-of-time meditation (Alexander, 2008) Begin the process of mindful meditation, and after a time, envision yourself standing alongside a river, the river of your life. The moving waters are your own vitality, or life force, moving forward continually despite all that happens on the riverbank.

Pick a point along the riverbank and walk upstream toward it, moving into the past. This is a place in your life where you experienced a regret, loss, crisis, or trauma. Take a seat on the riverbank, and as you gaze at the passing waters, breathe deeply. Watch yourself go through this past painful event as if you were watching an old home movie. Breathe out the constricted energy that has long held the pain, regret, or trauma inside of your body. Observe as it begins to flow out of you. When this life event has finished unfolding, look into the eyes of your younger self and say, "It's okay. Everything will be healed downstream, I promise." Reassure your younger self until you feel that the turbulent feelings have calmed. Bid your younger self good-bye, and then turn and walk the other way, downstream, feeling the vital power of the river alongside you.

Experience yourself opening to the future with a fresh and renewed sense of hope and possibility as you move forward, releasing and healing your past. If your internal movie held an old regret, such as never finishing a project that meant a lot to you or

dropping out of college in your very last semester, now see yourself picking up where you left off, taking action and finally completing this task. Experience the exhilaration and the wonderful sense of renewal that arises in you as a result.

Observe your healed, future self. Look into the eyes of this future self and ask, "What wisdom can you share with me?" Listen closely to the answer. Listen as your future self reassures you that you're in the process of healing even now. Feel this self imbue you with courage, strength, and love.

The miracle of mindfulness and trance when healing trauma

Over time, what comes from using mindfulness-based psychology to address trauma may be best described by the Vietnamese Buddhist Monk, Thich Nhat Hanh, in his book *Miracle of Being Awake:*

> The sadness or anxiety, hatred, or passion, under the gaze of our concentration and meditation, reveals its own nature. That revelation leads naturally to healing and emancipation. The sadness, or whatever, having been the cause of pain, can be used as a means of liberation from torment and suffering. We call this using a thorn to remove a thorn. We should treat our anxiety, our pain, our hatred and passion gently, respectfully, not resisting it, but living with it, making peace with it, penetrating into its nature by the meditation on interdependence. (Hanh, 1976)

The experience of undergoing any form of traumatic event poses the unique opportunity to become crushed by the severity of the event or to develop a new view of it as a result of undergoing the process of therapeutic mind/body healing. In our view, mindfulness brings a new lens to a dark event. It allows the patient to adopt and cultivate an attitude that trauma offers an opportunity for spiritual growth, presenting lessons that are part of a spiritual curriculum. It is not our view that trauma happens for a purpose. Rather, it holds the potential for rapidly changing a person's worldview. A patient was in a freak accident that caused her to lie in a coma for months. Afterward, she underwent a total change in perspective. After her emotional and physical recovery from the trauma, she left her high-powered job in Los Angeles and set off to live a quieter and more meditative life in the mountains.

Although the trauma may be unwanted and out of our control, we retain the choice to use it as the basis of transformation. After a trauma, we cannot turn back the clock to a past before the event, but we can move foreword with forgiveness and for all who were involved, including ourselves.

Building a Healthier Brain and Creating Neural Payoffs Through Mindfulness Practice

In the past 10 years, there has been an exponential increase in research on mindfulness and neuroscience, and how they intersect. Studies have shown there are neural payoffs to mindfulness, and this has implications for the understanding and treatment of stress,

anxiety, depression, addiction, and trauma. Dr. Richard J. Davidson ignited interest as a result of his 2003 study that put people through an MBSR program and found they experienced a shift to greater activity in the left prefrontal cortex, which is associated with positive emotions (Davidson et al., 2003). His other studies with monks who had been practicing mindfulness meditation for thousands of hours confirmed that they, too, experienced a significant shift in activity in the left prefrontal cortex (Begley, 2004). During mindfulness and compassion meditation practices, the monks had elevated activity in the insula, considered to be the central switchboard of the brain that helps us coordinate our thoughts and emotions (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008).

"Meditation can have a serious impact on your brain long beyond the time when you're actually sitting and meditating, and this may have a positive impact on your day-to-day living," according to research by Sara Lazar and her team (Lazar et al., 2005). Using MRI brain scans, Lazar provided a glimpse into the possibility of mindfulness affecting neuroplasticity and perhaps even the process of neurogenesis throughout the lifespan. In her study, she discovered that meditators with a consistent mindfulness practice had thicker regions of frontal cortex, regions responsible for reasoning and decision-making, than those who did not. Additionally, she found that the regular meditators had a thicker insula. Lazar suggested that because our cortex and insula normally start deteriorating after age 20, mindfulness meditation might help us make up for some losses as we age.

In 2010, Norman Farb and colleagues published a study of a randomized control trial where participants were split up into a group training in mindfulness and another training in cognitive therapy (Farb et al., 2010). Both groups viewed clips of sad movies while their brains were monitored. Both groups reported the same amount of sadness, but the mindfulness group scored lower on the depression inventory administered afterward. When the researchers looked at the brain scans, they found the control group showed heightened activity in the cortical midline, an area of the brain associated with self-awareness, while the mindfulness group showed heightened activity in the somatosensory cortex, which lights up when we're paying attention to the body. The implication here is that the mindfulness group saw the sad scene but cut off their rumination by focusing on the feeling they were experiencing, not the story. While this was a study concerning depression and, in particular, relapse into depression, it's easy to see the implications it holds for the mindfulness meditation's effect on processing trauma reactions.

Sara Lazar and colleagues (2005) measured the brains of participants who participated in an 8-week MBSR course and found significant growth in two critical areas, the hippocampus and the tempo-parietal junction. The hippocampus is involved in learning and memory, and the tempo-parietal junction lights up when we experience empathy. Learning, as well as accessing memory and empathy, is a critical element to healing from trauma.

In a recent study, Tang, Lu, Fan, Yang, and Posner (2012) used an advanced form of brain imaging, called diffusion tensor imaging, to illuminate how mindfulness can result in a rapid change in neural networks as a result of neuroplasticity. The researchers measured participants' brains at just 2 weeks and again at 4 weeks of practice. The results showed that training led to changes in the efficiency of the white-matter, which

conducts neural impulses throughout the brain. Changes were noted in the anterior cingulate cortex, a part of the brain responsible for self-regulation of mood and emotional state.

If we think of the brain as a reactive organ that is constantly processing stimulation and making quick decisions about what is safe or dangerous, the ability to influence its functionality has tremendous implications for treating trauma. If we can bring about neurogenesis in areas of the brain associated with greater compassion, awareness, and self-regulation, we can actually retrain our brains to react to stimuli in a healthier way.

Neural networks

Neural networks are the connections between neurons, or brain cells, that allow our brains to process information efficiently. Also called neuronal pathways, they are formed by initial experiences and reinforced when those experiences are repeated whether in reality (e.g., when lifting a cup to the mouth to drink) or in our minds (imagining the motion of lifting a cup to the mouth to drink). Learning requires creating new neural networks, activating dormant ones that have gone unused for a long time, and deactivating active ones that are associated with experiencing trauma, fear, anger, and sadness.

In the old scientific model, it was believed that the production of new neural networks was not possible, and therefore, the potential for learning, transforming, and healing was very limited. Breakthroughs in neuroscience have revealed that the brain is far more malleable or plastic than previously believed, and that state-dependent learning allows us to actually retrain the brain. The areas of the brain responsible for state-dependent learning include the midinsular cortex, the anterior cingulate cortex, and the hippocampus, which works with the amygdala.

The *anterior cingulate cortex* coordinates communication between the prefrontal cortex, where we experience executive function (decision-making, impulse control, and planning), with the amygdala, the emotional center of the brain. Mindfulness meditation thickens the right anterior insula, the part of the brain associated with self-awareness. The same study showed that mindfulness meditation affects activity in, and appears to "grow," the left inferior temporal gyrus, the part of the brain associated with visual processing and perhaps with face recognition (Hözel et al., 2008).

The midinsular region of the brain's cortex is associated with subjective emotional experiences, the perception of the intensity of physical and emotional pain, and the emotional processing of bodily experiences and states such as feeling tense, constricted, angry, and so on. Researcher, Richard Davidson, says that mindfulness meditation stimulates a feeling of positivity, optimism, and creative thinking.

The *hippocampus* is responsible for the storage and retrieval of long- and short-term memory, and its integration with emotion. It also plays a role in the processing of sensory information and spatial memory (where things are in relationship to each other). The *amygdala* is key to processing emotions such as anger and fear, working with the hippocampus to incorporate them into memory and learning. Mindfulness meditation has been shown to reduce the size of the amygdala while creating a perception of reduced stress (Hözel et al., 2010).

Contraindications and Cautions for Mindfulness-Based Psychotherapy and Trance in the Treatment of Trauma

In using mindfulness for healing trauma, it is important to avoid a "one size fits all" approach. Depending on the severity of the symptoms, different rules of engagement are needed. The patient's egoic stability must be assessed. A patient revealed the following traumatic experience when approaching a railroad crossing one day the guard rails were not in place to alert her to stop at the tracks. Instead of stopping, she began to drive across the tracks but was hit full force by an oncoming train. The train picked up her large vehicle, turned it upside down, and pushed it for over a quarter of a mile before the car became almost completely crushed by a wall adjacent to the tracks. The therapist suggested she stop relaying the story of the trauma and that they practice mindfulness meditation together. During the meditation, he instructed her to access a positive image or memory of feeling totally safe and comfortable. Then, he suggested that while in this mindful state, breathing slowly, she return to the memory of the trauma. He suggested that she go back and forth, in a process called trauma pendulation.

In trauma pendulation, the therapist mindfully observes the patient's experience, then guides the patient in creating a positive state of safety and comfort. Doing so resets the nervous system and provides an oasis from emotional stress. Then, when the patient is ready, the therapist returns to the work of guiding the patient into allowing feelings, memories, and sensations to arise and be experienced despite the discomfort. The therapist may or may not draw the patient into a memory of a specific trauma; the goal may simply be to allow the patient's unconscious mind to bring up feelings, images, memories, or sensations that need to be experienced and released.

The more severe the trauma, the more deeply the suppressed affect is stored in the nervous system and the more the patient experiences constriction in the pain body of self. The suppressed affect needs to be brought to the surface and reexperienced so that it can be contained and reintegrated into the patient's life experience. Most trauma survivors are unlikely to be in touch with all the varied layers of pain and emotional dysregulation. The process of traumatic suppression or dissociation is actually protective, allowing the sufferer both to survive the trauma and to function in the world after the experience. The therapist's use of mindfulness and trauma pendulation can help the patient to continue participating in the process of healing without disassociating. It establishes trust, honesty, authenticity, and compassion as central to the patient–therapist relationship. The process of both client and therapist practicing mindfulness together with the therapist providing guidance and support not only creates in the client a sense of trust and safety but also allows the therapist to be laser-like in focus, guiding the client in safely uncovering deeply repressed material. For example, when a client presents with numbness and fragmentation or dissociation, the therapist can suggest mindful inquiry to help the patient hold on to the painful affect and experience it more deeply, which allows for discovery, identification and categorization, containment, and possible discharge.

If the client reports feeling numb, detached, or disconnected, or is observed disassociating from the pain or trauma, the therapist should guide the client into experiencing safety and comfort so as to develop a positive baseline for further exploration of the

trauma. Once the client is emotionally reregulated and connected with the self and a sense of well-being, he or she can begin exploring the trauma state. In using mindfulness to determine when to bring the client back to a mind state of safety and comfort, the therapist is respecting the client's nervous-system response.

Conclusion

After the experience of trauma, the question "Why did this happen to me?" often arises. It is not our view that trauma happens for a purpose. Rather, trauma is a painful and often unwanted experience that suddenly and rapidly changes one's entire worldview—sometimes in an instant. Undergoing a traumatic event may cause a person to develop PTSD, but it may also eventually lead that individual to adopt and cultivate a perspective that the trauma offers them the ability to enroll in a mindful curriculum that guides them to cultivating the internal resources to heal themself. We don't have control over the occurrence of trauma, but as we cultivate mindfulness, we begin to see that we do have the choice to use the experience as an opportunity to transform our lives. From this space of awareness, we can deepen the experience with mindful inquiry or use hypnotic trance to help clients access insight and internal wisdom they may not have thought existed before. We can never go back to the time before that trauma, and there may be things that we lose that are irretrievable. However, the very existence of this pain allows us to match it with mindfulness, which inspires invaluable states of forgiveness, compassion, and lovingkindness toward ourselves and others. These in turn allow us to take huge leaps forward in healing. As people learn to let go of states of blame and remorse, they can transform painful affliction into compassionate self-acceptance and forgiveness of others.

As Western psychologists, we have a mission and responsibility to help our patients and students to develop a positive sense of self so they can experience personal growth and improve their relationships, including their communication within those relationships. However, we also have the potential to guide patients into entering a doorway of discovery and experiencing a state of being where the ego drops away, and an awareness of the interconnected nature of life arises. This is a place where trauma drops away, where we find peace in a warm and loving ground of being.

How
Did the rose
Ever open its heart
And give to this world
All its
Beauty?
It felt the encouragement of light
Against its
Being,
Otherwise,
We all remain
Too
Frightened.—Hafiz (Ladinsky, 1999)

Mindfulness enables us to assist our patients and students, as well as ourselves as therapists, to drop painful attachments to the small stories of our lives and be free to develop a new, wider view known in Buddhist psychology as Prajna, or "no self." This wider view includes a deeper understanding of the process of the ego dying and being reborn as well as recognition of the interconnected nature of life.

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