

WORDTRAILS AS A TRAUMA-INFORMED TOOL: A NEUROPSYCHOLOGICAL PERSPECTIVE

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OVERVIEW

WordTrails is a powerful practice for self-discovery and emotional healing. Rooted in neuroscience and trauma-informed principles, it blends play with evidence-based techniques like interoception, bilateral processing, and polyvagal regulation. Each element of the game—from embodied word choice to symbolic bridging—becomes a pathway for integration, meaning-making, and flow. Whether you seek clarity, emotional release, or a creative reset, this method turns language into a living map of the Self.

What makes this experience truly transformative is the brain state it creates: a dynamic interplay of calm alertness, creative openness, and emotional safety. During play, the nervous system shifts toward parasympathetic regulation, while the brain enters a theta-dominant state—similar to deep meditation or creative flow. This state is optimal for memory reconsolidation, emotional processing, and new neural pathway formation. In short, WordTrails isn’t just a game; it’s a structured doorway into the neurobiology of healing and insight.

WordTrails unites all three modes—storytelling, trinket-based anchoring, and collaborative reflection—into a single, integrative experience that activates the brain’s social engagement system, fosters co-regulation, and cultivates narrative coherence. Across all styles of play, the dominant brain state is one of safe connection and reflective integration, engaging the prefrontal cortex and calming the amygdala to allow empathy, perspective-taking, and meaning-making to flourish.

It is important to recognize the psychological framing in language: for mediators and professional settings, the term “tool” conveys purpose, structure, and utility, while the term “game” may feel informal or frivolous in certain contexts and lends itself to be approached in a playful manner. Presenting it as a “playing game” enhances the safety of being allowed to not take it all so seriously. While positioning WordTrails as a trauma-informed relational tool ensures maximum credibility across diverse audiences while preserving its inherently engaging and human-centered design.

- WordTrails is a neuroscience-based practice that transforms language into a living map for emotional healing and self-discovery.
- By inducing a theta-dominant brain state—similar to creative flow and deep meditation—WordTrails unlocks integration, insight, and emotional regulation.
- This trauma-informed tool blends play, storytelling, and symbolic anchoring to activate the brain’s social engagement system and foster safe connection.
- More than a game, WordTrails is a structured pathway into calm alertness, creative openness, and the neurobiology of healing.

Personal Experience with WordTrails: A Neuropsychological and Phenomenological Reflection

Solo play

- Primarily engages intra-personal awareness (self-reflection, self-dialogue).
- Activates default mode network (DMN) and medial prefrontal cortex — both linked to autobiographical memory and the sense of Self.
- Encourages a meditative, contemplative state where pattern-making is internal.

When I approached WordTrails solo play, I entered without many expectations—just a curiosity about what the experience might offer. Almost immediately, I noticed something striking: the quietness of the space. There was no audience, no external gaze—only me, the board, the words, and the trinkets. This created what felt like a **sacred space of allowance**, where self-expression flowed unfiltered. That absence of performance pressure seemed to **activate a deeper openness to the Self**, something harder to access in shared play.

From a **neuropsychological perspective**, this makes sense. Solo play appears to **engage the Default Mode Network (DMN)**, a set of brain regions including the **medial prefrontal cortex and posterior cingulate cortex**, which are strongly associated with **autobiographical memory, self-referential processing, and inner narrative construction** (Raichle et al., 2001; Andrews-Hanna, 2012). These networks are active during introspection and daydreaming, states closely aligned with meditation. By removing external social cues, my attention turned inward, fostering an **intra-personal dialogue** that felt both meditative and cathartic.

As I navigated the board, **emotions long submerged began to surface**—those undercurrents tied to real-time family dynamics. But instead of dissolving into tears, I found another channel: **naming these emotions and mapping them physically on the board**. This act was powerful because it **externalized my inner landscape** in a tangible form, transforming abstract feelings into something I could see, hold, and contemplate without judgment. In this way, WordTrails provided an **embodied metaphor for meaning-making**, similar to how expressive arts therapy leverages creative representation to enhance psychological integration (Malchiodi, 2015).

The **trinkets** played an especially profound role in this process. Initially, they appeared to be mere game pieces—tokens to mark words. Yet as the game progressed, they became **symbolic anchors of emotional weight**. By placing them on the words that resonated most deeply, I was effectively performing a **neuro-symbolic encoding process**, reinforcing the salience of those

emotional states in memory and meaning (Barsalou, 2008). At the end of the game, I realized something beautiful: the trinkets clustered on **two poles**—the most troubling emotions on one end, and on the other, the words tied to my **inner phoenix**, my capacity for resilience and renewal. The spatial arrangement formed what looked like a **bridge**, connecting despair and hope, pain and transformation.

This physicality matters. **Psychologically, trinkets serve as transitional objects** (Winnicott, 1953), mediating between the inner world and external reality. They allow the player to project internal states onto concrete symbols, creating a safe buffer for emotional processing. In trauma-informed care, this is crucial because it enables **dual awareness**—the ability to hold distressing emotions while maintaining a sense of safety (Ogden, Minton, & Pain, 2006). For me, that meant confronting difficult truths without being overwhelmed, because the feelings lived “over there” on the board, structured and contained.

By the end, I sat with my completed map, struck by its honesty and beauty. Without judgment, I simply observed: *This is where I am. This is how I’m processing life right now.* Unlike meditation or journaling, WordTrails offered me **a visualized narrative**, a lived metaphor, and a deeply embodied experience of inner cartography. It was not just play—it was a practice of self-revelation and self-compassion.

1. Embodied Choice & Interoception (Felt-Sense Decision-Making)

How to incorporate:

- **Start with a grounding ritual:** 3 slow breaths, eyes closed, hand over heart or belly.
- **Prompt:** “Let your body, not your mind, pick the word.”
- **Mechanic:** Spread your trinkets or words with a soft gaze so you are not reading the word(s). Gently hover your hand and notice sensations—warmth, pull, calm, tension.
- **Psychological role:** Anchors choice in interoceptive awareness, bypassing analytical dominance. Engages insula activation, which is linked to Self-access in IFS and improved emotional regulation.
- **Optional reflection question:** “What part of me reached for this?”

2. Emotional Processing in Two Hemispheres (Pain + Possibility)

How to incorporate:

- **Create two zones** on your table or journal:

- **Left side:** Words that touch on pain, grief, loss.
 - **Right side:** Words that signal hope, resources, or future possibilities.
 - **Mechanic:** Alternate drawing from left and right zones (or journaling about one then the other).
 - **Psychological role: Mirrors bilateral stimulation (like EMDR),** helping link emotional memory (right hemisphere) with meaning-making and planning (left hemisphere).
 - **Optional reflection question:** *“How does the bridge between these two words feel inside me?”*
-

3. Bridge-Building & Integration (Meaning-Making Across Opposites)

How to incorporate:

- **Mechanic:** After pulling one word from each side (Pain + Possibility), **write a sentence connecting them.**
 - Example: *“Even though I feel abandoned, I am opening to trust.”*
 - **Psychological role:** Fosters **neural integration** (Siegel, *Mindsight*), creating coherence between lower emotional brain structures and higher cortical reasoning.
 - **Optional prompt:** *“What new pathway opens if these two truths hold hands?”*
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4. Relational Mirroring & Co-Regulation (Self-as-Companion)

Challenge in solo play: No human partner.

Solution: Use **inner witness practice:**

- Speak your word out loud and imagine a compassionate other hearing it.
 - Journal a response from your **Compassionate Witness voice** (like IFS Self or Wise Adult).
 - **Psychological role:** Stimulates **ventral vagal state** (Polyvagal theory) and activates inner co-regulation circuits.
 - **Optional mantra:** *“I see you. I’m here.”*
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5. Quiet Presence & Flow State (Deep Self-Connection)

How to incorporate:

- **Set the environment:** No phone, low light, soothing music (optional), timer for 15 minutes.
 - **Mechanic:** Slow pacing—draw, pause, breathe, write.
 - **Psychological role:** Quieting the **Default Mode Network**, reducing rumination, and enhancing flow (Csikszentmihalyi).
 - **Optional reflection:** *“What shifted in me when I gave myself this time?”*
-

Trinkets as Anchors

- Each **trinket** = **sensory anchor** + **symbolic container**.
- In trauma recovery, objects can serve as **transitional objects** (Winnicott) or **grounding tools** to bridge inner and outer worlds.
- **Why it matters:** Touch activates somatosensory pathways, regulating the nervous system and reinforcing emotional memory reconsolidation (Schoore, *Affect Regulation*).
- Suggest: End session by holding the trinket and stating:
“This word stays with me.”
- Optional: Place it somewhere visible as a daily micro-dose of meaning.

Two-player mode

- Introduces co-regulation through relational mirroring.
- Activates social brain networks (temporal-parietal junction, anterior cingulate cortex) that are important for empathy and mentalizing.
- Adds layers of nonverbal communication and attunement — often subtly influencing word choice and token selection.

When I first experienced **WordTrails** with another person — my partner, James — I didn’t realize how different the dynamic would feel compared to solo play. The setup was simple yet visually inviting: colorful tokens arranged in a loose spiral, a deck of cards, and the spinner we never

touched. James walked me through the rules, but his main instruction stayed with me: *“Pick what speaks to you, without overthinking.”*

The game began quietly. James went first, choosing a token with the word *“opening.”* I followed with *“rest.”* He nodded, then placed *“flow”* beside my choice. Soon, two distinct paths unfolded before us — one weaving toward themes of **grief and loss**, the other blooming with **growth and forward movement**. Neither of us set out to create these contrasting trails; they simply emerged as an organic reflection of our shared yet separate inner landscapes.

What struck me most was the *bridge* that formed between these two trails. Words like *“stillness”* and *“becoming”* appeared in the center, linking my sorrow with my hope, his memories with his aspirations. That bridge wasn’t dictated by the game. It arose from the interplay of our choices — a visual metaphor for connection, empathy, and the possibility of integration.

Something happened internally, too. Each time I picked a token, I paused. I checked in with myself: *What resonates now? What wants to come forward?* That act of micro-reflection, repeated over and over, became a subtle rewiring process. It felt like my brain was creating new associations — a principle known as **neuroplasticity**, where novel experiences and mindful decision-making strengthen emerging neural pathways (Siegel, 2020).

Our conversation was minimal, yet **relational attunement** was unmistakable. I noticed James often mirrored my choices; later, he admitted it was intentional. “I wanted to stay connected to your rhythm,” he said. That mirroring gave me an unexpected sense of safety and validation, even without explicit discussion. In psychological terms, it was an example of **nonverbal co-regulation** — the nervous system finding calm through shared presence (Porges, 2011).

By the end, the board felt like a living journal we had co-authored in silence: a map of our inner worlds, drawn together through words and intention. There was no winner, no scoring, no pressure — just an unfolding dialogue in token form. The simplicity of it was profound.

1. Embodied Choice & Interoception

- When James said, “Don’t think too much, just choose,” I bypassed overactive analytical thinking and went straight to *felt-sense* decision-making.
- Neurologically: This engages the insula (interoceptive awareness), allowing a player to check in with body-based emotional signals — a core way of accessing the capital-S Self in Internal Family Systems (IFS) and trauma recovery literature.

2. Emotional Processing in Two Hemispheres

- The game board literally had two sides: one for pain/grief and one for positive life areas.
- Neurologically: This mirrors the bilateral processing principle used in therapies like EMDR — helping the brain integrate trauma by linking emotional memory (right hemisphere) with more cognitive, future-oriented thinking (left hemisphere).

3. Bridge-Building & Integration

- The central “bridge” of words connecting both sides is more than symbolic — it mirrors how the brain forges *new neural pathways* between emotional and cognitive centers when a safe environment encourages meaning-making.
- Consciousness research calls this vertical integration (linking lower emotional brain structures with higher cortical reasoning).

4. Relational Mirroring & Co-regulation

- James and I were subtly mirroring each other’s moves.
- Neurologically: This engages mirror neurons and supports ventral vagal activation (polyvagal theory), fostering safety and trust. This state is a gateway for deeper access to the Self.

5. Quiet Presence & Flow State

- Minimal talking, steady pace, visual engagement, and self-reflection combined to shift me into a flow state.
- In this state, the default mode network(DMN- self-referential worry and rumination) quiets down, allowing deep self-connection without overthinking.

Group mode

Group Play Experience: Collective Flow and Shared Emotional Resonance

When I played WordTrails in a group setting, the experience felt completely distinct from both solo and pair play. The room carried a quiet, meditative tone despite the social nature of the gathering. There was a palpable sense of synergy—players feeding off one another’s word choices and the collective emotional energy in the room. Some participants appeared deeply inward, absorbed in their personal processes, while others were more relationally attuned, offering empathic responses to each turn.

The most profound part of the session unfolded during the trinket stage. When the first participant began arranging words, she broke into tears while explaining their significance—words that traced back to core attachment wounds with a parent. It was raw, cathartic, and deeply moving. Hugs followed, and the sense of shared vulnerability created a bond that felt both tender and powerful. Each subsequent participant offered a completely different configuration of the same words, revealing how unique and idiosyncratic our internal maps of meaning truly are. One person's words formed a straight line—a narrative unfolding from left to right. Another created a blooming, flower-like structure that reflected growth and renewal. I was struck by how freeing it felt to see my own layout reflect my journey through a difficult life chapter—a visible pattern of resilience and hope.

By the end, we had witnessed one another's inner worlds—layers typically veiled in day-to-day life. The experience felt sacred, marked by empathy, authenticity, and emotional release.

- Expands complexity through multi-perspective meaning-making.
- Triggers collective intelligence dynamics — emergent patterns formed by overlapping inner narratives.
 - Often amplifies novelty, surprise, and creativity because of the diversity of input, activating Relational Safety and Collective Intelligence

Playing WordTrails with others recruits social brain circuits that foster empathy, co-regulation, and collaborative meaning-making. Benefits include:

- Mirror Neuron System Engagement: Enhances empathic attunement and understanding through reciprocal observation and imitation (Rizzolatti & Sinigaglia, 2016).
- Ventral Vagal Activation: Polyvagal theory explains how safe social engagement calms the autonomic nervous system, supporting emotional regulation and presence (Porges, 2011).
- Distributed Neural Network Activation: Temporoparietal junction, anterior cingulate cortex, and other social cognition regions are engaged, promoting perspective-taking, social problem-solving, and relational trust (Decety & Lamm, 2007).
- Co-created Meaning and Social Learning: Players co-construct narratives, process trauma collectively, and develop adaptive strategies while fostering a sense of belonging (Schoore, 2012; Yalom, 2005).
- Enhanced Creativity and Novelty: Diverse perspectives increase unpredictability, stimulating reward circuits and emergent pattern formation (Kaufman & Gregoire, 2015).

Directed mode

- Facilitates goal-oriented or guided exploration under the supervision of a trained facilitator (e.g., mediator, therapist).
- Engages both intra-personal and inter-personal neural networks, supporting emotional regulation, perspective-taking, and structured problem-solving.
- Activates executive function (dorsolateral prefrontal cortex) for intentional decision-making and adaptive strategy formulation.
- Supports relational repair and conflict resolution by fostering co-created understanding between participants.
- Encourages reflective processing within a safe, scaffolded environment, enhancing integration of experiences and insights.
- Amplifies the emergence of the Capital-S Self by combining self-directed choice with guided social and emotional scaffolding.

PART I

WordTrails: How Play Activates the Capital-S Self

WordTrails is more than a word game — it is a dynamic, adaptive process that activates the neural pathways of reflection, meaning-making, and connection. Its design allows it to be played solo, in pairs, in groups, or directed with each format engaging different psychological and neurological circuits.

The Neurological Dimensions of Play: Different modes of WordTrails engage distinct neural systems:

- **Solo Play:** Amplifies self-referential processing in the medial prefrontal cortex, supporting metacognition and inner narrative integration.
- **Pair Play:** Recruits mirror neuron systems and limbic co-regulation circuits, enhancing empathy, perspective-taking, and emotional resonance. It also stimulates distributed neural networks for collective meaning-making, including the temporoparietal junction and anterior cingulate, which support social cohesion and collaborative problem-solving.
- **Group Play:** Expands complexity through multi-perspective meaning-making. Triggers collective intelligence dynamics — emergent patterns formed by overlapping inner narratives. Often amplifies novelty, surprise, and creativity due to the diversity of input. Activates Relational Safety and Collective Intelligence.
- **Directed/Guided Play:** Facilitator-led sessions engage additional top-down executive circuits (dorsolateral prefrontal cortex), promoting emotional regulation, perspective-taking, and co-regulated social interaction, while supporting integration of self-referential and relational networks.

In all modes, the act of selecting words based on felt experience engages both bottom-up emotional awareness (insula, limbic system) and top-down executive processing, fostering a bridge between implicit emotional memory and conscious verbal expression.

The result is a unique, moment-to-moment activation of the Capital-S Self — the integrated core of identity, values, and meaning — facilitated not through rigid rules, but through a flexible, player-driven process that mirrors the fluidity of lived experience.

WordTrails: A Neurological Perspective

WordTrails is more than a language-based tabletop activity—it is a structured yet open-ended process that stimulates multiple neural networks simultaneously, creating conditions that support the emergence of the capital-S Self. Drawing from trauma studies, psychology, and consciousness research, we can understand its impact across four key dimensions: attention regulation, emotional integration, self-referential processing, and relational facilitation.

1. **Attention Regulation and Prefrontal Activation**

Selecting and placing words engages the dorsolateral prefrontal cortex (DLPFC), a region central to executive functioning and sustained attention (Miller & Cummings, 2017). The game’s visual and tactile components recruit the brain’s parietal and occipital areas, fostering a state of relaxed focus—a balance between alertness and ease. This balance is known to increase cognitive flexibility, a core aspect of Self-led functioning (Siegel, 2020).

2. **Emotional Integration and the Limbic System**

Word selection is guided by internal cues—feelings, memories, or intuitions—which recruits the limbic system, particularly the amygdala (emotional salience) and hippocampus (contextual memory). The safe, playful structure of WordTrails supports dual awareness: the ability to engage with emotionally charged content while remaining anchored in the present. This mirrors trauma-informed practices that rewire the brain’s threat-detection systems toward safety (van der Kolk, 2014).

3. **Self-Referential Processing and the Default Mode Network**

The reflective nature of the game activates the medial prefrontal cortex (mPFC) and posterior cingulate cortex (PCC)—key nodes of the Default Mode Network (DMN), which is involved in autobiographical memory and meaning-making (Raichle, 2015). In healthy states, DMN activation supports coherent self-narratives. In WordTrails, the process of linking words into “paths” mirrors the integrative process of bringing disparate life experiences into a unified self-story, an essential function of the capital-S Self.

4. **Relational Resonance and Mirror Neurons**

When played with others, WordTrails introduces an additional layer: interpersonal synchrony. Observing and responding to another player’s choices engages the mirror neuron system (Rizzolatti & Sinigaglia, 2016), enhancing empathy and attunement. This co-regulation deepens the neurobiological sense of connection—a foundational state for Self-leadership in Internal Family Systems (IFS) theory (Schwartz, 2021).

5. **Directed/Guided Play and Facilitated Integration**

In sessions led by a facilitator (therapist, mediator, or guide), WordTrails additionally

recruits executive control networks, including the ventrolateral and dorsolateral prefrontal cortices, to support goal-directed reflection and adaptive problem-solving (Diamond, 2013). Guided framing of the game allows participants to explore emotionally charged topics, negotiate relational differences, or co-create new solutions in a scaffolded environment. For example, mediators using WordTrails with divorcing couples can facilitate safe co-regulation, reduce emotional reactivity, and promote collaborative problem-solving—mechanisms supported by research on neurofeedback, social cognition, and co-regulation in trauma-informed interventions (Siegel, 2012; Cozolino, 2014).

In sum:

WordTrails uses a multisensory, choice-driven process to activate neural systems that govern attention, emotional regulation, self-referential processing, and relational integration. Whether played solo, in pairs, in groups, or in a directed/guided session, it supports a shift from fragmented or reactive states toward integrated, Self-led awareness.

PART II

WordTrails: Neurological Activation of the Capital-S Self & Mode-Specific Benefits

How WordTrails Activates the Capital-S Self: A Neurological Perspective

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Specific Experiences and Benefits by Play Mode

1. **Solo Play:** Cultivating Deep Self-Reflection and Inner Integration

Playing WordTrails solo engages primarily intra-personal neural networks, encouraging introspection and self-awareness. Key benefits include:

- **Enhanced Interoceptive Awareness:** Activates the insula, improving recognition of bodily sensations and emotional states (Craig, 2009).
- **Strengthened Default Mode Network (DMN):** Supports autobiographical memory and coherent self-narrative construction (Raichle, 2015).
- **Emotional Regulation:** Facilitates engagement with difficult feelings in a contained, self-paced manner, fostering bottom-up integration of trauma memories (Siegel, 2020; van der Kolk, 2014).
- **Mindfulness and Flow:** Encourages a meditative state with reduced rumination and improved cognitive flexibility (Csikszentmihalyi, 1990).

2. **Interpersonal Play** (Paired or Group): Activating Relational Safety and Collective Intelligence

Playing WordTrails with others recruits social brain circuits that foster empathy, co-regulation, and collaborative meaning-making. Benefits include:

- **Mirror Neuron System Engagement:** Enhances empathic attunement and understanding through reciprocal observation and imitation (Rizzolatti & Sinigaglia, 2016).
- **Ventral Vagal Activation:** Polyvagal theory explains how safe social engagement calms the autonomic nervous system, supporting emotional regulation and presence (Porges, 2011).
- **Distributed Neural Network Activation:** Temporoparietal junction, anterior cingulate cortex, and other social cognition regions are engaged, promoting perspective-taking, social problem-solving, and relational trust (Decety & Lamm, 2007).

- Co-created Meaning and Social Learning: Players co-construct narratives, process trauma collectively, and develop adaptive strategies while fostering a sense of belonging (Schoore, 2012; Yalom, 2005).
- Enhanced Creativity and Novelty: Diverse perspectives increase unpredictability, stimulating reward circuits and emergent pattern formation (Kaufman & Gregoire, 2015).

3. **Directed/Guided Play:** Facilitated Integration and Goal-Directed Outcomes

When guided by a facilitator—such as a therapist, mediator, or trained coach—WordTrails additionally recruits executive control networks to support structured reflection and goal-oriented interaction. Benefits include:

- Executive Control and Cognitive Flexibility: Facilitated framing activates dorsolateral and ventrolateral prefrontal cortices, enabling adaptive decision-making and guided problem-solving (Diamond, 2013).
- Co-Regulation in High-Stakes Interactions: Facilitators help participants manage emotional reactivity, enabling safe exploration of difficult relational dynamics, e.g., in divorcing couples or family mediation (Siegel, 2012; Cozolino, 2014).
- Goal-Oriented Narrative Construction: Participants collaboratively generate insights and resolutions, reinforcing perspective-taking, empathy, and shared understanding.
- Enhanced Therapeutic Efficacy: The guided context leverages structured scaffolding to accelerate integration of emotional, cognitive, and relational learning, supporting trauma-informed outcomes (Shapiro, 2018; Linehan, 2015).

Summary: How and Why WordTrails Works — Neuropsychological Highlights

Whether played solo, in interpersonal settings, or in directed/guided contexts, WordTrails activates neural networks governing attention, emotional regulation, self-referential processing, and relational integration. Its flexibility allows participants to explore, reflect, and connect in ways that support the emergence of the capital-S Self and adaptive coping.

- Activates Executive Function & Attention: Engages the dorsolateral prefrontal cortex to support focused, flexible thinking and intentional word selection, enhanced further in guided settings where facilitators structure goals and frame reflection (Diamond, 2013).

- **Facilitates Emotional Integration:** Involves limbic system areas (amygdala, hippocampus), allowing players to safely explore and regulate emotions linked to memories and trauma. Directed play strengthens co-regulation and safety in high-stakes interactions, such as conflict resolution or therapeutic guidance (Siegel, 2012; Cozolino, 2014).
- **Enhances Self-Reflection:** Stimulates the Default Mode Network, enabling autobiographical memory and coherent self-narratives critical to the capital-S Self. Facilitators can help participants frame insights and integrate learning for more structured self-understanding.
- **Promotes Relational Resonance (in paired/group and directed play):** Activates mirror neuron systems and social brain networks that foster empathy, attunement, and co-regulation. Guided contexts amplify relational understanding in challenging or goal-directed scenarios.
- **Supports Trauma Healing:** By balancing top-down executive control with bottom-up emotional processing, it helps rewire threat responses into safe engagement, with guided facilitation accelerating therapeutic outcomes (Shapiro, 2018; Linehan, 2015).
- **Flexible and Adaptive:** The game's open-ended structure allows personalized, unique experiences that mirror each player's inner landscape and social context, whether solo, social, or facilitated.

WordTrails works because it uniquely combines focused attention, emotional exploration, self-reflection, and relational attunement within a safe, playful environment. Guided facilitation enhances this process, supporting trauma-informed outcomes, goal-directed learning, and collaborative meaning-making. By allowing each player's experience to shape the game, WordTrails becomes a flexible, powerful tool for personal growth, integration, and connection.

PART III

What is the Role of Trinkets in WordTrails?

In the context of WordTrails, trinkets are small, meaningful objects—tokens, or symbolic charms—that serve as anchors for stories, emotions, and transformative insights. Participants are allowed trinkets to use during gameplay to represent feelings, memories, or commitments, linking the abstract (language, stories) to the concrete (physical object). This bridges cognitive processing with embodied experience. *(Note: the number of trinkets assigned to each player depends on the amount of players.)*

The Psychological Role of Trinkets

1. Grounding and Regulation

Trauma often disrupts a sense of safety and bodily presence (van der Kolk, 2014). Trinkets provide sensory grounding—participants can hold, feel, and visually focus on a tangible object. This sensory cue calms the nervous system by activating the parasympathetic response, reducing stress and increasing emotional regulation (Ogden, Minton, & Pain, 2006).

2. Transitional Objects for Emotional Safety

Drawing from object relations theory (Winnicott, 1971), trinkets function as transitional objects, providing continuity between internal emotions and external reality. They allow participants to project feelings safely without direct exposure, reducing defensiveness and enabling deeper sharing in group or dyadic settings.

3. Memory Encoding and Narrative Repair

Physical objects enhance episodic memory encoding (Craig & Lockhart, 1972). When a story or insight is associated with a trinket, it becomes a mnemonic anchor that helps participants recall positive shifts later. This fosters narrative repair, a key mechanism in trauma healing (Pennebaker & Seagal, 1999).

4. Symbolic Representation and Agency

Choosing a trinket reinforces agency—a critical factor for trauma recovery (Herman, 1992). The act of selection and the symbolism behind it allow participants to externalize and re-author their stories, aligning with principles of narrative therapy and meaning-making (White & Epston, 1990).

5. Ritual and Closure

Trinkets can be integrated into ritualized closure at the end of a session, supporting a sense of containment and safety. Ritual is shown to reduce anxiety, enhance focus, and provide predictable structure in uncertain contexts (Norton & Gino, 2014).

Trinkets: Anchoring Meaning and Facilitating Neuroplasticity

A distinctive feature of WordTrails is the use of trinkets — small symbolic tokens that players place on cards they find especially meaningful. Each player has six trinkets, and the game concludes when all trinkets are placed. This mechanic adds a tangible layer to the abstract cognitive and emotional work of the game, providing both symbolic and neurological reinforcement.

Psychological and Neurological Mechanisms:

- **Salience and Memory Encoding:** Assigning a trinket to a card engages the brain's reward and salience networks, including the ventral striatum and orbitofrontal cortex, enhancing the memorability of chosen words and associated emotions (Knutson & Cooper, 2005).
- **Goal-Directed Behavior and Prefrontal Activation:** The finite number of trinkets introduces a structured endpoint, engaging executive function and planning circuits (dorsolateral prefrontal cortex), supporting sustained attention and intentional decision-making (Miller & Cummings, 2017).
- **Emotional Anchoring and Neuroplasticity:** By physically marking meaningful words, players consolidate affective and cognitive associations. Repeatedly linking experience to action strengthens synaptic connections, a demonstration of experience-dependent neuroplasticity (Kolb & Gibb, 2011).
- **Closure and Reflective Integration:** The completion of trinket placement provides a sense of closure, which can facilitate reflective processing and enhance self-referential integration through the medial prefrontal cortex and hippocampus (Raichle, 2015).

Neuropsychological Implications:

- **Experience-Dependent Neuroplasticity:** By physically marking meaningful words, trinkets strengthen synaptic connections associated with emotional salience and memory encoding (Kolb & Gibb, 2011).

- **Emotional Integration:** Placement highlights moments of personal significance, supporting limbic system engagement (amygdala, hippocampus) and reinforcing adaptive emotional processing (Knutson & Cooper, 2005).
- **Cognitive Closure and Self-Reflection:** Completing the trinket placements provides a structured sense of completion, engaging prefrontal circuits responsible for planning, decision-making, and reflective evaluation (Miller & Cummings, 2017).
- **Facilitates Shared Meaning in Group or Directed Play:** In multi-player or guided settings, trinkets serve as visual anchors for co-created narratives, enhancing relational resonance and collaborative insight (Raichle, 2015; Rizzolatti & Sinigaglia, 2016).

Trinkets are more than decorative elements — they function as neurocognitive tools that consolidate learning, anchor emotional significance, and provide closure, enriching both solo and social dimensions of WordTrails. The trinket mechanic encourages players to slow down, notice what resonates, and make intentional choices. In doing so, it supports the emergence of self-directed awareness, reinforces emotional learning, and promotes the integration of personal experiences into a coherent self-narrative. This tangible act of marking significance bridges abstract reflection with concrete behavior, amplifying the therapeutic potential of the game.

Summary

Trinkets are small tokens players place on words or cards that feel especially meaningful. This physical action helps the brain mark and remember important insights, strengthens emotional processing, and provides a sense of completion. In group or guided play, trinkets also create shared points of meaning, helping players connect and co-create understanding. Simply put, trinkets make the experience more tangible, reflective, and neurologically impactful.

Across all modes, the act of selecting words and placing trinkets engages both bottom-up emotional awareness (insula, limbic system) and top-down executive processing (dorsolateral prefrontal cortex), supporting neuroplastic change, emotional integration, and the development of the Capital-S Self. The trinket mechanic adds a tangible, intentional layer that strengthens memory, emphasizes meaningful content, and provides a structured sense of closure — making the experience both deeply personal and relationally resonant.

PART IV

Audience-Specific Pitches for WordTrails

WordTrails leverages storytelling and reflective dialogue as a trauma-informed tool, grounded in psychological research, to strengthen connection, empathy, and communication across diverse contexts.

WordTrails is a trauma-informed storytelling and dialogue tool designed to foster emotional resilience, relational trust, and meaning-making through guided narrative exchange. Drawing upon principles of expressive writing, narrative therapy, and post-traumatic growth research, WordTrails empowers participants to share their experiences in a structured, safe, and game-based format. This unique approach helps individuals and groups move from isolation and fragmentation toward connection and coherence.

Research demonstrates that structured storytelling and expressive writing reduce stress responses, improve psychological well-being, and enhance social bonds (Pennebaker & Smyth, 2016; Neimeyer, 2019). WordTrails operationalizes these findings into a practical, engaging format for diverse audiences, including Veterans Associations, Corporate Wellness / DEI Programs, and Professional Mediators & Conflict Resolution Specialists.

1. Veterans Associations

Objective: Support reintegration, emotional regulation, and self-reflection for veterans returning to civilian life.

Pitch:

WordTrails provides a structured yet playful way for veterans to explore their inner experiences and reconnect with their authentic Self. By selecting words and building meaningful connections on the board, participants engage neural systems that support attention regulation, emotional integration, and autobiographical reflection. Solo play allows deep self-reflection; paired or guided play strengthens co-regulation, empathy, and relational safety. Veterans benefit from the opportunity to process experiences safely, rebuild identity outside the team context, and foster shared understanding in peer groups.

Key Takeaways:

- Activates prefrontal networks for cognitive flexibility and attention control.
- Supports limbic integration for safe emotional processing.
- Encourages self-reflective narrative reconstruction, reinforcing the capital-S Self.
- Promotes social attunement in guided or paired sessions, enhancing relational safety.

Goal: Emphasize emotional regulation, community healing, and resilience.

Core Themes: Post-traumatic growth, reducing isolation, fostering belonging.

Structure:

- **Hook:** “Reclaiming voice through story”
- **Challenge:** Veterans face challenges reintegrating, coping with trauma, and finding safe spaces for expression.
- **Solution:** WordTrails provides structured storytelling, validated by trauma research, to reduce emotional suppression and enhance trust.
- **Benefits:**
 - Builds camaraderie and mutual understanding.
 - Supports resilience and self-regulation (research: narrative therapy & trauma processing).
 - Encourages meaning-making after trauma (post-traumatic growth framework).
- **Call to Action:** “Bring WordTrails to your veteran community as a bridge between silence and shared strength.”

Pitch 1: Veterans Associations

Framing: Supporting moral injury recovery, resilience, and peer bonding through structured storytelling.

Opening Hook:

“Every veteran carries a story—but not every story gets told. WordTrails creates a safe space for veterans to share their experiences without judgment, building trust and mutual understanding through structured narrative exchange.”

Why It Matters:

Veterans face unique challenges, including moral injury, PTSD, and social disconnection. Research shows that storytelling within a structured, peer-supported environment fosters emotional processing, reduces symptoms of trauma, and strengthens community ties (Litz et al., 2009; Pennebaker & Chung, 2011).

How WordTrails Helps:

- **Restores Meaning:** Helps veterans reconstruct narratives disrupted by trauma, a key factor in post-traumatic growth.
- **Strengthens Bonds:** Encourages shared understanding and reduces isolation through game-based, non-threatening interaction.
- **Supports Healing:** Builds emotional regulation and coherence by integrating expressive writing with guided reflection.

Call to Action:

“Partner with us to bring WordTrails into your veteran support groups. Let’s create a space where stories heal, one card at a time.”

2. Corporate Wellness / DEI Programs

Objective: Foster communication, empathy, and team cohesion in diverse organizational settings.

Pitch:

WordTrails is a creative, evidence-based tool to strengthen team communication, empathy, and shared problem-solving. By engaging both individual and social neural networks, it provides a safe, structured environment to explore perspectives, surface insights, and co-create meaning. Paired and group modes help employees practice active listening, mirror neuron engagement, and nonverbal attunement, enhancing relational intelligence and trust. Directed play with facilitators ensures alignment with team goals and organizational outcomes, making WordTrails a unique addition to DEI and wellness programs.

Key Takeaways:

- Enhances executive function and attention through goal-oriented play.
- Strengthens empathy and perspective-taking via mirror neuron activation.

- Supports social cohesion and conflict resolution in diverse groups.
- Encourages reflection on values, priorities, and collaborative problem-solving.

Goal: Emphasize empathy-building, psychological safety, and inclusion.

Core Themes: Storytelling as a DEI and stress-management tool.

Structure:

- **Hook:** “Beyond metrics—into meaningful connection”
- **Challenge:** Stress, burnout, and lack of belonging drive disengagement.
- **Solution:** WordTrails creates space for authentic dialogue, validated by research on empathy, cognitive flexibility, and cultural intelligence.
- **Benefits:**
 - Increases team cohesion and trust.
 - Reduces stress by facilitating expressive communication.
 - Enhances empathy across diverse groups (DEI alignment).
- **Call to Action:** “Transform your wellness and DEI initiatives into lived experiences of inclusion and care.”

3. Professional Mediators & Conflict Resolution Specialists

Objective: Facilitate constructive dialogue, reduce emotional intensity, and uncover shared understanding during disputes.

Pitch:

WordTrails offers mediators a trauma-informed tool to guide participants through complex emotional dynamics. By structuring interaction around word choice and reflective paths, it activates both bottom-up emotional awareness and top-down executive control. Directed sessions help disputing parties co-create safe spaces to explore perspectives, identify areas of agreement, and process emotionally charged topics. The tangible, playful structure helps reduce conflict intensity, encourages empathy, and fosters co-regulation, supporting more productive outcomes.

Key Takeaways:

- Engages executive and emotional regulation circuits for safe participation.

- Facilitates shared understanding and collaborative narrative creation.
- Reduces relational tension by creating structured, meaningful engagement.
- Enhances mediator effectiveness through guided neural and emotional activation.

Pitch 3: Professional Mediators & Conflict Resolution Specialists

Framing: A transformative dialogue tool for high-stakes conversations and relational repair.

Opening Hook:

“In mediation, trust is everything. WordTrails provides a structured, trauma-informed framework to help parties share stories, uncover meaning, and build the empathy needed for resolution.”

Why It Matters:

Unresolved conflict often stems from narratives that have never been safely expressed. Trauma-informed research highlights the role of storytelling in reducing defensiveness and restoring a sense of agency during conflict (Herman, 2015; Winslade & Monk, 2000).

How WordTrails Helps:

- **Creates Safety:** Provides mediators with a structured process that reduces emotional flooding and fosters calm dialogue.
- **Surfaces Core Needs:** Uses storytelling to reveal underlying values and experiences driving conflict.
- **Supports Lasting Resolution:** Builds empathy and mutual understanding by engaging both cognitive and emotional systems.

Call to Action:

“Equip your mediation practice with WordTrails. Transform conflict into connection through the power of guided storytelling.”

Integrated Research Support

- **Expressive Writing & Trauma:** Improves emotional regulation and immune function (Pennebaker & Smyth, 2016).
- **Narrative Identity & Meaning-Making:** Central to resilience and post-traumatic growth (Neimeyer, 2019).

- **Psychological Safety & Performance:** Trust-based teams outperform by 50% in engagement metrics (Edmondson, 2019).
- **Conflict Resolution:** Narrative reframing reduces hostility and promotes empathy (Winslade & Monk, 2000).

ADDENDUM

WordTrails Overview: Game Design & Dynamics

By Scout Wilkins, Game Creator

Game Elements and Design

WordTrails is a table top game/tool consisting of:

300 chips

50 Action cards

12 Trinkets

1 spinner

The chips each carry a single word. They are organized into 17 color groups. Each group gives possible answers to a question they are color coded to.

Examples of the questions:

- *Who owns this?*
- *What am I feeling?*
- *What is my level of desire or obligation?*
- *What natural forces might be at play here?*
- *What senses am I using?*
- *Where am I viewing this from?*

The Rules

1. WordTrails is built from the ground up on a foundation of authentic choice. You can. You don't have to. In this space there will be no pressure, no coercion.
2. Once a piece is played, it remains on the table. There are no "take backs". What has been played is here, and we all work with what's actually in front of us.
3. No explanations. There is no need or ability to justify or defend. Your choices don't have to make sense to anyone, including you. Interestingly, judgment, guilt, shame and blame turn out to vaporize in the absence of explanation.
4. Use the trinkets to keep oriented towards what resonates. The trinkets will keep you naturally attuned to noticing what feels true to you, in what another has played. What speaks to you, about another's responses? This focuses the direction of energy flow toward coherence and connection.

These four simple rules create a level playing field. The unusual level of safety is based on the fact that the rules apply across the board, and no one can explain their way out of that fact.

The Premise

We are on a grand adventure together. None of us has been in this exact position before...it's all going to be new uncharted territory for each of us, without exception.

Even in a guided game, we don't know what we will create together today. It is yet to be seen, yet to be done.

Starting from right here, with conditions being what they are and shifting and changing as we go, let's move forward together.

All possibilities and actions are on the table and freely available for the choosing.

The adventure is taken a step at a time, with players watching, listening and responding to each other in turn.

Everyone has the opportunity to very privately witness what emerges and how it feels.

Players move forward building trails together step by step, taking time to consider what is happening in real time, giving information and taking action, in the absence of any worry about judgment.

Player Modes

WordTrails can be played alone or in a group.

Solo play mode

Two-player mode

Group mode

Guided mode

Group Size

In the proposed introductory game, the optimal group size is 2 - 4, in order for each player to have ample trinkets.

In actual play, larger groups have demonstrated a high level of creative capacity to figure out how to play with WordTrails together.

In one group, for example, a player spontaneously began by stacking a few chips they wanted to offer a fellow player. As those were passed around the table, other players built on what was being offered to the chosen recipient.

This built into everyone in the group being the recipient of information from the others.

The elements available can truly be worked with in any way imaginable.

Crossing The Threshold

Much like its metaphorical storyline, at the actual moment of taking the first step embarking on a true adventure, WordTrails offers an interesting threshold experience

The fluid, unscripted nature of play with so many options can be unfamiliar and intimidating.

To help people feel more comfortable entering and playing for the first time, a specific game is suggested, to provide structure.

The Introductory Game

Table set up.

- The table is set up so all the chips are laid out around a working space in which the trails will be built.
- The action cards are left in a stack, to be drawn randomly or chosen deliberately, as desired.
- The spinner is available for anyone to use as appeals to them.
- The trinkets are divided equally between players.

Crossing the Threshold

- Rules and premise are reviewed.
- Players pause, connect, and agree to proceed, following those agreements.

Play Begins

Phase One. On the trail together.

- A chip or card is selected randomly and laid in the middle of the table. This is the entry point to the adventure.
- Players take turns choosing the chip or card they would like to play next, building on what has been laid down.
- The pieces are laid touching each other, so trails begin to form.
- The trails develop organically as the adventure unfolds. There are no rules as to what has to be played where, or how the trails “should” or are “supposed to” develop.
- Along the way, players watch for points of resonance, “me too” moments where another player has put down a chip or card that feels important. When this is felt, the player places one of their trinkets on the resonant piece.
- Phase one of the game is complete when all the trinkets have been placed.

Phase two.

At the campfire, making s'mores.

- After pausing to honor and acknowledge what has been created so far, all the chips and cards without trinkets are pushed away and the twelve trinketed pieces are brought together.

- Each player gets a turn to create their own personal design, or s'more, with those twelve elements.
- When the s'more is complete to their satisfaction, they can tell the story of what it says to them, or let their s'more speak for itself.
- The game is complete when every player has had a chance to create and share their own s'more.

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DR. STEFANIE BENNETT: CREDENTIALS & BACKGROUND

Dr. Stefanie Bennett holds a PhD in Psychology with a specialization in Transpersonal Psychology from the prestigious Sofia University. Her doctoral dissertation, the first of its kind, focused on parental alienation from the mother's perspective. She is an award-winning poet and the author of over ten books, including multiple volumes of poetry and several scholarly works. Her major titles include: *The Soul's Return* – with a foreword by Dr. Douglas Gabriel; *Breath Divided: How Narcissism Wounds the Soul* – a synthesis of Aramaic wisdom and spiritual science, with a foreword by Dr. Neil Douglas-Klotz; and *From Breath to Spiral* (forthcoming) – a study of plasma as it relates to consciousness and soul fragmentation.

Dr. Bennett has also written and published several workbooks specifically designed to support trauma recovery and healing from narcissistic abuse. She has extensive experience consulting with individuals healing from trauma and has training in domestic violence response. Her academic achievements include graduating with honors from the University of Washington and being inducted into the Golden Key International Honor Society. As a researcher and speaker, she has contributed original thought to the field of intentionalism, explaining why and how intention works. She is a sought-after speaker and podcast guest on the subject of narcissistic abuse and soul healing. Dr. Bennett was a guest speaker for a master class and a guest author in Veda Austin's second book.

Dr. Bennett's language studies in Ancient Greek, Latin, French, Japanese, and now Aramaic inform and enrich her deep research in consciousness studies. Her forthcoming book and workbook on Mary Magdalene continues her exploration of soul reclamation and sacred feminine wisdom.