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Science catching up: Experiential family therapy and neuroscience

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Abstract

Experiential family therapy, pioneered by Virginia Satir and Carl Whitaker, centered the experience of the "here and now," human authenticity and congruent communication in the work of psychotherapy. Their approach—often considered atypical and atheoretical—was popular for a while, then relegated as behavioral and cognitive theories developed. However, with the proliferation of modern neuroscience, particularly the field of Interpersonal Neurobiology, therapists can see neuroscience research providing hard data and respective frameworks delineating the underlying architecture for understanding the connections between the mind, emotions, behavior, and relationships. This article highlights the neurobiological mechanisms that explain why classic experiential family therapy was so powerful. The main tenets of both Carl Whitaker's symbolic experiential family therapy as well as Virginia Satir's model for peoplemaking are illuminated through the postulates and scientific findings of interpersonal neurobiology.

KEYWORDS

Carl Whitaker, experiential family therapy, interpersonal neurobiology, neuroscience, Virginia Satir

INTRODUCTION

Virginia Satir and Carl Whitaker were pioneers in family therapy and bold, inspirational leaders of the experiential branch. They were champions of the here-and-now and seemed unperturbed by much criticism they received for their atypical and atheoretical work with families. Their work in part emerged from the humanist faction of psychiatry, centered on immediacy and discovered through encounter groups, Gestalt questioning, and a focus on individual and collective emotionality. However, perhaps even more saliently, their work was driven by their desire to be fully themselves and encourage their clients to do the same. Carl Whitaker described the impetus of his work stemming from his own experience "as a simple schizophrenic in high school" who gave up his obstetrition training to become a psychiatrist because he "fell in love with schizophrenia" (Whitaker, 2000, p. 7). Virginia Satir's work went well beyond the therapy room as she made it her goal to "raise the consciousness of each individual regarding personal esteem and world peace on our planet [which] became the driving force in her life. Her goal was to promote both individual and systemic self-actualization" (Haber, 2011, p. 73). They believed sincerely in their work, and it was immensely popular and influential for a while.

Experiential family therapy lost momentum as the culture of the 1960s passed and their work began to be described as a misfit for family therapy with its focus on individual expression and perhaps simply a fad of the time (Nichols & Davis, 2017). With the rise of behavioral and cognitive therapies and solution-focused approaches, experiential techniques were largely held at bay for some time. However, small corners of the therapy community continued paying attention to the power of experience through psychodrama and emerging models like internal family system (IFS) and emotion-focused therapy (EFT).

Today, experiential work has regained momentum in part due to the proliferation of neuroscience research providing hard data and respective frameworks to underscore the connections between the mind, emotions, behavior, and relationships. However, experiential family therapy as described by Virginia Satir and Carl Whitaker, remains in large part sequestered to the margin of discussion on experiential therapy theory and techniques despite the congruence between their approaches and extant neuroscience findings.

This article provides an invitation to rethink classic experiential family therapy through the lens of modern neuroscience to highlight the modern relevance of the clinical approach pioneered by Virginia Satir and Carl Whitaker. Roberts & Chafin (2020) recently published an article applying the symbolic-experiential model of psychotherapy to neuroscience. Their article offers a novel look at Carl Whitaker's work and the role of unconscious memory in symbolic-experiential psychotherapy. The present article provides wider scope to examine the alignment of neuroscience and experiential family therapy by including the work of Carl Whitaker as well as Virginia Satir. Additionally, the present article focuses on additional neuroscience tenets beyond what was discussed in Roberts & Chafin's article which heavily focused on implicit and explicit memory. Thus, the current article provides a unique contribution to the present topic.

While a full overview of behavioral neuroscience is well beyond the scope of this article, a brief overview of interpersonal neurobiology (IPNB) is provided. This portion of neuroscience research was chosen due to its relevance, robust library of research, and its previous applications to psychotherapy. IPNB has culled together a synthesis of neuroscience and psychological literature rooted in complex systems and applied it to the interpersonal sphere. Thus, it provides a particularly germane framework for the purpose of this article. Following a brief introduction to IPNB, this article will juxtapose and illuminate the main tenets of Virginia and

Whitaker's work through the postulates and scientific findings of IPNB. Finally, this article will discuss the unique way neuroscience supports the propositions of experiential family therapy in contrast to some other therapy modalities, offering the field of family therapy an opportunity to reconsider this approach as a distinctively useful frame for guiding clients toward well-being. In short, this article asserts that experiential family therapy was not a product of its time; instead, Virginia Satir and Carl Whitaker were very much ahead of their time.

IPNB

IPNB provides a multidisciplinary view of the mind and mental well-being through the consilience of traditionally independent fields such as physics, anthropology, psychology, neuroscience, genetics, attachment, as well as contemplative wisdoms. With a comprehensive and coherent framework for outlining the definition, structure, and function of the brain and mind and how these entities are shaped by experiences, especially human relationships, IPNB provides the connecting architecture for why and how therapeutic relationships foster change and healing (Siegel, 2012a, 2012b). Further, IPNB suggests a triangle of well-being made up of three fundamental components of human life: brain, mind, and relationships. IPNB has a rich library of literature, and while a detailed summary is well beyond the scope of this article (see *Pocket Guide to Interpersonal Neurobiology: An Integrative Handbook of the Mind* or *Being a Brain-Wise Therapist: A Practical Guide to Interpersonal Neurobiology* for more in-depth and practical writings on IPNB), a brief overview of key concepts and their relation to psychotherapy and the process of change is presented.

Key concepts

Mind

One key benefit of IPNB is that it *provides* a working definition of the mind. Mental health professionals have long been touting the work of helping individuals and families cultivate mental health. However, this field has primarily worked from a pathological base while the articulation of what a healthy mind is and what healthy human relationships look like has been less attended to. IPNB brings an important question to the table: what is a healthy mind, and what defines mental well-being? The definition of the mind offered by IPNB suggests that our mind cannot be reduced to the neural activity within the brain, but instead is “an emergent, self-organizing process that shapes how energy and information move” (Siegel, 2006, p. 6). In addition to providing a definition for the mind, IPNB draws heavily upon research to look at how the mind develops across the lifespan. IPNB looks specifically at the ways the brain is set up for development and how relationships influence the genetically hard-wired processes. The process of early attachment is looked at as an especially relevant phenomenon that has a significant effect on the development and subsequent functioning of the brain.

Integration

Integration is when individualized parts are linked together (Siegel, 2012a, 2012b). IPNB describes neural integration as specialized parts of the brain being connected in a way that promotes the

flexible and harmonious flow of energy and information throughout all parts of the brain (Siegel, 2010). Within the concept of integration, IPNB designates nine domains of integration: conscious, vertical, bilateral, memory, narrative, state, temporal, interpersonal, and transpiration integration (Siegel, 2006). The content of each of these domains of integration varies, but the processes are isomorphic. For example, bilateral integration can be seen when the left hemisphere with its linear and logical mode of processing is linked with the right hemisphere's holistic and visuospatial proficiency allowing energy and information to flow through both modes of processing. Interpersonal integration can be seen when one person's mirror neurons "resonate" with another person's mirror neurons creating an interpersonal connection based on attunement and understanding which fosters neural and social change (Siegel, 2006, p. 254). No matter the sphere, the process is the same: the linking together of separate parts. Integration is at the heart of mental well-being as it leads to a "state of functioning of the whole" and is characterized by several components that Daniel Siegel describes through the acronym FACES: "Flexible, Adaptive, Coherent, Energized, and Stable" (2006, p. 249). IPNB asserts that integration fosters freedom and opportunity at both a neural and relational level. Consequently, it has been emphasized that therapists "can approach each person with two questions: Where has integration broken down? What can happen in the interpersonal system and in the individual mind to encourage integration to emerge?" (Badenoch, 2008, p. 51).

Attunement

Attunement is requisite in the assessment of integration. Fundamentally, attunement is "how we focus our attention on others and take their essence into our own inner world" (Siegel, 2010, p. 34). This concept holds an objective and subjective realm. The physical side of attunement is the perception of information and signals, primarily sent in nonverbal communication by the brain's right hemisphere through body posture, eye contact, affect, tone of voice, and the timing and intensity of responses (Siegel, 2010). All of these physical signs can be perceived when we focus our attention on another person. The subjective realm of attunement is an "authentic sense of connection" and taking in the presence and essence of another person at that moment, leaving that person with a sense of "feeling felt" (Siegel, 2010, p. 34). Attunement requires an open state of presence that has transcended (to the best of our abilities) our brain's desire to anticipate our lives based on previous experiences (Siegel, 2010). This process of being open by critically examining our contextual experiences is no easy task and is carefully explored in *The Mindful Therapist* by Daniel Siegel. Presence is defined in IPNB as "a state of being open" while attunement "requires presence but is a process of focused attention and clear perception" (Siegel, 2010, p. 35).

Memory

IPNB emphasizes in detail the important role of memory processes and narratives in the work of psychotherapy. In the broadest way, memory can be categorized into two types: implicit and explicit (Cozolino, 2010; Siegel, 2007). The primary difference between these types of memory is the way they are processed, encoded, and subsequently "created" in the brain. Explicit memory involves conscious learning and when invoked creates a consciousness of remembering. In contrast, implicit memories remain below the conscious level and are simply experienced (Cozolino, 2010, p. 77; Siegel, 2007). Traumatic events are often encoded as implicit memories which makes this concept especially salient for clients who have experienced traumatic stress

creating a symptomatic legacy explained through the concept of posttraumatic stress disorder (PTSD). In PTSD, one continues to experience the traumatic event through unconscious implicit memory. From an IPNB perspective, it is the role of therapy to support the neural rewiring of an implicit memory into explicit memory. This process moves a client from a disintegrated state into an integrated state. This transformation is possible only due to the neuroplasticity of the brain and is evoked through experience.

Neuroplasticity

Neuroplasticity is the "ability of the brain to change its structure in response to experience" (Siegel, 2012a, 2012b). Therapy capitalizes on the principles of neuroplasticity by promoting specific neural changes. Some researchers have asserted that "clinicians can therefore be seen as neuroarchitects, sculpting the flow of energy and information, both within themselves and between others, to rewire the brain toward a state of integration" (Baldini et al., 2014, p. 218). However, to do this well, the therapist is required to have a strong, stable, flexible, and open presence.

With the key concepts of mind, integration, attunement, memory, and neuroplasticity, IPNB offers a framework for understanding how energy and information flows through the brain, nervous system, mind, and relationships. Siegel suggests that "energy and information move through the nervous system (brain as mechanism of flow)... is monitored and modified (mind as regulation)... and is communicated among people (relationships as sharing)" (Siegel, 2010, p. 122). These three components are what IPNB calls the triangle of well-being. As a result, IPNB places an emphasis on the ability for people to perceive this flow of energy and information through mind, brain and relationships; this is called triception and becomes a critical mechanism for therapists to support clients moving toward well-being (Siegel, 2010).

IPNB emphasizes the way relationships can both foster disintegration *and* integration. Put another way, people experience their worst pain and also their greatest health in the context of relationships. In this manner, the therapist—with greater weight than technique—is a key tool in the process of ushering individuals and families toward well-being. Thus, as the therapist fosters their own integration (well-being), it is much more likely that they will engage with their clients in a way that promotes individual and collective well-being in the therapy room. This, however, goes well beyond the therapeutic alliance. The therapeutic alliance is the connective prerequisite for therapists to use themselves in intentional ways that shift clients toward integration. While simply having a strong alliance could increase the well-being of the client (which likely is the mechanism behind the common factors research (Wampold, 2010)), when combined with intentional and targeted new experiences, momentum toward well-being is gained. IPNB provides guidance on what interventions will influence integration and what techniques could strengthen patterns of disintegration.

A NEUROSCIENCE VIEW OF EXPERIENTIAL FAMILY THERAPY

> In psychotherapy, we struggle endlessly with the fact that most people live fragmented lives. They are preoccupied with the horrors and the glories of the past or

> they are preoccupied with the horrors and the glories of the future. They don't live; they just use their left brain to endlessly think about living. This kind of meta-living is just like meta-communication—the disease that all psychotherapists are suffering from. We spend our lives talking about talking and many times never say anything. Even worse, if we're not very careful, meta-communicating contaminates the rest of our living and the rest of our talking (Whitaker, 2000, p. 9).

Though neuroscience was barely budding at the time Carl Whitaker and Virginia Satir pioneered experiential family therapy, they both explicitly addressed the human brain. They knew little about the complicated functions of the brain because neuroscience had yet to reveal this information, nevertheless, they knew it played a critical role in the disparate way humans behave, communicate, and experience their lives. The brain certainly was not a central theme in their work, however, the main tenents of Virginia and Carl's therapeutic process are supported by the key findings of IPNB.

Carl Whitaker's symbolic experiential family therapy

Carl Whitaker was known for resisting the delineation of theory and techniques guiding his psychotherapy process. He believed that effective therapy was only possible once the therapist was able to become personally involved with the family. Whitaker said, "The process of family therapy revolves around people and relationships, not intervention techniques or theoretical abstractions. The therapist, as a human being, is pivotal" (Whitaker & Bumberry, 1988, p. 18). After Whitaker's death, Maurizio Andolfi reflected, "He taught us more about life than about techniques. He taught us about the search for ourselves and our own spiritual essence, through the experience of suffering and solitude" (Whitaker, 1996, p. 318). While his genuine performance of therapy has not been subsumed within a conceptual framework, a number of core component of his work have been frequently discussed: (a) personal integrity of the therapist; (b) spontaneity, creativity, and play; and (c) confrontation, confusion, challenge, and growth (see Whitaker & Bumberry, 1988). The relevant neuroscience findings for each of these core components follow.

Personal integrity of the therapist

Whitaker was extremely interested in the person of the therapist. He suggested, "Theory and technique come alive and take form only when filtered through the personhood of a therapist" (Whitaker & Bumberry, 1988, p. 18). He believed that people were first and foremost, human beings, and must retain their humanity and personhood to allow psychotherapy to be a truly human encounter (Whitaker & Bumberry, 1988). Neuroscience research is consistent with this notion and has demonstrated that the presence of the therapist and the connection between the therapist and client is the most crucial factor in the therapeutic process (Siegel, 2010). This rests on the concept of neuroplasticity in which "clinical practice enhances the therapist–client relationships, and harnesses specific neural changes that can occur with intentional interaction" (Baldini et al., 2014, p. 218). While IPNB describes well-being synonymous with a state of integration, the therapist can only help a client move toward integration if they have a "stable, flexible, and adaptive inner world to be able to hear, process, and reflect back the client's

experience coherently" (Baldini et al., 2014, pp. 218–219). Again, in this way, the therapist is seen as a neuroarchitect, "sculpting the flow of energy and information, both within themselves and between others, to rewire the brain toward a state of integration" (Baldini et al., 2014, p. 218).

Whitaker suggested, "My capacity to be real, to be alive during the session, to respond in a personal fashion is the essence of what I have to offer" (Whitaker & Bumberry, 1988, p. 18). However absurd Whitaker was, he was not narcissistic. He knew intuitively that while he was an important tool in the psychotherapy process, it was the presence of his own personhood in interaction with the family which fostered change; he said, "families don't grow because of something the therapist does to them. Real growth is something the therapist and the family do with each other. It's not the family *or* the therapist, but the family *and* the therapist that make up the vehicle to growth" (Whitaker & Bumberry, 1988, p. 19). IPNB describes the role of human relationships in the process of healing. It is the embodied flow of energy and information shared in the context of relationships that allows growth (Siegel, 2009). The concepts of presence, attunement, and resonance are some of the key mechanisms that capitalize on the person of the therapist in the change process.

If a therapist is able to be fully present, then the possibilities for attunement, resonance, and trust are possible. However, this requires therapists to examine the ways past experience primes their brain to perceive and interpret information based on historical events, and then work to become more fully open to present possibilities (Siegel, 2010). Whitaker describes this process as, "[having] some connection with and access to our own impulses, intuitions and associations. Only when you've struggled with yourself are you free to bring your person, not just your therapist's uniform, into the therapy room" (Whitaker & Bumberry, 1988, pp. 21–22). Once presence is established, the therapist can launch a sense of resonance and subsequently trust or alliance with the client system.

The resonance circuit of the brain is responsible for the sense of clients "feeling felt" through the "blending of intra- and interpersonal attunement" (Baldini et al., 2014, p. 220). This requires therapists to develop presence—to pay attention to their own experience in addition to being attuned to their clients. Carl Whitaker consistently brought here-and-now awareness of himself into his therapeutic process in addition to reflections of his experience of his clients:

> To even say that I'm trying to be more personal sounds too contrived. It's more a matter of my being more alive. If I can really be there, in the present, to get a personal sense of their pain, then I'm free to be instinctively responsive to what is occurring. My responsibility to the family is to be as personally responsive to them as I can. This is different from being responsible for or merely reactive to them. I'm not just acting in reaction to them, but I'm offering them a glimpse of my own internal responses as well. In other words, they're having the experience of my experience of me, not just feedback about them (Whitaker & Bumberry, 1988, p. 50).

Whitaker's approach was a blend of intra- and interpersonal attunement. In this way, he was able to establish resonance. He suggested: "It's my capacity to always see them...that permits my alliance with them. While it may not be detectable to an observer, it's been my experience that the family can sense that I'm interested in them as a unit" (Whitaker & Bumberry, 1988, p. 36). What Whitaker describes as the "therapeutic alliance," IPNB describes in part as resonance and interpersonal attunement. The therapist is awake to themselves and to the client system, creating the connection in which neural and social change becomes possible.

It is important to note that while the personal integrity of the therapist is critical to bringing about change in families, it serves as the foundation for more targeted change. While an authentic and warm therapeutic alliance fosters attunement, the steps Carl Whitaker took after this was established allowed for greater growth in the family system.

Spontaneity, creativity, and play

Carl Whitaker was perhaps most notably known for his use of spontaneity, creativity, and play. The symbolism he incorporated into his work was rooted in his early training in play therapy. Through this experience, Whitaker became privy to the modes of communication and perceptions rooted in nonverbal and symbolic language. Whitaker was not interested in being limited to left brain only communication through logical, linear, and linguistic representations of experience. Instead, he used both pragmatic and absurd interactions to foster change. "Even the most serious symptomatic manifestations seemed to have little relevance for Whitaker... Problematic behavior became quickly transmuted by his use of relational imagery and playful objects, working on the awareness of the family within the individual" (Andolfi, 1996, p. 318). Whitaker understood to some degree the specialized functions of the left and right hemispheres of the brain as well as the connecting function of the corpus callosum:

> In therapy... the process becomes one of increasing communication freedom with the opening of new options and extensive experience in the back-and-forth traffic across the corpus callosum from right brain total gestalt and intuition to left brain symbolic use of language in consciousness and operationalized by the organizational capacities of the whole person (Whitaker, 2000, pp. 9–10).

Since so many families found themselves emotionally blunted, Whitaker used a wide range of creative and spontaneous interactions to spur families toward the freedom of authentic communication. Unfortunately, many people get stuck at the absurdity of some of Whitaker's actions including falling asleep in session, throwing nerf balls, and sharing his own fantasies with clients. However, the creative—or absurd—acts were not the point; they were simply the mechanism. Whitaker was willing to step outside the "therapy box" to increase his clients "capacity to experience the world in a broader and deeper manner... even when the reality elements remain unchanged" (Whitaker & Bumberry, 1988, p. 41). The use of both the right and left hemispheres of the brain in Whitaker's work is consistent with IPNB definition of well-being. It is, in essence, rooted in integration and wholeness. IPNB asserts that disintegration is characterized by rigidity or chaos. If one were to code Whitaker's behavior in sessions with his clients, it is likely that they would see him responding in a way that shifts clients out of rigidity or chaos and into authentic and integrated connection.

Confrontation, confusion, challenge, and growth

In addition to spontaneity and play, Carl Whitaker was resolutely in favor of confrontation and challenging clients to support the growth process. He thought of the process of psychotherapy being one to expose contradictions in lived experiences and "disturb and expand consciousness" of the individual and the family (Keith, 2014, p. 12). He

understood the power of patterns in peoples' lives and the need to interrupt patterns to afford new possibilities. In his effort to broaden the range of living in his clients, Whitaker often used direct challenge and evoked confusion.

> I want to be able to disrupt their certainties and destroy their notion that life is simple. When the neatness of their right/wrong dichotomy is eliminated, a new world opens up. They are then faced with the growth issues of choice, values and responsibility in an uncertain world. Again, I want to participate in an experience that shakes them. One that surprises them enough to break free of the family-of-origin hypnosis we all are subject to. Confusion is, by itself, one of the most potent ways of symbolically opening up the infrastructure of the family. (Whitaker & Bumberry, 1988, pp. 45–46).

Whitaker did not know the details of neural networks and the complexity of memory in priming the brain for the experience; he did, however, understand the role of new experiences in fostering growth. He also understood that verbal language was only one part of the experience. Findings from neurobiology illuminate the role of implicit memory and the concept of *neuroception* in the human interpretation and experience of reality. Neuroception is defined as "a neural process, outside the realm of awareness, that is neurobiologically programmed to detect features of the environment, including behavioral cues of others, that indicate degrees of safety, danger, and threat" (Ogden & Fisher, 2015, p. 31; Porges, 2011). Whitaker's approach did not ignore the role of the unconscious; in fact, he capitalized on the unconscious and the neural firings of implicit memory. While he described it as a process of disturbing the hypnosis of the family, it is consistent with the way IPNB describes unconscious processes of the brain, especially the role of implicit memory, and mind which impact human behavior and relationships. When implicit memory is triggered, one does not have a conscious awareness of remembering, they simply experience sensations, feelings, and thoughts tied up with that implicit memory. Thus, one is not able to verbally articulate the connection between the memory and the present. However, new experience and the use of symbolism to tap into the implicit memory system can help clients shift out of rigid or chaotic patterns that are contributing to their suffering.

Scholars who have applied IPNB to the realm of psychotherapy have developed a set of tools to help therapists tap into the unconscious processes and bringing them into conscious awareness to use the mind to regulate and shift states. Carl Whitaker's approach did just this—he sought to increase consciousness by evoking the unconscious realm. As aforementioned, play, spontaneity, and creatively were some of the mechanisms to do this. At other times, confusion, confrontation, and challenge were used. Whitaker used the power of presence and attunement and trusted himself to guide his families in this process. There is no roadmap for this process—it requires one to be present for the journey as clients take risks to move toward integration and wholeness.

Virginia Satir's peoplemaking

We create our world. The problem is, it's never done consciously. When we do it consciously, we have the best of all possible worlds (Satir, 2020, p. 9).

Virginia Satir described herself as "a combination of Jonny Appleseed and Paul Revere" with a goal of changing global consciousness (Brothers, 2019, p. XXI). She made it her life goal to support as many people as possible from shifting out of a power-driven hierarchical model

toward a seed model that moves humanity down a growth path toward wholeness (Brothers, 2019). She was quite literally, yet pragmatically, seeking world peace. Virginia described this process as the "wholing of humanity: 'peace within, peace between, peace among'" (Brothers, 2019, p. XXI). Virginia spent more time than Carl Whitaker describing her process of psychotherapy and beliefs around human growth. She wrote her ideas both for the field of psychotherapy (see *The Satir Model: Family Therapy and Beyond*) and also for the public (see *The New Peoplemaking*). Many found her writings robust and remarkable. They are also aligned with the findings of neuroscience and its applications to mindfulness, self-growth, and psychotherapeutic healing, most of which were developed much after the establishment of her work. For purposes of this article, the main tenets of Virginia's work will be outlined as follows: (a) personhood, (b) patterns that disconnect, and (c) patterns that connect.

Personhood

Similar to Carl Whitaker, Virginia Satir was less interested in teaching her students techniques and more interested in helping them "fine tune their instrument," which of course, was themselves (Brothers, 2019, p. 76). She was primarily interested in supporting each person she worked with—student or client—in becoming more fully human. Virginia understood that the "use of self" in therapy could only be used for growth when the person of the therapist searched "their own depths for authenticity and... constructive styles of interaction" (Brothers, 2019, p. 76). She was interested in therapist self-esteem and how this impacted the therapeutic process: "The way is through the meeting of the deepest self of the therapist with the deepest self of the person, patient or client. When this occurs, it creates a context of vulnerability—of openness to change" (Brothers, 2019, p. 77).

We now know through the lens of neuroscience how critical this process is to the world of mental and relational health. As mentioned in respect to Carl Whitaker's *personal integrity of the therapist*, IPNB describes the important role the therapist plays through the concept of resonance. Resonance is what is required for the human nervous system to develop a sense of safety and connection with others in early childhood (Siegel, 2009). Virginia Satir emphasized over and over the role of warmth, love, and *being seen* in regard to child development. Neuroscience research has now demonstrated the critical way resonance shapes the circuits of the brain. Allan Shore's work regarding "right-brain to right-brain nonverbal communication describes the right-lateralized interbrain synchronization embedded in the mother-infant (and therapist-patient) relationships" (Shore, 2021, p. 5). Shore's research documents how in right-brain to right-brain "nonverbal communications, the mother regulates the infant's internal states of sympathetic and parasympathetic autonomic arousal, thereby facilitating a burgeoning state of autonomic balance and a subjective sense of safety, expressed in the infant's quiet alert state" (Shore, 2021, p. 6). More simply, when there is resonance, this interpersonal connection is possible and rewires the brain toward neural integration which subsequently gets expressed socially. This same process is part of what happens in experiential family therapy when the therapist is grounded and resonance emerges. In fact, without resonance, therapists risk reifying neural circuits of disintegration which may amplify problematic symptoms in clients. With resonance and attunement, the therapist can support neural integration. In their 2014 article, Baldini et al. explains this process:

> The practice of psychotherapy is an art and science in which the therapist works as a neuroarchitect to harness the power of neuroplasticity to move clients toward

> neural integration. This ultimately enables the clinician to connect with the client in such a way that neurobiological changes can be cultivated and a greater state of well-being developed (p. 225).

Virginia Satir weighted the presence of the therapist above technique and theory for this very reason. She believed that the experiential therapist's ability to create resonance and subsequent neural integration (what she called being fully human) was why therapy is a powerful experience in supporting families moving toward well-being.

Virginia Satir was committed to multi-level peace and believed the personhood of the therapist was tethered to this goal. During her tenure in the field of family therapy, critical nomenclature was still emerging guiding dialogue around issues of power, privilege, and oppression; however, Virginia was committed to justice and peace. She encouraged her students to engage in self-growth which often required engaging in critical self-evaluation around issues of bias. From this perspective, the notion of the "use of self" in therapy essential dissipates, as the self of the therapist is the primary tool for cultivating healing. The therapist holds a special position in the therapy room which can cultivate immense relational healing at its best and reinforce disintegration and systems of oppression at its worst. It is for this reason that Virginia placed the utmost priority on the process of the therapists becoming more fully human to ensure that they are promoting to the best of their ability mental well-being. This process of increasing authenticity required therapists to attend to the ways in which their well-being was uniquely linked to humanity's well-being.

Patterns that disconnect

Virginia Satir was deeply influenced by the work of Gregory Bateson and cybernetics. Underscored by her belief in the sacred interconnectedness of the human race through the life force, Virginia placed a heavy emphasis on the way communication moved individuals, families, and the collective human race toward flourishing and connection... or away from it. Virginia was not interested in developing a heady theory, however, she consistently sought to express her discovery of human behavior in "simple, but lucid ways, using language that was sufficiently pictorial to accurately define the behavior" (Brothers, 2019, p. 98). She described patterns that disconnect being characterized by (a) incongruence and (b) four survival stances (patters of incongruent communication). Incongruence is consistent with the IPNB concept of disintegration where individualized parts (whether parts of the brain or parts of a larger human system) become rigid in their roles and disconnected from other parts or random and chaotic, leading to a lack of well-being. While Virginia did not have current neuroscience findings to explain what was happening on a neural level, she was able to describe this process through cybernetics.

Incongruence

Virginia described incongruence within the context of modes of communication. She was very interested in the messages people give and receive through verbal and nonverbal communication. IPNB describes this process through the lens of neuroscience:

> By examining the properties of self-organization, clinicians gain practical and powerful insights into how to help identify an "unhealthy" mind and help that

> mind move toward well-being. At the heart of this approach is the idea that optimal self-organization moves the system toward flexibility, adaptability, and stability. When linkage or differentiation does not occur, the system moves toward chaos (uncontrolled differentiation), or rigidity (limiting, over-linkage), or some combination of both (Baldini et al., 2014, p. 219).

While IPNB focuses on more than just verbal and nonverbal integration, many of the states of integration culminate to influence these modes of communication. Virginia knew how complicated this process was and took special care to track patterns in the presentation of incongruent communication. After many years, she described four main stances of incongruent communication which she called the survival stances.

Virginia Satir outlined four survival stances: (a) placating, (b) blaming, (c), being super-reasonable, and (d) being irrelevant. When someone disregards their own feelings of worth, they begin to placate (Satir et al., 1991). They develop a people-pleasing façade and say yes to everything. In doing so, they begin to sacrifice themselves to honor others over their true feelings (Satir et al., 1991). This survival stance is characterized by sending the message that "we are not important" (Satir et al., 1991 p. 36). Observing for over 50 years, Virginia outlined the connection between this way of incongruent communication and the physiological and psychological effects on the placating person. Without the help of neuroscience or IPNB, Virginia knew the connection between words, affect, behavior, inner experience, psychological effects, and physiological effects. For each survival stance, she carefully watched and recorded patterns. For the person who placates, she observed their words articulating their belief that everything is their fault, their affect appearing weak, their behavior characterized as "giving in" and "apologizing," their inner experience as feeling worthless, their psychological effects as depressed and suicidal, and their physiological effects as migraines, stomach disorders and a distressed digestive track (Satir et al., 1991, p. 40). Neuroscience now has now provided findings that demonstrate the interdependence of complex human systems including the relationship between physiology and psychology. In particular, the relationship between emotional stress and disease has been explored (e.g., see Gabor Mate's book, *When the Body Says No: Exploring the Stress-Disease Connection*). While the exact demonstration of "placating" as Virginia Satir described has not been studied, the concept of disintegration and the negative intra- and interpersonal impacts has been backed up by IPNB. In fact, IPNB describes the lack of integration leading to various forms of psychopathology:

> When two minds feel connected—when they become integrated—the state of neural firing within each individual can be proposed to become more coherent. Literally, this may mean that the corresponding activations between the body proper, limbic areas, and even cortical representations of intentional states between two individuals enter a state of "resonance" in which one matches the profiles of the other. The impairment of such shared states has been proposed to be a characteristic of forms of psychopathology, including schizophrenia (Siegel, 2006, pp. 254–255).

The stance of placating can also be understood through the concept of the window of tolerance from IPNB. The window of tolerance is a framework used to describe the regulatory boundaries around arousal states managed by different parts of the brain. Within the "window of tolerance" (when someone experiences felt safety), information and energy are processed through the prefrontal cortex (Ogden & Fischer, 2015). Conversely, when someone senses a threat, arousal mechanisms

within the brain and body are active. When arousal exceeds the regulatory boundaries, the brain and body shift into a state of survival, primarily ruled by the amygdala's fight, flight, and freeze mechanisms (Ogden & Fischer, 2015). The survival mechanism can manifest in a variety of behaviors, but it is characterized most simply as a hyperarousal zone (fight or flight) and a hypoarousal zone (also called dissociation or shutdown). Virginia Satir's survival stances can be explained and categorized as variations of hyper and hypoarousal. Placating would be a form of shut down, where the placating person dissociates from their own feelings and/or body sensations in an effort to survive. These patterns of survival are influenced greatly by early life experiences and the way attachment and traumatic stress impact brain and communication development.

The rest of the survival stances described by Virginia Satir can also be understood through the IPNB concepts of disintegration and/or the arousal system (i.e., window of tolerance). The blaming stance is often considered the opposite of placing. It is branded by a disregard of the other, and an "incongruent way of reflecting society's rule that we should stand up for ourselves" (Satir et al., 1991, p. 41). It is often characterized by hostile, angry affect and a lack of regard for others. The blaming stance often is accompanied with a belief that "the only way to succeed in life is to fight our way through" (Satir et al., 1991, p. 42). In describing the bodily response of blaming, Satir et al. describe a physiological response associated with adrenalin pumping into the bloodstream and rapid, shallow breathing (1991). The survival state of fight is synonymous with the stance of blaming as described by Virginia. It represents a state of communication that occurs when the body detects a threat and releases stress hormones to fight off danger. The brain is not in a state of integration during fight mode and it prevents resonance, attunement, and relational integration. This mode, in Virginias words, does not produce peace within or peace among.

The last two survival stances are the super-reasonable response and the irrelevant response. The super-reasonable response is characterized by extreme objectivity, rigidity, and relational aloofness (Satir et al., 1991). It can be understood in IPNB by someone using the left hemisphere of their brain to regulate information without the support of a fully integrated nervous system. In this way, the person is not accessing the individualized function of the right hemisphere for understanding nonverbal communication, essential for resonance and attunement. If someone is not accessing the right brain in connection with the left, they are likely to miss the fullness of what is happening in the social exchange of energy and information. If they are only utilizing the left prefrontal cortex, which is responsible for logic, linear thinking, and language, they are likely to present as "super reasonable" or "hyper logical." This is often missed as problematic due to the social privileging of logic and Enlightenment-era thinking. Virginia describes this stance as "principled, boring" and often results in withdrawing from both feelings and others resulting in immense loneliness (Satir et al., 1991, p. 47).

Finally, the irrelevant stance is the opposite of the super-reasonable stance, characterized by a pattern of erraticism and spontaneity. People using this communication pattern are primarily interested in avoiding stress and thus engage in cheerful, amusing, and clownish behavior (Satir et al., 1991). Often these individuals are fidgety, moving around, and restless and their words often do not make sense given their context. Through the lens of IPNB this can be understood by a lack of integration on multiple levels. Virginia describes the irrelevant stance as ignoring self, other, and context—thus, this mode of communication is characterized by a lack of vertical integration (integration of the brain and larger nervous system within the body), bilateral integration (integration between the left and right hemisphere), and interpersonal integration (connection between people) at the very least.

Despite the stance that one takes, all survival stances as outline by Virginia Satir can be understood as incongruent communication that lead to palpable effects that inhibit well-being

and human flourishing both individually and relationally. Virginia writes in depth about the development of these stances within the context of family-of-origin communication and child development. A full exploration of this aspect is beyond the scope of this article; however, these tenets of her model are also congruent with IPNB, research on attachment, brain development (see, e.g., Daniel Sigel's, *The Neurobiology of We*).

Patterns that connect

Virginia described various levels of congruence which provide the mechanisms driving patterns of connection. She suggested that congruence is a "choice of becoming more fully human, as well as a state of wholeness" (Satir et al., 1991, p. 65). Congruence is characterized by "a free flow of personal and interpersonal energy" in addition to "flexibility and openness to change" (Satir et al., 1991, pp. 65–66). In a congruent state, self, others, and context are all connected. She understood congruence to be the base for a healthy functioning individual, family, and world. The congruent response leads to words that match nonverbal communication including body position and affect, behaviors that are alive and competent, harmonious and balanced inner experiences that all culminate in healthy psychological and physiological functioning. Once again, the concept of integration, central to IPNB, describes well-being; where Virginia discusses levels of congruence, IPNB describes domains of integration.

In the interdisciplinary field of IPNB, health is seen as emerging from integration, the linkage of differentiated parts of a system. With integration, a system flows toward flexibility and adaptability. When lacking integration, chaos, rigidity, or some combination of the two, ensue. Disorders can be seen as manifestations of impaired integration, with the wide range of symptoms revealing the chaos or rigidity characteristic of particular psychiatric disturbances (Baldini et al., 2014, p. 225).

Virginia Satir used her knowledge both from learning about general system theory and cybernetics as well as her keen observations over decades to outline these patterns that have now been supported through neuroscience research.

Virginia developed simple tools, such as the *resource wheel*, to help people work toward congruence. Similarly, developer of IPNB, Daniel Siegel, developed the *wheel of awareness* to promote skills in cultivating integration through what he calls mindsight (Siegel, 2010). There is resemblance between the application and language used around these two sets of tools. Virginia would frequently walk her students, families, and fellow therapists through exercises to promote an expansion of consciousness which in turn, frees up the opportunity for congruence to take place. Congruence is the ingredient needed for connection, and connection is the pathway to change. In this way, Virginia harnessed awareness at the body level and helped others thread this awareness through ecological levels toward "harmony with our spiritual essence, or what Satir called the universal life force" (Satir et al., 1991, p. 84). She would say, "the next layer is concerned with your senses—your eyes, your ears, your nose, your mouth, the pores of your skins—all of which are the "holes" in which input from the outside comes in and messages from the inside go out" (Satir, 1978, p. 41).

Similarly, Daniel Siegel has used the *wheel of awareness* to promote integration and awareness in those he works with. He harnesses the IPNB principle of awareness to help individuals differentiate between "what we are aware of from the experience of awareness itself" (Siegel, 2010, p. 93). In this way, it offers a metaphor to focus your attention on various aspects of experience (e.g., the five senses, bodily sensations, mental activities, and

interconnection). In a manner very similar to Virginia, Daniel Siegel guides the readers, students, clients, and others to harness the connection between various levels of experience to promote integration. For both experiential family therapy, and now IPNB, the practicing of these things helps people move toward well-being.

A unique approach

While certainly other therapy models find support in modern neuroscience, experiential family therapy provides a unique approach to guide individuals and families toward increased social and neural integration—toward well-being. The presence of a warm and connective therapeutic alliance is a focus of many modern approaches to psychotherapy. Experiential family therapy, however, uniquely harnesses the capacity for change provided by the relationship between therapist and family in combination with experiential techniques and allows therapists to intentionally promote multilevel change across systems—the family system, and as IPNB outlines, the neural system. This is not true of all therapy modalities. Take, for example, cognitive, psychoeducational, or solution-focused approaches. These approaches rely heavily on the use of the logical and linguistic left-brain processes, and often overlook the integrative functioning that occurs when the right and left-brain link together. In contrast, experiential approaches lead by Whitaker and Virginia combined insight and experience to harness social and neural change.

CONCLUSION

Experiential family therapy has long been touting the role of the "here and now" and the power of novel experiences in promoting individual and family level change. Virginia Satir and Carl Whitaker did not fully understand the neurobiological mechanisms that were providing the underlying architecture for why their approach to psychotherapy was so powerful. With the proliferation of behavioral neuroscience, particularly the field of IPNB, therapists today can hold the assumptions of classic experiential family therapy up to the light of modern scientific findings and find their sound. In this way, instead of experiential family therapy being written off as a fad of its time, it may be understood as an approach to psychotherapy that harnesses the brain's capacity for plasticity and the power of human connection to move the collective human race toward well-being. Virginia Satir and Carl Whitaker were ahead of their time, and now science has caught up.

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