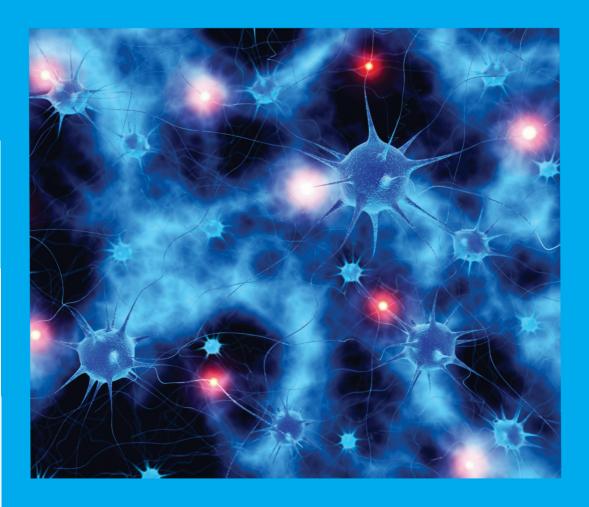
Clinical Applications of The Polyvagal Theory

The Emergence of Polyvagal-Informed Therapies



Stephen W. Porges & Deb Dana, Editors

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Therapeutic Presence and Polyvagal Theory: Principles and Practices for Cultivating Effective Therapeutic Relationships

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Abstract: Therapeutic presence involves being in the moment, receptive, and attuned with clients on multiple levels. Research demonstrates that therapeutic presence is necessary to facilitating positive therapeutic relationships and effective therapy. This chapter explains why this happens through the lens of Polyvagal Theory. There is a neurophysiological activation of safety in present, centered relationships via the ventral vagal pathways of the parasympathetic nervous system, which elicits clients' neuroception of safety. In turn, health and optimal growth are promoted. Practices are offered to strengthen relational presence, including mindfulness, attunement, and drumming exercises based in the therapeutic rhythm and mindfulness program.

I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

—Maya Angelou (in Booth & Hachiya, 2004, p. 14)

Working effectively in psychotherapy is only possible when clients feel safe and secure in relationship with their therapist. To promote safety and optimal therapy, therapists need to focus on *how* they are with clients as more primary than what they *do* in the therapy session. This is affirmed by decades of psychotherapy research demonstrating the relationship as the most consistent predictor of change (Norcross, 2011). Yet what contributes to a positive therapy relationship has been less clear until recently.

Emerging research suggests that therapeutic presence is a necessary and preliminary step to facilitating positive therapeutic relationships and effective therapy (Geller, 2017; Geller & Greenberg, 2002, 2012; Geller, Greenberg, & Watson, 2010). And Polyvagal Theory (Porges, 2011) explains *how* therapists' presence evokes clients' safety, strengthening these therapeutic relationships.

When therapists are fully in the moment and attuned with their clients. their receptive and safe presence sends a neurophysiological message to clients that they are being heard, met, felt, and understood, which elicits a feeling of safety (Geller & Porges, 2014). According to Polyvagal Theory, when clients feel met and felt by another person, they not only feel aligned with them, but the brain likely establishes a neuroception of safety (Porges, 1998, 2011). Clients who have experienced misattunement or trauma are often wired to perceive unsafety even when safety is present (Geller & Porges, 2014). They relate to the world with a heightened state of fear and protection as their sympathetic nervous system is aroused; or if it is overaroused, the dorsal vagal wing of the parasympathetic nervous system kicks in, evoking a state of shutdown or freeze. When therapists relate with their clients as a calming presence, it activates the social engagement system and invites calm and connection in the ventral vagal wing of their clients' parasympathetic nervous system, and over time clients feel safer and regulated in the relationship. Therapeutic presence elicits a reciprocal experience of safety between both therapist and client, which allows clients to open up and engage in the necessary therapeutic work.

This chapter will focus on understanding (a) the value of therapists' presence in creating safety for clients and in deepening the therapeutic relationship; (b) how presence elicits a neurological and physiological feeling of safety, which is the foundation for healing, as viewed through the lens of Polyvagal Theory; and (c) practices that help to cultivate therapeutic presence using relational approaches such as mindfulness and rhythm-based modalities. Overall, this is all a call for more ventral vagal therapy through emphasizing the need for training and cultivation of this foundational approach of therapeutic presence.

What Is Therapeutic Presence?

Therapeutic presence is a way of *being* with client that optimizes the *doing* of therapy (Geller, 2017; Geller & Greenberg, 2012). It involves therapists bringing their whole self to the encounter and being present on multiple levels—physically, emotionally, cognitively, relationally, and spiritually (Geller & Greenberg, 2012). Therapeutic presence involves being grounded in one's self, while receptively taking in the verbal and nonverbal expression of the client's in-the-moment experience.

Therapeutic presence is a way of *preparing* for therapy (Geller, 2017). As therapists become present in their personal and daily life and prior to session, it allows presence to be experienced with greater ease in session. Through practice and care to their own well-being and relationships, therapists can more finely attune their nervous systems so their ventral vagus nerve is activated and they are ready to engage with clients in a healing and attuned manner. Ongoing self-care as well as taking a few minutes prior to session to center inside and invite a state of presence and ventral vagal activation can support therapists to be in an optimal state to facilitate their clients' healing. This is supported by research that suggests that just 5 minutes of centering prior to session improves session outcome and reduces clients' psychological distress (Dunn, Callahan, Swift, & Ivanovic, 2013).

Therapeutic presence is an *internal experience*. Therapists' experience includes feeling (a) *grounded*, centered and in contact with one's self, while being (b) *immersed* in the moment with clients' pain and suffering. There is a simultaneous experience of (c) *expansion*, in which there is a felt sense of a larger perspective and spaciousness, and of compassion, as therapists are (d) *with and for* the other, in service of their client's healing process. This internal experience of therapists' presence is an expression of their ventral vagal system being ideally tuned so that therapists can be a safe presence for their clients.

Therapeutic presence is a *process* or way of doing therapy (Geller, 2017). This process involves (1) being open and *receptive* to clients' experience, attuning to their verbal and nonverbal expressions; (2) *attuning inwardly* to therapists' resonance with clients' in-the-moment experience, which serves as a guide to (3) *extend and promote contact* through both verbal and nonverbal expression. Therapists' inner sensory systems inform them of how their client is receiving their responses and interventions and what is occurring moment to moment in the relationship (Geller, 2017). This helps therapists recognize the optimal moments for particular responses or interventions so they are offered with the greatest impact and precision, and in resonance with what is emerging in the moment. The moment-to-moment attunement that is inherent in the therapeutic presence

process serves two important purposes. First, it allows clients to feel felt, heard, and calmed as their nervous system comes into alignment with their therapist's calming presence. Through the bidirectional communication between the nervous systems of the therapist and client, growth and healing are supported. Second, it allows therapists to sense and feel their clients' experience so they can respond with what is most needed in the moment to support clients' growth.

Therapeutic presence is also highly *relational*. When clients perceive their therapist as present with them, they become more present within and in the relationship. The bidirectional communication that is central to Polyvagal Theory reflects this process where the nervous systems of people affect each other, and as the therapist's presence activates clients' presence and back again, they engage in a feedback loop where a larger state of shared presence begins to emerge, and therapists' and clients' bodies and brains become in sync. This supports an intersubjective consciousness or sharing of the same emotional landscape (Stern, 2004), which deepens safety and leads to therapeutic change.

Therapeutic presence is *growth promoting* for therapists, clients, and the therapeutic relationship. It includes self-care and balance for therapists. Clients feel heard, understood, and safe, which is experienced on a neurophysiological level, and even outside of conscious awareness (Geller & Porges, 2014; Porges & Carter, 2014). Clients' defenses then soften, and natural growth and healing unfolds.

Background Research on Therapeutic Presence

An empirically validated model of therapeutic presence was developed (Geller & Greenberg, 2002) that includes the preparation, process, and experience described above. From this model came the development and validation of a psychotherapy measure, the therapeutic presence inventory (therapist and client versions; Geller et al., 2010). Research with the therapeutic presence inventory suggests that therapeutic presence is a positive predictor for the therapeutic alliance (Geller et al., 2010; Pos, Geller, & Oghene, 2011). It was found that clients' experience of their therapists' presence matters most—those who experienced their therapist as present had a positive alliance and a successful session outcome across three modalities of therapy (cognitive behavioral, emotion-focused, and person-centered therapies; Geller et al., 2010). It is valuable, then, to be skillful in nonverbally communicating presence so that clients receive their therapists' presence. Polyvagal Theory helps us to understand how to do this through prosody of voice, open body posture, and a face-to-heart connection that evokes connection and safety.

Research affirms that therapeutic presence is related to yet distinct from empathy (Pos et al., 2010; Geller et al., 2010); and presence precedes empathy

(Hayes & Vinca, 2011). Therefore, the ventral vagal activation in therapists that ensues from therapeutic presence is proposed as a necessary precondition to being empathic and sustaining a positive therapeutic relationship.

How Does Therapeutic Presence Promote Effective Therapy?

We can best answer this question through the lens of Polyvagal Theory as well as therapeutic presence research. Presence and attunement to one's self and others activates safety, which improves the therapeutic relationship and overall outcome. Also, therapists who are grounded and present serve as an emotional regulator for clients, given that the bidirectional communication and interaction between therapists' and clients' nervous system and viscera (the brain and the body) is mediated by the relational environment (Geller & Porges, 2014; Porges, 2011). The following brief explanation shows how this occurs in the psychotherapy process (see Figure 7.1).

First, the therapists become present, prior to session, through grounding, centering, breathing, and attuning within their self in the moment. This then allows therapists to openly receive and attune with their clients. Clients begin to feel safe from a neurological, physiological, and emotional perspective (Allison & Rossouw, 2013; Cozolino, 2006; Geller & Porges, 2014; Porges, 2011; Schore, 2012). This process has three important effects (Geller & Porges, 2014).

- 1. Clients' defenses drop away, and an optimal portal opens up to engage effectively in the work of therapy.
- 2. Clients' nervous systems begin to calm in resonance with their therapists' calm, grounded presence, and they feel more present and accepting within and more connected with their therapists.
- 3. Therapists' responses and interventions are offered in attunement with what is poignant in the moment for their clients, including their readiness to receive.

Through repeated experiences of safety, clients can potentially generate a greater sense of safety in other relationships, which is central for well-being, growth, and health (Geller & Porges, 2014).

Co-Regulation: Creating Safety Through Presence in Relationship

The regulators of emotions and physiology are embedded in relationship (Cozolino, 2006; Geller & Porges, 2014; Porges, 2011; Schore, 2012). Experiencing the attuned presence of another person can change the brain (i.e.,

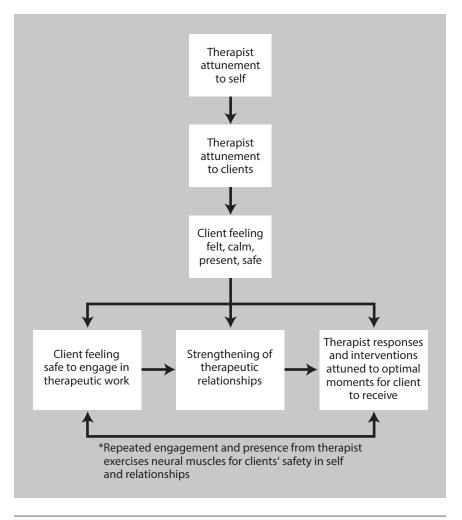


FIGURE 7.1
How Does Therapeutic Presence Promote Safety and Therapy Effectiveness?

the client) and the experience of the person they are in relationship with (i.e., their therapist). This can in part occur through co-regulation, which has been defined as the bidirectional linkage of oscillating emotions between different partners, contributing to the emotional stability of both (Butlar & Randall, 2013). So in clinical terms, if therapists are calm, then their clients will become

calm in resonance with their grounded presence, as emotions, bodies, and brains are bidirectionally linked (Geller, 2017; Geller & Porges, 2014). Alternatively, if therapists are not grounded and present, then they can be thrown off or dysregulated when their clients are emotionally overwhelmed. Polyvagal Theory helps to understand how this happens, and its insights have direct application to the clinical setting.

Indicators of Safety: Bidirectional Communication Within and Between People

Polyvagal Theory describes the evolution of the mammalian nervous system to include a third wing beyond the fundamental fight-or-flight and immobilization responses, called the *social engagement system* (Porges, 1995, 1998, 2003, 2011). The fight-or-flight portion of the autonomic nervous system depends on sympathetic activation. Immobilization and social engagement are parasympathetic responses, but their divergent outcomes depend in part on the portions of vagus nerve they activate (Porges, 2011). The ventral (or "smart vagus") supports face-to-face communication, and helps to inhibit sympathetic excitation (which triggers fight-or-flight behavior) so that emotions are well regulated. Having the ventral vagus activated supports having positive social interactions.

Polyvagal Theory further explains that potent cues of safety or danger outside of conscious awareness are detected by cortical areas, and can shift physiological states (Geller & Porges, 2014; Porges, 2011). Shifting physiological states are communicated from visceral organs to the brain via the vagus. These cues are also communicated from the regions to which the vagus nerve has projections—such as the striated muscles of the face and head (Porges, 2011). Because of these connections to the face and running all the way down to the subdiaphragmatic region, the way that people use their faces, voices, breathing, and bodies can say a lot about how calm or activated they are feeling in a given moment. When vocal prosody (pitch, rhythm, and timbre of voice) is rich, the body is open, and the face is at ease, a general state of calmness is being experienced, and this supports spontaneous social engagement behaviors (Geller & Porges, 2014).

Not only is there a bidirectional communication between brain (i.e., central nervous system) and body—there is also a bidirectional communication between the nervous systems of people who are in relationship with each other (Cozolino, 2006; Porges, 2011; Schore, 2012; Siegel, 2010). This communication is not necessarily in conscious awareness; it is more of a "gut" (visceral) sense that informs us of how we are feeling in an interaction. In this way, safety and unsafety are experienced and mediated by physiological states (for example, bodily felt agitation when unsafe, internal sense of ease when feeling

safe). This process of automatic evaluation of safety or risk in relationship is called *neuroception* in Polyvagal Theory (Porges, 2003).

Emotional dysregulation and physiological reactivity to others can develop in response to trauma or misattuned relationships. Yet current safe relationships can heal and exercise the neural muscles of safety, such as with a person who is present, caring, and in sync. The bidirectional nature of the social engagement system means that positive interactions between therapists and their clients can influence their vagal function to dampen stress-related physiological states, and support growth and restoration (Geller & Porges, 2014).

Promoting Regulation and Growth in the Therapeutic Relationship

A helpful way of looking at how to promote regulation in relationship is through attuned right-brain-to-right-brain communication (Schore, 2009, 2012; Quillman, 2012). In relationship, while there is often a verbal narrative that is being communicated (which is primarily left-brain activity), there is an additional nonverbal way that emotions and experiences are expressed. *Right brain to right brain* refers to these nonverbal ways that promote regulation, as highlighted in Polyvagal Theory, such as body posture, vocal expressions, facial expressions, and gestures.

In interactions with therapeutic presence, therapists listen with their bodies and senses (right brain) to what is expressed via the bodies of their clients (their right brain's communication). Informed by Polyvagal Theory, it is important that therapists are actively using nonverbal communication to show that they are listening, connected, and want to understand their clients and help them to feel safe.

Polyvagal Theory proposes that cues of safety or danger are communicated interpersonally from the upper part of the face, eye contact, prosody of voice, and body posture. The therapeutic encounter is filled with nonverbal messages that are outside the realm of our awareness, yet clients are interpreting their therapists' way of relating with them in a physiological or gut-sense way. The neuroception of safety is detectable by physiological markers.

Through therapists' warmth and prosody of voice, soft eye contact, open body posture, and receptive and accepting stance, clients can receive their calm and safe therapists and feel safer to open and engage. The work of therapy is significantly enhanced. Attuning to the moment-to-moment encounter allows therapists to recognize (e.g., in the facial expressions of their clients) when their client is (a) feeling open and ready for an intervention, and it is appropriate to proceed with such; or (b) not feeling safe, and therefore it is necessary to pause and not proceed with an intervention and instead focus on enhancing safe contact in the relationship. Therapeutic presence also helps

therapists regulate their own reactivity so they can maintain their ventral vagal activation within themselves, and authentic connection with clients.

Research suggests that a safe therapeutic environment facilitates the development of new neural pathways for the client, which in turn contributes to the repair of attachment injuries and provides the positive social interactions that are essential for health and growth for the client (Allison & Rossouw, 2013). So when clients feel that their therapist is present, open, and centered, and willing to hear, feel, and hold their pain with a caring and grounded presence, it can actually deactivate the trauma response and over time give their brains an experience of safety that eventually extends to other relationships. This helps to strengthen clients' ventral vagal systems, and creates flexibility in their vagal brakes (Porges et al., 1996) so they can open and close with greater fluidity and control. Therapists' presence can both reduce distress and provide a soothing comfort that changes the structure of the brain to feel safe, grow, and restore healthy functioning. So how can therapists activate presence and encounter their clients in session in a way that maximizes safety and healing?

The Process of Presence in Session

The process of presence reflects what therapists do when they are present with clients to activate that state of safety and connection as well as facilitate therapeutic growth. This is not about actual techniques but about how therapists are with their clients. Cultivating presence in therapeutic relationships begins with the therapists, so that they enter into the therapy encounter feeling grounded, open, and receptive.

Starting With Cultivating Presence in the Therapist

An array of practices to cultivate therapists' presence in daily life can be found in the book *A Practical Guide to Cultivating Therapeutic Presence* (Geller, 2017) and from suggestions below. Diaphragmatic breathing with long exhalations, relaxation practices, yoga, chanting, music, mindfulness, grounding or centering exercises, and deep listening all help to activate presence. Polyvagal Theory affirms these ancient practices, as they soften sympathetic activation and strengthen the newer vagal circuit through play, positive activity, and vocal stimulation. Cultivating presence within therapists helps them to confront painful or difficult events (such as clients' suffering or personal hardship) with less reactivity, and helps build the autonomic and neural structure to be present with their clients.

Preparing Prior to Session

Prior to session, therapists need to cultivate presence so they are ready to meet their clients as a safe other, ready to receive them without judgment. This allows their nervous systems to meet their clients in a state of calm. This starts before therapists even arrive at the office. It includes allowing time to open up the space, gather thoughts, get nourished, and center inside, rather then checking messages, texts, and e-mails.

Setting an intention for presence at the start of a day or session can be powerful and simple. Standing in stillness, feeling the soles of the feet as they touch the floor, and taking a few deep and slow breaths can facilitate this process. Words can also support the intention for presence, such as "Letting go of stress" with your exhale, and "Arriving into now" on your inhale. Therapists can engage in a tree pose or a centering practice to activate a sense of presence in the body. It also helps to take a brief time between clients, such as taking three full breaths to let go of the last contact and open to the next meeting in this new moment.

The Process of Presence Within a Session

Throughout the session, therapists are going through a reciprocal process to optimize their presence in relationship with their clients: They are (1) receiving from the client (2) attuning within to what is being received, and (3) allowing this blend of experiences to inform their understanding and response. This includes tracking moment to moment their clients' experience and the relationship, as well as assessing when clients feel safe or unsafe and adjusting when needed to promote contact and safety.

RECEIVING, READING, AND ATTUNING WITH CLIENTS

Once the session begins, present therapists are receiving their clients, actively listening to all of their ways of expressing, and attuning with them to activate an experience of feeling heard, felt, and seen. This includes attending to verbal and nonverbal expressions as therapists offer gateways to understanding their clients' experience.

Attuning to facial expressions and eye gaze is helpful from a Polyvagal perspective to reading the state of the other. For example, eyes that are widened may suggest fear and unsafety. A soft eye gaze may indicate that the client feels safe and at ease. Leaning on Polyvagal principles, a shared gaze between a warm and present therapist and the client can evoke a sense of safety and regulation.

Polyvagal Theory sheds light on why nonverbal communication like vocal prosody, body posture, and facial expressions are consistently such powerful conveyers of an individual's physiological and psychological state. We are all equipped with the integrated system that Polyvagal Theory describes, connecting cues in our environment to our internal sense of safety or unsafety. These manifest in how we use our faces, voices, breathing, and body. But the physiological changes that give us an internal sense of security or dis-ease are mediated by features in social interactions that are, in general, outside the realm of our awareness. An interaction with another (i.e., with client or therapist) can trigger a broad range of observable bodily changes; while we may be unaware of them in ourselves, we can and do interpret them in each other.

Why is this important for therapeutic presence? Think of a situation, for example, when you (or imagine a therapist) had a momentary lapse in attention when listening to a client. A tightness in the edges of the client's eyes or a distant gaze would inform the therapist that their client has noticed and is having a reaction—they might feel unsafe or disconnected. The momentary lapse in attention can be experienced as rejecting, which triggered physiological changes of unsafety, as revealed through the client's face.

The neuroception of unsafety can be expressed in other ways in the therapeutic relationship. For example, a therapist who looks down in reflection could be perceived as rejecting what the client is saying; a therapist who raises her arm to reach for a glass of water could be perceived as preparing to strike. It is helpful for therapists to develop the ability to attune with their clients so they can read the cues to help guide their responses.

PRACTICE FOR ATTUNING WITH CLIENTS: MIRRORING GESTURES

Attuning to others can be developed with practice, such as with this two-person exercise (Geller, 2017). Person A is asked to connect to a particular feeling. Then person A is guided to create different movements, facial expressions, and gestures reflecting that feeling. Person B is invited to mirror or imitate these gestures, speech patterns, or movements. Person B can express what he feels as he mirrors person A's experience to see if it is similar. Partners can then switch roles and repeat the steps above. Debriefing helps to make sense of what is being experienced in mirroring another and reflect on the accuracy.

Attuning Inwardly

As therapists receive their clients' moment-to-moment experience, they are also attuning with their selves to understand what is being received. This inner

attunement with acceptance and awareness is a part of keeping the ventral vagus online in therapists and remaining a grounding presence for clients. In this state of sensing without reactivity, the therapist's body acts as an antenna or a tuning fork. Therapists use their bodies to detect states of autonomic resonance with their clients in order to sense and listen to clients' experience, and then listening internally to determine how to respond. Therapists can also tune in to how they may not be present (i.e., distraction), and invite their attention back to the moment. Scanning one's inner experience can occur in a split second, once the ability to be present strengthens through practice.

There are multiple things that therapists can turn their attention to internally as they read and resonate with their clients. Emotions, body sensations, breathing patterns, images, and insights are all venues for therapists to attend to within themselves. For example, a quiver in the therapist's chest or moisture in their eyes may inform them that his client is feeling sad. An accelerated heart rate or a tight, anxious feeling may be an autonomic resonance with their client's anxiety. Attending to breathing patterns also provides cues of what is occurring in the session. A therapist's restricted breath may reflect their own absence or disconnection, or it is a resonance with their client indicating that the client is unsafe or emotionally disconnected. When therapists are present, the body acts as an empathic indicator of clients' experience, which may in part be a function of the bidirectional communication inherent in Polyvagal Theory.

Therapeutic presence requires that therapists have an embodied sense of self-awareness and capacity for interoceptive (sensing inwardly) awareness. Embodied self-awareness is the ability to pay attention to ourselves, including our experience, bodily sensations, movements, and inner sensory world in the present moment (Fogel, 2009). This capacity is a key source of information when therapists are in bidirectional attunement with their clients.

PRACTICE FOR ATTUNING TO YOUR OWN RHYTHM: MINDFUL DRUMMING

Mindful drumming can heighten interoceptive capacities, helping attune to your internal bodily terrain, first by noticing your bodily rhythm, and then by externalizing those rhythms through movement and sound (Geller, 2017). Drumming also helps to release stress and tension by activating the vagal brake, quieting the mind as the ventral vagal is optimized, and strengthening the rhythmic alignment and communication between brain and body.

Slowing down external rhythm can encourage bodily rhythms to slow down in sync with your playing, which creates a calmer and more stable feeling inside. Mindful drumming is a wonderful integration practice too. Coordinating both right and left hands with the heart, breath, and bodily rhythms helps to syncopate right-brain and left-brain hemispheric activity. This sup-

ports balance and mental acuity, enhancing your focus and attention. The following practice can be done on a hand drum (e.g., djembe or ashiko) or on the top of a desk or on your lap. An empty large jug of water turned upside down can serve as a useful rhythm tool as well.

- Place your nondominant hand on your heart, neck, or wrist to sense your heartbeat or pulse, trying to listen to the rhythm of heart or pulse as it is right now. Notice if it is fast or slow, deep or shallow.
- 2. With your dominant hand, play the rhythm of your heart or pulse with a soft tap on your instrument.
- 3. When that feels comfortable and natural, tune in to the rhythm of your breath.
- 4. Play the rhythm of your breath with your nondominant hand by tapping at the beginning of each inhale and each exhale. Notice the difference in the rhythm of breath from heart or pulse, and how these rhythms relate with each other.
- 5. Continue playing the rhythm of your heart and breath for 10–15 minutes, at times inviting yourself to slow down and continue the same rhythms but at a slower pace. Notice your experience as your external rhythms slow.
- 6. As you close this practice, rest with your hands on your instrument and rest in silence, sensing what is true in your experience and bodily rhythms.

Responding and Promoting Contact

We have been exploring the first two parts of the cyclical process of therapeutic presence. The third reflects extending and maintaining contact with clients, such as with an empathic understanding or silent gesture. When therapists are attuning to the nonverbal elements of clients' experience, they are supporting an autonomic attunement with clients that allows them to respond with ways to calm and promote safety as needed, and strengthen the connection and the therapeutic process. For example, if therapists feel tension and sense it is an autonomic resonance with their clients, they can genuinely reflect that and ask clients what is going on for them emotionally (assuming they do so in a way that expresses their ventral vagal connection through vocal prosody and soft facial features).

In the therapeutic presence process, therapists use the cues they receive from reading clients and within themselves to guide their responses. These cues can inform whether they need to slow down and reestablish safety and connection, or if it is okay to proceed to an intervention. The insights of Polyvagal Theory allow therapists to assess their clients' sense of safety through nonverbal communication. In the clinical encounter, therapists can notice clients' state of safety or unsafety by recognizing their physiological expressions—for example, are their eyes downcast? Is their face relaxed? And importantly, therapists can then use physiological modes of expressing and connecting to induce feelings of safety and ease in the clients.

So how, exactly, can therapists use this information as a basis for responding and communicating therapeutic presence? If therapists register that their clients are feeling safe, then it is an optimal time to proceed with facilitation of the therapeutic process by engaging in an intervention. If they perceive that clients are unsafe, then they may want to pause and inquire what is going on for them, causing the unease. The possibilities are that the client is feeling scared, resistant, or disconnected, or perhaps that the therapist is not present. Therapists can enhance safety through offering practices grounded in Polyvagal Theory, such as entraining their breathing with that of their clients, inviting long exhalations, a kind and caring look, or leaning forward (Geller, 2017). Clients can also benefit in and out of session from neural exercises that promote experiences of inner safety, such as deep breathing or bodily relaxation practices like qigong or yoga.

ENTRAINMENT IN BODY, BRAIN, AND RELATIONSHIPS

Entrainment is based on a physics phenomenon of resonance. Independent rhythms (or oscillating bodies) join in synchronized movement as one speeds up while the other slows down. For example, the second hands of clocks will eventually move in unison when positioned next to each other, independent of any intervention. Entrainment helps us understand the psychological, physiological, and neuronal synchrony in therapeutic presence that promote regulation and growth in therapeutic relationships.

Purposely entraining our body movements with someone else's can increase our sense of unity (Geller, 2017). Like the hands of the clock, bodies tend to naturally fall into these rhythms in relationship as well (Marsh, Richardson, & Schmidt, 2009). In the therapy context, intending for presence can invite this synchrony between brain and body rhythms, along with a positive sense of interpersonal connection (Geller, 2017).

When therapists use their presence to autonomically attune and resonate with clients' physiology and experience, synchrony emerges as their bodies come into rhythm with each other. Their heads move in temporal coordination, and vocal rhythms are reflective of each other (Ramseyer & Tschacher, 2014; Imel et al., 2014). Coming into sync on a physiological level builds a sense of trust and safety. Movement synchrony at the start of psychotherapy

has predicted client ratings of the alliance at the end of each session, as well as symptom reduction (Ramseyer & Tschacher, 2011).

Synchrony between the bodies of the therapist and client can emerge naturally in therapeutic presence and in moments of deep relating. For example, research suggests that people in dialogue who feel connected may begin to breathe in sync, and those engaged in joint tasks requiring interpersonal trust show heart rate synchrony (Warner, 1996; McFarland, 2001; Mitkidis, McGraw, Roepstorff, & Wallot, 2015; Koole & Tschacher, 2016). The more partners expected the other person to show reciprocity in the joint task, the more synchronous their heart rate rhythms became. This research suggests that trust builds synchrony and synchrony builds trust. Synchronization of physiological rhythms could be considered a "proxy for trust-building process" (Mitkidis et al., 2015, p. 105), a process that lies at the core of the therapeutic alliance. Therapists can use their ventral vagal, attuned presence to intentionally express to their clients that they are present and safe.

Practices and Tools for Promoting Contact

The following suggestions fine-tune how therapists can promote contact and express presence nonverbally.

USING NONVERBAL CUES TO PROMOTE CONTACT AND SAFETY WITH AND FOR CLIENTS

Therapists can use nonverbal expressions to promote contact with clients that inspires a neurophysiological experience of safety (Geller, 2017), including:

- prosody (rhythm) in voice;
- soft facial expression;
- soft and direct eye gaze;
- open and forward-leaning body posture;
- visual focus and attention attuned to clients

Research supports these nonverbal elements of safety in the clinical encounter. For example, direct and attentive eye gaze results in clients feeling present and empathically attuned to (Marci & Orr, 2006; Marci, Ham, Moran, & Orr, 2007). Clients' and therapists' physiological arousal was measured as in sync when therapists' eye gaze was attentive and in contact with their clients (Marci et al., 2007). Alternatively, clinicians who shifted their eyes and attention away from the clients left clients feeling distanced, less empathically attuned to, and in discord or out of sync with their clinicians. Clients can sense when their therapists maintain or lose their presence and attention.

It is helpful if therapists bring their attention in interactions with their clients to these elements. If they notice a tension in the body, they can adjust and soften to a more present-centered focus, to help ensure nonverbally that clients feel safe with them.

ENTRAINMENT BREATHING

Therapists can intentionally mirror their breath with their clients as a way to read their experience and to promote connection and contact. Entrainment breathing communicates to clients that they are not alone in their experience, promoting a neuroception of safety and activating the social engagement system (Geller & Porges, 2014).

Entrainment breathing is when therapists mirror the clients' breathing rhythm. It creates a neurophysiological synchronization of rhythm in the brain and body between people (Cozolino, 2006, Siegel, 2010, Porges, 2011, 2014). This both supports empathic attunement with clients' emotional experience and invites clients to feel safe as their ventral vagal system comes online and in rhythm with their therapists' calm and grounded presence.

LONG EXHALATIONS TO ACTIVATE A CALM PRESENCE

Long exhalations are efficient ways of turning off therapists' (and clients') sympathetic nervous systems and vagal pathways of defense, inviting a sense of calm, openness, and trust (Geller & Porges, 2014; Porges, 2011). In contrast, longer inhalations with shorter exhalations can increase tension, yet can also increase state of alertness in the body if greater wakefulness and energy is needed. Through long exhalations, therapists can invite their own bodies into presence and invite clients to attune to their therapists' calming presence. It is also a helpful practice for clients to do directly to activate greater calm and safety.

Therapeutic Relational Presence

I described in this chapter a process where the therapists are present with their clients that activates an experience of presence and safety in clients and strengthens the therapeutic relationship. This process of relating can deepen into profound moments of relating, termed therapeutic relational presence (or relational presence; Geller, 2017; Geller & Greenberg, 2012). As both people become present with each other, a portal opens up to an "I—Thou" encounter that is larger than each individual (Buber, 1958).

This transformative state engages a triad of relationships between therapists, clients, and a larger sense of spirituality. Therapists experience a sensitivity and access to the inner world of their clients, as if they are sharing the same space. There is an interpersonal synchrony in these moments, which unfolds

to a form of intersubjective consciousness (Stern, 2004). The consciousness of one overlaps with and partially includes the consciousness of the other, so that when one person has an experience, it activates almost the same experience in the other person too (Geller, 2017).

How Does Relational Presence Create Change?

Neuroscience research, such as the discovery of mirror neurons at the end of last century, may illuminate what happens in relational presence (Ferrari & Rizzolatti, 2014; Gazzola, Aziz-Zadeh, & Keysers, 2006; Glenberg, 2010; Siegel, 2010). In shared moments of presence, therapists' mirror neurons and adaptive oscillators activate in relation to clients' expressed experience, which manifests in an experience of knowing the other through direct engagement. Like two people dancing together, there is a reading and a sharing of experience. This shared neural experience is a form of interbrain synchrony (Behrends, Müller, & Dziobek, 2012; Llobera et al., 2016), which can deepen into relational presence.

Feeling attuned to and deeply connected with their therapists can activate clients' social engagement systems (ventral vagal activation), reducing defenses and evoking a neuroception of safety. The hormone oxytocin (Carter, 2014; Porges, 1998) may also be released and contribute to a loving therapeutic relationship infused with healing.

Cultivating Relational Presence: Therapeutic Rhythm and Mindfulness

Therapeutic Rhythm and Mindfulness $(TRM^{TM})^2$ combines evidence-based practices of group drumming, mindfulness, visualization, and emotion-focused awareness (Geller, 2009, 2010, 2017) into a unified program that offers multiple benefits. It is designed to release positive emotions such as joy, vitality, and social connectedness, while reducing stress, tension, anxiety, and depression. It provides an opportunity to build relationships and to feel a sense of belonging in community with other therapists.

The mechanisms in TRM likely exercise therapists' social engagement systems through the playfulness of drumming, rhythmic movement, breath awareness, and group entrainment. The neural pathways can be strengthened that support social connection, growth, and healing (S. W. Porges, personal communication, 2014). TRM is an efficient and positive practice to cultivate relational presence, as it enhances intrapersonal and interpersonal connection as well as

² http://rhythmandmindfulness.com/

a connection with something larger. Group drumming helps therapists become more synchronized with their own rhythms as well as the rhythms of others, as it involves an improvisational emergent way of communicating with rhythm. Research suggests that improvisational music played in relationship involves a brain-phase-locking process within a person and between people, increasing brain coherence in self and brain synchronization in relationship (Lindenberger, Li, Gruber, & Müller, 2009; Sänger, Müller, & Lindenberger, 2012). Group drumming has been shown to increase brain hemispheric synchronization and social connectedness (Winkelman, 2003), manifesting in increasing connectedness with the self and others, while promoting a larger state of group connection.

Practice: Relational Mindfulness With Rhythm (Geller, 2017)

Drumming practices are particularly powerful in relationship (dyad or group), as the experience of entrainment quickly occurs. Entrainment promotes a subjective sense of synchrony, supporting therapists to attune to clients' experience without getting caught up in words. Drumming also promotes synchronicity of left-brain and right-brain hemispheres, eliciting a clearer sense of focus, concentration, and inner harmony (Winkelman, 2003).

This practice can be done with another person or in a larger group. It helps to use a small percussion instrument, such as a hand or tongue drum or shakers.

- 1. Sit across from your partner.
- 2. Each of you can close your eyes and attune to your breath.
- 3. Then open your eyes, staying connected to your own rhythm of breathing.
- 4. Extend awareness to the rhythm of your partner's breathing, perhaps noticing the rise and fall of your partner's belly or chest.
- 5. After a few moments of breath entrainment, pick up your instrument.
- 6. Begin to play a gentle rhythm in relation, allowing a rhythm of conversation to emerge between the two of you—allow space for listening and expressing/playing.
- 7. Notice what you feel inside—play your present moment experience of being in relationship with your partner.
- 8. After 5–10 minutes of playing, close your eyes and begin to soften the volume of your rhythm back in attunement with your breath, until it is barely perceptible.
- 9. Return awareness to your breath.
- 10. When this feels complete, open your eyes and thank your partner for this practice.

Final Remarks: The Fertile Ground of the Present Moment

We are interconnected beings, resonating moment to moment on the level of dialogue and in our bodies, emotions, and brains. This sense of connection exercises the social engagement system defined by Polyvagal Theory (Porges, 2011), releasing the barriers to relationship, eliciting safety, and promoting growth. In psychotherapy, therapists' attunement to the fertile ground of the present moment, and to both the visible and invisible expressions of a client's experience, allows clients to feel deeply felt, seen, and understood, activating a sense of safety in relationship.

Polyvagal Theory helps to explain the neural mechanisms of how presence evokes safety and growth. The bidirectional communication of brains and bodies allows therapists with intention for presence to serve as regulators in relationship with their clients. An understanding of how therapists affect their clients' neurophysiology helps them to be intentional in using nonverbal means to attune with their clients in a way that facilitates a positive and effective therapeutic relationship.

As a foundation to optimal therapeutic effectiveness, I propose that therapeutic presence grounded in Polyvagal principles be provided as an essential part of psychotherapy training. Understanding the components and functioning of the mammalian nervous system gives the therapist a whole new set of tools to use in establishing and communicating presence with and for their clients. The larger sense of interconnection that ensues from this foundational state invites a healthy state for both therapists and clients.

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