Concept Paper

Suicide and the Survival Architecture of Coping: A Model of Arousal Regulation from Contemplation to Collapse

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Posted Date: 17 December 2025

doi: 10.20944/preprints202512.1395.v1

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Suicide and the Survival Architecture of Coping: A Model of Arousal Regulation from Contemplation to Collapse

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Abstract

The *Survival Architecture of Coping* (SArC) reframes the concept of suicide not as a failure of will or morality, but as the terminal phase of an overwhelmed regulatory system. Drawing from affective neuroscience, developmental psychology, and contemporary suicidology, SArC conceptualizes despair as the point at which the human coping architecture; biological regulation, cognitive flexibility, relational co-regulation, and existential meaning; can no longer reorganize mounting activation into workable forms of thought, action, feeling, and rest. In regulatory terms, suicide emerges when arousal continues to rise while usable capacity narrows, and the system progressively loses its ability to bind experience into coherent, livable patterns. Building on Freud's notion of binding (Freud, 1895/1966) and the tension between Eros and Thanatos (Freud, 1920/1955), SArC interprets coping as the ongoing work of integration: channeling activation into connection, comprehension, and constructive action, rather than fragmentation and collapse. This framework integrates McEwen's concept of allostatic load, Bowlby's attachment models, and process-based therapies with recent regulatory accounts of arousal and appraisal, including the Arousal Appraisal Model (Passaro, 2025a). It situates suicidal crises along a continuum; from low-load contemplation, through matched-load engagement and excess-load emotion, to overload states in which collapse or shutdown becomes the only remaining form of relief. Rather than treating suicide as an inexplicable choice or a discrete symptom cluster, SArC views it as a systemic outcome: the exhaustion of a survival architecture that has been operating beyond its sustainable limits. Prevention and treatment are therefore reconceived as the restoration of coping capacity; reactivating rhythm across body, mind, relationship, and meaning; rather than merely suppressing suicidal ideation. In doing so, SArC offers a unifying model in which healing is understood not as the elimination of pain, but as the renewed ability of the system to move, integrate, and remain intact while in pain.

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Authorial Preface

This chapter emerges from years of sitting beside those who no longer wished to live, listening not for verbal answers but for expressions of the faint rhythms of systems struggling to survive their own exhaustion. Over time, I began to see a pattern that transcended diagnosis or circumstance. The people before me; soldiers, teachers, students, parents; shared one invisible wound: their capacity to cope had been worn thin. What remained was not a deficit of strength, but a system asked to carry more activation than it could safely hold or discharge.

In the therapy room, despair often speaks the language of depletion. "I can't keep doing this," a client says, or "I'm tired of trying." Beneath those words lies an exquisite biological truth: the mechanisms that regulate arousal, pain, hope, and endurance have been driven beyond their sustainable range. What we call a suicidal crisis is not a collapse of character, but a collapse of regulation; an exhausted attempt to manage too much energy with too little remaining capacity.

 doi:10.20944/preprints202512.1395.v1

This is where what I now call the *Survival Architecture of Coping* (SArC) was born, not in theory, but in observation. Across years of practice, I began mapping how humans sustain hope under strain: how breath steadies rising activation into thought, how connection helps distribute emotional load, how meaning gathers scattered experience into something that can be carried, and how even in the deepest fatigue the body continues its quiet work of survival. Later theoretical work on arousal and appraisal, including the Arousal Appraisal Model (Passaro, 2025a), helped give language to these movements; SArC extends that language into the specific terrain of despair and suicidality. What follows is an attempt to describe that architecture; the science and practice of emotional survival when the system has been living at the edge of its own capacity.

Part I — The Fall: When the System Overloads

Despair rarely arrives as a sudden catastrophe. It enters gradually, often disguised as fatigue, apathy, or the quiet conviction that nothing can change. Yet beneath those symptoms lies a profound regulatory event: the struggle of the adaptive system to keep rising activation within a workable range.

The Survival Architecture of Coping begins here, with the premise that human beings are not designed merely to endure stress, but to move through it; shifting among the states of reflection, effective action, tolerable feeling, and restorative stillness. When that movement tightens or stalls, the system begins to fracture. The result is not merely distress but disintegration: what neuroscience calls allostatic overload (McEwen, 1998), and what we, in clinical practice, may encounter as a state of despair.

1. The Adaptive System and Its Limits

The human organism is built for dynamic balance. Each domain of the coping system; biological, cognitive, relational, and existential; contributes to the regulation of arousal and meaning. When one falters, other systems come into play to compensate, thought ameliorates emotion; relationship distributes pain; meaning reorients chaos.

But compensation is costly. Under chronic stress, adaptive flexibility tightens into rigidity. The mind narrows, repeating the same cognitive scripts. The body remains braced long after danger passes. Relationships that once provided safety become sources of further strain. What began as short-term adjustments hardened into chronic patterns.

Over time, activation accumulates faster than it can be organized into effective action, integrated understanding, or genuine rest. In what follows, I will use the term *load* to describe this total demand on the coping system; physiological, cognitive, relational, and existential; relative to its available capacity. The organism is still mobilizing, still reacting, but with less usable capacity. Eventually, the entire system begins to operate beyond its sustainable limits, a state that mirrors the metabolic fatigue of any biological organism forced to function without adequate recovery.

This moment, when the system can no longer translate strain into adaptive motion or return to baseline, is the true beginning of despair. The Survival Architecture of Coping identifies it not as a psychological failure, but as systemic overload: too much demand, too little remaining bandwidth to carry it.

2. The Historical Arc of Despair

Humanity has long sought language for this collapse. Ancient texts such as *The Dispute Between a Man and His Ba* (ca. 2000 BCE) record one of the earliest debates with despair: a man pleading for death, his soul urging endurance (Lichtheim, 1975). What makes that Egyptian fragment striking is not its antiquity but its structure. The crisis is not framed as wickedness or weakness. It reads more like an internal regulatory argument between parts of a system that no longer knows how to go on.

Across centuries, this argument reappears: Job with his God (Job 3:1–26, *New Revised Standard Version Updated Edition*, 2021), Marcus Aurelius with his duty (Marcus Aurelius, ca. 170/2002), the

 doi:10.20944/preprints202512.1395.v1

Buddha with his suffering (Bodhi, 2000, SN 56.11). Each tradition proposes a way to restore balance; prayer, virtue, mindfulness; but all are, at their core, practices of coping. They are traditional attempts to re-organize overwhelming experience into something that can be borne.

By the Enlightenment, despair was re-coded as illness. Suicide became "melancholia," then "suicidal monomania," as medicine replaced morality. In the process, the social and existential scaffolds of coping were often lost. The individual became both the problem and the site of cure; the wider regulatory network; family, community, ritual, meaning; receded from view.

Then, in 1897, Émile Durkheim reconceptualized suicide as a social phenomenon: the result of disconnection and deregulation within the collective body (Durkheim, 1897). He understood what medicine had partly forgotten; that coping is not solitary but social, and that regulation is distributed across systems of belonging. Yet his analysis, structural and statistical, could not fully explain the inner mechanics of collapse. How does disconnection become dysregulation? What happens inside the organism when belonging fails, and no new way of organizing distress is found?

SArC takes up that question. In dialogue with contemporary work on arousal and appraisal, including the Arousal Appraisal Model (Passaro, 2025a), it treats despair as the product of a system that has lost too many of its ways to turn activation into coherent life.

3. The Psychology of Collapse

Twentieth-century psychology turned inward again. Freud saw suicide as aggression turned against the self; Menninger reframed it as a fusion of impulses; to die, to kill, to be killed (Menninger, 1938). Later, suicidologists such as Edwin Shneidman described suicidal crises as states of cognitive constriction, in which the person can see only a single escape route from intolerable distress (Shneidman, 1985). Cognitive models of depression and suicide further elaborated this pattern, noting that suicidal individuals often perceive death as the only solution left (Beck et al., 1979; Wenzel, Brown, & Beck, 2009). This narrowing; what clients describe as "tunnel vision"; is not just metaphor; under high load, the prefrontal cortex yields to more primitive survival circuits, reducing cognitive range.

Thomas Joiner's Interpersonal Theory of Suicide added that thwarted belonging and perceived burdensomeness combine with acquired capability to create lethal risk (Joiner, 2005). SArC builds upon this by reading these conditions as signs of a regulatory system losing its routes for relief. When one feels like a burden, seeking help becomes dangerous; when help is not sought, loneliness deepens; as loneliness deepens, arousal has fewer places to go. The loop tightens until the system can no longer redistribute strain.

In this sense, suicide is not a singular decision, but a progressive failure of regulation. Cognitive options narrow; relational avenues constrict; biological recovery falters; meaning thins. A bridge weakened by repeated stress does not simply "choose" to give way; it loses structural capacity until collapse becomes inevitable under loads it once could bear.

4. The Body Joins the Conversation

Contemporary neuroscience confirms what ancient texts and clinical observation have long suggested: despair is not solely mental but deeply embodied. Chronic stress reshapes the architecture of regulation. Under prolonged strain, the amygdala becomes more reactive, the hippocampus more vulnerable, and the prefrontal cortex; seat of reflection and planning; less able to modulate subcortical activation (Arnsten, 2009; McEwen, 1998).

In trauma, this dysregulation becomes chronic. The body oscillates between states of heightened alarm and states of numbing or collapse. Polyvagal Theory (Porges, 2011) describes this as shifting among mobilized, socially engaged modes and older survival modes of fight, flight, or shutdown. The result is paradoxical: the person appears numb yet flooded, immobilized yet inwardly braced. In clinical practice, these states are often mistaken for apathy or resistance; in truth, they are signatures of a system struggling to stay intact under load.

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A client once described it this way: "I feel like I'm running inside but can't move." That phrase captures the essence of regulatory breakdown: energy without outlet, motion without direction. Other patients, including some who show no overt signs of depression or suicidal ideation, describe recurring dreams in which they are trying to run toward or away from something, but their feet feel sucked into the floor or mired in molasses, slowing them to an agonizing crawl. From a SArC perspective, both the waking metaphor and the dream image point to the same phenomenon: the coping system is overloaded; activation is being generated, but there are too few safe ways left to express, organize, or resolve it.

5. Calm as Survival Intelligence

Calm, in this context, is not an absence of feeling but the restoration of workable rhythm. When arousal falls within a tolerable range, the "window of tolerance" described by Siegel (1999), higher-order capacities reawaken. Breath deepens; perception widens; the self becomes capable of choice again.

SArC defines this as *functional calm*: the state in which the nervous system can experience distress without disintegration and can still convert activation into reflection, communication, or action. It is not so much a mood as a stance—like taking a knee long enough to get your bearings: the ability to stay online while hurting.

We see this intelligence everywhere: in the breath that steadies thought before a difficult conversation, in the friend who listens without escalating or shutting down, in the body's spontaneous sigh after crying. Calm is not resignation; it is the biological and psychological signal that the system still has room to move. In terms of SArC, it is the sign that coping capacity has not yet been exhausted—that the person can still shift gears rather than being locked into overdrive or collapse.

6. The Modern Landscape of Overload

Today, overload wears new disguises: burnout, loneliness, moral injury, ecological grief. Each represents a similar configuration: enduring demands that outstrip the available capacity to process, act, rest, and repair. Nurses working through pandemics, activists confronting climate catastrophe, parents sustaining care through chronic stress—all inhabiting systems pushed to operate near their limits for long periods.

Our nervous systems evolved for episodic threats, not for continuous alarm. Modern life traps them in a state of ambient emergency: unending notifications, economic precarity, social comparison, and responsibility without recovery. Under such conditions, the basic regulatory tasks—downshifting arousal, finding perspective, accessing support, sustaining meaning—become harder to perform.

Research on cognitive overload and coping suggests that, under sustained information and demand-load, executive resources deplete faster than they can renew; flexibility gives way to rigidity, and attention becomes harder to direct. In SArC terms, this means that the system exhausts coping capacity faster than it is rebuilding it. More activation is generated than can be translated into constructive thought, action, or rest.

In this terrain, despair is less about a single catastrophe than about accumulation. Suicide does not appear as an isolated impulse but as the endpoint of a long period in which the system has been operating close to, or beyond, its limits. SArC interprets suicide not as an unexplainable choice, but as the collapse of a regulating system that has run out of workable ways to manage its own activation. The self does not so much desire death as it longs for stillness—a level of relief that no longer feels attainable within life.

Closing of Part I: The Fall

 doi:10.20944/preprints202512.1395.v1

Every suicidal crisis begins, in some form, as the body and mind plea for relief. Beneath cognition and belief, the organism seeks to stop moving because movement has become synonymous with being overwhelmed. Yet even in that stillness, a deeper rhythm persists; the faint work of systems still trying, however clumsily, to keep life going.

The Survival Architecture of Coping takes that residual motion seriously. It views despair as the state in which coping capacity has been driven to its edges, not as the absence of capacity altogether.

In the next section, Part II, The System: The Architecture of Coping, we will descend into the structure itself: the four domains through which life sustains coherence; body, thought, relationship, and meaning; and how their interdependence determines whether a human being breaks or bends beneath the weight of existence. Recent models of arousal and appraisal, including the Arousal Appraisal Model, will serve in the background as guides for understanding how these domains jointly manage rising activation; and how, when they fail, the system loses its ability to go on.

Part II — The System: The Architecture of Coping

1. The Four Domains of Coping Capacity

The Survival Architecture of Coping (SArC) conceptualizes human endurance as the emergent property of four interdependent domains: biological regulation, cognitive flexibility, relational co-regulation, and existential meaning. Each represents a subsystem of the broader adaptive architecture responsible for maintaining equilibrium under changing conditions. Together, these domains form a feedback network through which stress is metabolized, emotion is organized, and coherence is restored.

This multidimensional model parallels developments across psychology and neuroscience that frame health as dynamic stability rather than static balance. In physiology, McEwen's (1998) concept of allostasis describes the body's ability to achieve stability through change, continually recalibrating to accommodate environmental demand. In cognitive neuroscience, Bonanno and Burton (2013) define resilience as "the capacity to flexibly adapt to changing emotional circumstances," emphasizing the importance of shifting strategies as conditions change. Likewise, attachment theory (Bowlby, 1969) and existential psychology (Frankl, 1959) situate human survival within relational and meaning-based frameworks.

SArC unites these literatures into a single systemic model. Coping is not a discrete behavior or trait, but a multi-domain process of regulation in which physiological, cognitive, relational, and existential systems continuously redistribute energy and re-organize experience. In this sense, adaptive functioning depends on the system's ability to channel rising activation into workable forms; thought, action, feeling, and restorative stillness; rather than allowing it to accumulate unchecked. Suicide, within this framework, emerges when these domains lose synchrony; when regulation, cognition, connection, and meaning can no longer collaborate to keep the organism within a tolerable range of load. Recent theoretical work on arousal and appraisal, such as the Arousal Appraisal Model (Passaro, 2025a), provides a regulatory backdrop for this view by emphasizing how changing mobilization–capacity relationships shape subjective experience and behavior.

2. Biological Regulation: The Body as the First Coping System

Biological regulation constitutes the foundation of coping capacity. The nervous system governs emotional and behavioral stability through rhythmic oscillation between activation and recovery. When this rhythm falters, all higher-order capacities; reflection, empathy, and moral judgment; degrade.

The physiological underpinnings of coping lie primarily in the autonomic nervous system (ANS), which modulates arousal through two complementary branches: the sympathetic (mobilization) and the parasympathetic (restoration). Stephen Porges's Polyvagal Theory (2011) refines this model by distinguishing between dorsal (immobilization) and ventral (social engagement) vagal pathways. A healthy system moves fluidly among these states, recruiting as much

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activation as needed and then relinquishing it. An overloaded one becomes trapped in chronic hyperactivation (anxiety, agitation) or in patterns of hypoactivation (numbness, collapse).

Chronic stress triggers allostatic overload, in which neuroendocrine responses become maladaptive. Elevated cortisol altered heart-rate variability, and persistent sympathetic dominance degrades both physical and psychological resilience (McEwen & Stellar, 1993). Over time, the organism is less able to bring heightened activation back toward baseline or to enter states of restorative rest. The result is physiological rigidity: a narrowing of the range in which life can be lived without feeling overwhelmed. Clinically, this manifests as insomnia, somatic tension, fatigue, and emotional exhaustion.

From a SArC perspective, this loss of oscillation is the biological signature of coping collapse. The body continues to generate activation; through external stressors, internal worries, or remembered threats; but lacks sufficient capacity to organize that activation into effective action, tolerable feeling, or genuine rest. The restoration of rhythm; through breath regulation, movement, sleep, and sensory integration; thus becomes the first step in rebuilding coping capacity. These interventions expand the bandwidth within which other domains can work.

3. Cognitive Flexibility: The Mind's Motion

If biological regulation provides the system's energy and limits, cognitive flexibility determines how that energy is directed and understood. Cognitive processes such as appraisal, problem solving, anticipation, and perspective shifting enable the individual to reinterpret stressors and generate alternative pathways of adaptation.

Research on executive function delineates three interrelated components: working memory, inhibitory control, and cognitive shifting (Miyake et al., 2000). Under acute or chronic stress, these functions are impaired as prefrontal networks lose dominance to limbic reactivity (Arnsten, 2009). The mind perseverates, locked into repetitive thought loops that escalate arousal without producing new solutions.

SArC interprets this loss of flexibility as the cognitive dimension of despair. As Beck observed in his theory of cognitive constriction (Beck et al., 1979), the suicidal state is characterized by a narrowing of perceived options until death appears as the only relief. In regulatory terms, this reflects a system that can no longer re-organize its own activation: rising load is automatically interpreted as evidence of failure, hopelessness, or inescapable threat.

Cognitive flexibility functions as the mind version of breathing; expanding to encompass multiple perspectives, contracting to focus on a single task, and shifting between them as circumstances require. The health of this rhythm determines psychological elasticity: the ability to hold distress while still considering alternatives. Training flexibility through mindfulness, cognitive reappraisal, and metacognitive awareness has been shown to increase emotion regulation and resilience (Moore & Malinowski, 2009). These findings dovetail with constructivist and cultural accounts of emotion, which emphasize how interpretation and context shape affective experience (Barrett, 2017; Ford & Mauss, 2015). Within SArC, such practices are understood as ways of steering activation toward more workable patterns; diverting it from catastrophic narratives into frames that support action, connection, or acceptance.

4. Relational Co-Regulation: Connection as Equilibrium

Coping is not a solitary endeavor. Human regulation depends fundamentally on co-regulation, the physiological and psychological synchronization of nervous systems within relationships. From infancy onward, emotional stability is mediated through proximity, attunement, and predictable responsiveness (Feldman, 2007). Secure attachment provides repeated experiences in which distress is met, modulated, and resolved, establishing an internal model of safety (Bowlby, 1969).

This early architecture persists throughout life. Studies using hyper-scanning EEG and fMRI show that interpersonal attunement; eye contact, vocal rhythm, shared affect; produces measurable synchronization between prefrontal and limbic regions across individuals (Kinreich et al., 2017). Co-

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regulation thus operates as a form of distributed homeostasis: stress is shared, shaped, and reduced within the relational network. The burden of carrying activation does not fall on a single organism.

When isolation severs this loop, coping capacity erodes. Joiner's Interpersonal Theory of Suicide identifies thwarted belongingness and perceived burdensomeness as key contributors to suicidal ideation (Joiner, 2005). Within SArC, these constructs are reframed as social indicators of regulatory breakdown. When a person experiences themselves as a burden, they withdraw; when they withdraw, they lose access to co-regulation; as co-regulation diminishes, internal activation has fewer outlets and becomes harder to manage.

Therapeutic and communal relationships can restore this regulatory loop. The therapist's calm tone, reliable presence, and capacity to remain engaged in the face of strong affect serve as external regulators for the client's destabilized system (Schore, 2012). Over time, these interactions are internalized as new templates: the person learns that intense states are survivable in connection, not only in isolation. Family, peer, and community relationships can similarly function as regulators when they provide spaces where activation can be expressed, acknowledged, and modulated rather than denied or amplified. In SArC, relational repair is therefore both psychological and physiological: it increases the system's effective capacity by distributing load across multiple nervous systems.

5. Existential Meaning: The Integration of Experience

The fourth domain, existential meaning, provides the integrative axis around which all other capacities revolve. Meaning transforms raw experience into coherence, linking suffering to purpose, continuity, or value. As Viktor Frankl (1959) observed, "Those who have a why can bear almost any how."

Neuroscientific evidence supports this existential mechanism. Studies on purpose in life show correlations with lower inflammatory markers, improved immune function, and greater activation in regions associated with valuation and self-referential integration (Kang et al., 2019). Meaning acts as an organizational principle that binds affect, cognition, and memory into a narrative that makes ongoing effort worthwhile.

This emphasis on coherence extends earlier work in which I conceptualized flashbacks as expressions of a hippocampal drive to restore narrative and energetic continuity to traumatic memory (Passaro, 2025b). In SArC, that same drive for coherence is scaled up from episodic recollection to the broader architecture of coping across body, thought, relationship, and meaning.

When meaning collapses, integration disintegrates. Depression and existential despair are marked by alterations in networks associated with autobiographical memory and future projection (Sheline et al., 2010). The individual can no longer imagine a future in which current activation would lead anywhere worth going. Load no longer has meaning; it feels like a senseless burden.

Within SArC, meaning functions as the top-down regulator of the entire coping architecture. It answers the question, "For what am I willing to carry this level of activation?" and thereby shapes whether high-load states are approached, endured, or rejected. Existential therapies that emphasize narrative reconstruction and value-based action—such as Acceptance and Commitment Therapy (ACT; Hayes et al., 2011)—expand coping capacity by reestablishing a sense of direction. When pain is linked to something chosen or valued, it remains painful but becomes more tolerable, because it is no longer merely happening to the person; it is being carried for something.

Meaning, in the SArC framework, it is not a luxury. It is regulation made conceptual. It provides a context in which biological, cognitive, and relational efforts to manage activation cohere into a life that still feels worth sustaining.

6. Integration: The Coping System as Dynamic Infrastructure

Viewed together, these four domains form a self-organizing system—a living infrastructure of adaptation. The body provides energy and limits, the mind directs and interprets it, relationship stabilizes and shares it, and meaning integrates it. Coping capacity, then, is the dynamic equilibrium of these systems in motion.

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In a relatively healthy psyche, rising activation in one area is buffered and reorganized by the others:

- physiological arousal prompts cognitive reframing and behavioral adjustment,
- relational reassurance helps regulate emotion and restore perspective,
- existential frameworks situate setbacks within a broader trajectory.

Under chronic overload, these feedback loops become desynchronized. Arousal persists without cognitive modulation; cognition narrows without relational input; meaning fragments under the weight of accumulated failure and fatigue. The result is systemic rigidity: the inability to adapt across domains when demands change.

This model aligns with control theory in psychology, which defines behavior as the continuous adjustment of internal variables toward desired set points (Carver & Scheier, 1982). In suicide, the control loop fails; feedback is distorted or ignored, and error signals—between what is and what should be—amplified rather than resolved. The person experiences not only distress, but the chronic sense that no amount of effort alters the discrepancy. From this perspective, the system's efforts to maintain coherence over time—whether in the form of reorganizing traumatic memories (Passaro, 2025b) or recalibrating daily arousal—can be seen as variations of the same underlying imperative: to reduce disorganization enough that life can continue.

SArC reconceptualizes this not as weakness but as energetic and structural exhaustion. The task of therapy and prevention is not simply to dampen signals, but to restore pathways along which activation can travel—to reopen blocked routes between body and mind, self and other, present and future. Put differently, the work is to rebuild the system's ability to move: to allow arousal, once again, to be transformed into thought, action, feeling, and rest without breaking the person who carries it.

7. Bridge to Part III: Repairing the Architecture of Survival

The Survival Architecture of Coping situates suicide within the breakdown of a complex regulatory network. Biological rhythm, cognitive flexibility, relational synchrony, and existential coherence are not discrete constructs but interdependent channels of adaptation. When one fails, others strain to compensate; when all are compromised, collapse ensues.

Yet within every system, the potential for renewal remains. Neuroplasticity, relational attunement, and meaning reconstruction demonstrate that coping capacity is not fixed; it is teachable, measurable, and restorable. Emerging process-based and regulatory models—including work on arousal and appraisal—suggest that even deeply entrenched patterns of overload can be shifted when interventions target the underlying dynamics rather than only their symptoms.

Part III, *The Return: Repairing the Architecture of Survival*, will examine how this restoration occurs in practice: through therapeutic calibration, capacity mapping, and the operationalization of coping as a measurable process. It will articulate how interventions that reestablish rhythm, widen flexibility, and strengthen relational and existential scaffolds can reactivate the architecture of survival—and how, in that reactivation, life begins again even before suffering fully subsides.

Part III — The Return: Repairing the Architecture of Survival

1. From Collapse to Calibration

If Parts I and II describe the failure of the adaptive system, Part III concerns its renewal. Where traditional suicidology focuses primarily on symptom reduction and risk management, the Survival Architecture of Coping focuses on re-regulation: the systematic restoration of the system's ability to reorganize activation across biological, cognitive, relational, and existential domains.

Healing, in this view, begins not with argument but with calibration. The nervous system must relearn how to rise, fall, and settle—how to move between effort and rest, engagement and withdrawal, feeling and reflection—without getting stuck at extremes. Contemporary neuroscience

 doi:10.20944/preprints202512.1395.v1

supports this possibility: even after chronic stress, regulatory circuits retain plasticity. Structural and functional recovery within prefrontal–limbic pathways have been demonstrated following mindfulness and emotion-regulation training (Tang et al., 2015). Similarly, relational experiences that evoke safety and attunement activate ventral-vagal tone and dampen amygdala hyperactivity (Schore, 2012).

Recent regulatory models of arousal and appraisal, such as the Arousal Appraisal Model (Passaro, 2025a), help clarify what this renewal entails: not simply "calming down," but restoring the capacity to organize activation into thought, action, feeling, and restorative stillness in ways that fit the real demands of the situation. SArC applies this regulatory lens directly to despair and suicidality.

2. The Principle of Calibration

In clinical applications, SArC distinguishes calibration from correction.

- *Correction* seeks to replace maladaptive thoughts or extinguish specific symptoms.
- *Calibration* seeks to restore the rhythms by which the system adjusts itself—how it detects rising load, redistributes it, and returns toward workable ranges.

When therapists and clients engage in calibrated interaction; steadier voice, paced breathing, titrated emotional intensity; the nervous system entrains new temporal patterns. The session becomes a small laboratory in which activation is allowed to rise and fall in manageable increments rather than spiking into overwhelm or dropping into shutdown.

This perspective parallels interpersonal neurobiology, which views psychotherapy as the synchronization of two self-organizing systems (Cozolino, 2014). Through consistent, predictable attunement, the clinician's regulated presence becomes a live model of coherence. Over time, the client internalizes this rhythmic template, extending their window of tolerance (Siegel, 1999, 2020).

From a SArC standpoint, calibration therefore replaces persuasion as the central therapeutic act. The therapist's task is to help the system remember motion: to oscillate between expression and containment, effort and rest, grief and reprieve.

3. Re-Establishing Biological Rhythm

The first layer of repair begins with physiology. Chronic sympathetic activation depletes energy, distorts appraisal, and constricts perception. Recovery demands the reinstatement of basic oscillatory cycles: sleep and waking, activation and rest, tension and release.

Evidence from autonomic biofeedback and heart-rate-variability interventions demonstrates that deliberate breathing (approximately 5–6 breaths per minute) enhances vagal tone and supports emotional regulation (Lehrer & Eddie, 2013). Movement-based therapies such as yoga or paced walking similarly reintroduce rhythmic sensory input, promoting ventral-vagal engagement and reducing chronic hyperarousal (Streeter et al., 2012).

Within SArC, these are not peripheral "lifestyle" adjuncts but biological re-calibrators. They expand the workable range within which cognitive, relational, and existential processes can operate. In practice, this might mean:

- prioritizing regular sleep and circadian cues to synchronize endocrine rhythms,
- building small, predictable movement routines that convert activation into action rather than rumination,
- using breath and grounding as first-line responses when load starts to spike.

The aim is not permanent calm but a more flexible body, capable of rising to meet demand and then returning, rather than remaining locked in chronic high activation or repeated collapse.

4. Restoring Cognitive Flexibility

Once physiological rhythm is somewhat stabilized, attention can widen. Cognitive rigidity—the repetitive narrowing that characterizes suicidal ideation—requires interventions that explicitly train set-shifting and context sensitivity.

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Empirical support for metacognitive flexibility training and contextual behavioral therapies (e.g., ACT, DBT) shows improvements in emotion regulation and reductions in suicidal ideation (Hayes et al., 2011; Linehan et al., 2015). These approaches teach clients to:

- notice early signs of cognitive constriction ("all-or-nothing" conclusions, catastrophic predictions),
- hold thoughts as events in the mind rather than as literal truths,
- experiment with alternative appraisals, and micro-actions under manageable levels of stress.

In SArC-informed practice, the clinician often introduces micro-experiments: brief, low-stakes opportunities to test different responses under mild to moderate load. A client might try a new coping skill for three minutes, send one text message, or reframe one automatic thought in a difficult situation. Each successful shift, however small, strengthens the neural circuitry of flexibility, creating "muscle memory" for future crises.

In this way, cognition becomes not only a generator of content ("what I think about myself") but a steering mechanism that can redirect activation toward more workable destinations—reflection, action, connection—rather than toward chronic excess load and collapse.

5. Re-Activating Relational Co-Regulation

Because isolation amplifies dysregulation, rebuilding relational rhythm is essential. Therapeutic, familial, and community ties act as external regulators of arousal and emotion, extending the same principles of interpersonal synchrony documented in early caregiver–infant relationships (Feldman, 2007). Within SArC, relational work is not an optional add-on, but a central means of restoring coping capacity.

In treatment, SArC emphasizes structured reconnection:

- identifying one or two safe, reliable contacts,
- clarifying what types of support are feasible for them (listening, distraction, problem-solving, presence),
- scripting specific reach-out behaviors before a crisis occurs (e.g., "When I am in X state, I will send Y message to Z person").

This operationalizes what attachment theory describes as earned security: the establishment of trust through repeated experiences of rupture and repair (Hughes et al., 2020). Each successful episode in which distress is brought into relationship and survives there, expands the system's sense that it does not have to carry activation alone.

At the physiological level, positive social contact increases oxytocin and parasympathetic tone, counteracting chronic stress hormones (Heinrichs et al., 2009). Thus, relational repair is simultaneously neurochemical and existential: it re-teaches the body that safety and connection can coexist.

6. Reconstructing Meaning

Existential restoration forms the apex of the coping hierarchy. As rhythm and flexibility return, the mind becomes more capable of integrating experience into narrative. Meaning-centered therapies have been shown to decrease hopelessness and suicidal ideation by re-linking suffering to purpose or value (Frankl, 1959; Breitbart et al., 2010).

SArC integrates these findings by positioning meaning making as a regulatory function rather than a purely philosophical exercise. When clients articulate values, goals, relationships, or commitments that matter to them, neural networks associated with valuation and affiliation engage (Kang et al., 2019). The subjective "why" becomes a stabilizing force:

- high-load states remain painful but are framed as part of a chosen path,
- recovery efforts are no longer experienced as meaningless struggle,
- setbacks are assimilated into an ongoing story rather than taken as final verdicts.

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In practical terms, meaning work in SArC often includes:

- identifying domains of life where the person is still willing, even minimally, to invest energy,
- exploring how past suffering has shaped sensitivities, ethics, or commitments,
- imagining specific futures, even modest ones, in which current pain would be worth having endured.

Meaning, in this framework, is the system's highest form of binding: it weaves biological, cognitive, and relational regulation into a life that the person still recognizes as their own.

7. Monitoring Capacity in Practice

Although SArC can be implemented without any formal instrument, it does invite ongoing attention to capacity rather than to symptoms alone. In everyday clinical work, this can be done informally by asking, session to session:

- How is your body carrying load this week (sleep, tension, fatigue, agitation)?
- How is your "thinking" handling load (rigidity vs. flexibility, options vs. dead-ends)?
- How are your relationships sharing or amplifying load?
- How is your sense of "meaning" containing or collapsing under load?

Clients can be invited to track these four domains in simple ways—brief daily notes, color-coded check-ins, or shared language ("green / yellow / orange / red") that marks how much usable capacity feels available. The point is not to produce precise numbers but to cultivate a felt literacy of capacity: to notice when the system is moving toward overload and to intervene earlier and more gently.

In this sense, any structured reflection that helps individuals and clinicians see patterns over time; journals, simple rating scales, even shared metaphors; can serve the function that a formal index would, without requiring a separate instrument.

While SArC can be implemented informally through shared language and clinical judgment, its architecture lends itself to operationalization. In subsequent work, I intend to develop a Coping Capacity Index (CCI): a brief, multidomain rating framework that indexes how much usable capacity remains in each of the four systems (body, thought, relationship, meaning) over time. The goal of CCI would not be to pathologize individuals but to offer clinicians and clients a simple, shared map for tracking shifts in capacity before the systems collapse.

8. From Prevention to Practice

Implementing SArC in real-world settings requires a shift in emphasis: suicide prevention must evolve from an exclusive focus on crisis response toward capacity education. Just as communities teach cardiopulmonary resuscitation (CPR) as a basic life skill, long before cardiac emergencies occur, SArC envisions coping-skills literacy as a foundational component of public health.

Elements of this approach already exist in many schools and institutions under frameworks such as social-emotional learning, trauma-informed practice, mindfulness-education, and mental health literacy. These efforts have laid essential groundwork by normalizing emotional awareness, regulation strategies, and supportive environments. SArC builds upon this foundation by unifying these practices within a single organizing principle: the early recognition, maintenance, and restoration of coping capacity.

In practice, this shift might include:

- integrating basic psychophysiology of stress and regulation into school curricula, helping students understand how arousal, emotion, and cognition interact under pressure;
- training educators, managers, and community leaders to recognize early signs of overload and coping collapse, rather than waiting for crisis-level impairment;
- normalizing "micro-recovery" periods within institutions—brief, scheduled pauses for breath, movement, or quiet connection embedded into daily routines;
- offering shared, accessible language and tools that individuals and groups can use to talk about coping capacity without stigma or pathology.

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By reframing coping as skillful regulation rather than stoic endurance, SArC positions resilience as learnable infrastructure—available to all nervous systems, not only to those deemed exceptionally strong. In doing so, it moves suicide prevention upstream, transforming it from a reactive intervention into a proactive, teachable system of care.

9. The Ethics of Capacity

At its moral core, SArC asserts that compassion is a regulatory act. To respond to despair with empathy, curiosity, and containment is to lower arousal and widen capacity; to respond with judgment, dismissal, or shaming is to increase load. Ethical practice, in this sense, is a form of biological stewardship.

This principle extends beyond the clinic. Social policies that guarantee rest, safety, and belonging; such as reasonable work hours, equitable labor conditions, accessible healthcare, and inclusive communities; function as public forms of coping capacity. They shape the background level of load and the availability of resources to carry it. The nervous system is social; regulation is contagious.

SArC therefore invites a broader ethical question: What kinds of societies make it easier or harder for human systems to regulate their own activation? Prevention, in this light, includes not only clinical intervention but advocacy for structures that reduce chronic overload and support recovery.

10. Integration and Future Directions

The Survival Architecture of Coping reconceptualizes despair as a reversible systems failure. Its clinical implications extend across disciplines:

- For psychiatry, SArC encourages process-based monitoring of capacity alongside symptom assessment.
- For psychology, it emphasizes training in regulation and flexibility across domains.
- For neuroscience, it suggests research programs focused on rhythmic entrainment, cross-domain coupling, and recovery trajectories.
- For sociology and public health, it offers a regulatory lens on social determinants of mental health.

Future research can test SArC through multimodal designs that combine physiological markers (e.g., heart-rate variability, cortisol slope), simple process-tracking in the four domains, and qualitative narratives. Longitudinal studies may examine how shifts in coping capacity predict the onset, maintenance, and resolution of suicidal crises. Implementation science can explore how SArC-informed training and language can be integrated into healthcare, education, workplaces, and community settings.

The ultimate question is not only why people die, but how systems recover; how bodies, minds, relationships, and cultures reorganize themselves so that life becomes bearable again. Coping capacity offers a unifying lens for that inquiry: teachable, observable in everyday practice, and, above all, profoundly humane.

Discussion

The Survival Architecture of Coping (SArC) advances an integrative framework that situates despair and resilience within a dynamic system of regulation. It departs from symptom-based and disorder-focused models by emphasizing capacity rather than deficit, a move that aligns with the contemporary shift toward process-based and dimensional approaches in clinical science (Hayes et al., 2019; Hofmann & Hayes, 2019) and with longstanding observations that both too little and too much arousal impair functioning relative to an optimal range (Yerkes & Dodson, 1908). Rather than treating coping as a fixed trait or a list of strategies, SArC offers a way to conceptualize and track how

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well a system can still organize rising activation into workable forms of reflection, action, feeling, and rest.

At its core, SArC proposes that coping is neither a trait nor a singular skill but a systemic rhythm, the oscillatory motion by which organisms maintain coherence under conditions of load. This view resonates with existing work on allostasis (McEwen, 1998), self-organization (Kelso, 1995), and attachment regulation (Schore, 2012), while extending these principles beyond physiology into the psychological, relational, and existential dimensions of human adaptation. By integrating these traditionally fragmented literatures, SArC provides a unified language for describing survival processes across contexts.

Conceptually, SArC organizes this multidimensionality into four interrelated domains; biological regulation, cognitive flexibility, relational co-regulation, and existential meaning; that map onto the adaptive subsystems jointly sustaining engagement with life. Where traditional measures of coping often assess discrete strategies (e.g., avoidance, problem-solving), SArC emphasizes function: the system's ability to modulate arousal, reorganize thought, recruit connection, and orient to meaning while flexibly shifting among these domains as conditions change. This structure situates coping as an architecture of motion, providing a process-level account of how engagement fails and how it can be restored.

Clinically, this approach reformulates therapeutic intervention. Rather than aiming primarily to correct maladaptive thoughts or extinguish symptoms, SArC-based therapy seeks to restore oscillation; the capacity of the system to move between activation and rest, expression and containment, approach and withdrawal. In this sense, the therapist becomes less a corrector of cognition and more a calibrator of rhythm. This aligns with contemporary models of psychotherapy that view change as the restoration of synchrony across physiological and interpersonal systems (Cozolino, 2014; Siegel, 2020).

From a suicidological standpoint, SArC offers a reframe of the suicidal crisis. Instead of a discrete event or purely volitional act, suicide is understood as a terminal failure of regulatory capacity, a collapse of oscillation under sustained allostatic load. This conceptual shift has ethical implications: it replaces moral judgment with systemic compassion, emphasizing that despair reflects exhaustion of the regulatory network rather than deficiency of character. Accordingly, prevention becomes a matter of capacity restoration; rebuilding rhythm through small, repeated acts of regulation, connection, and meaning making.

In research, SArC suggests a program of empirical inquiry into the dynamics of coping. Simple, repeated assessments of affective modulation, cognitive flexibility, relational engagement, and perceived meaning; ideally embedded in ecological momentary assessment (EMA; Shiffman, Stone, & Hufford, 2008) and longitudinal designs; can be paired with physiological indicators such as heart-rate variability, cortisol slope, or sleep efficiency to model the coupling between subjective and biological regulation. By operationalizing coping as a dynamic process rather than a static attribute, SArC offers a bridge between phenomenology and psychophysiology. This orientation is compatible with network-based and formal-theory approaches that conceptualize psychopathology as emerging from dynamic interactions rather than fixed latent entities (Borsboom, 2017; Robinaugh et al., 2020).

In subsequent work, I intend to translate this conceptual architecture into a practical instrument: a Coping Capacity Index (CCI) that provides brief, repeated ratings of usable capacity across the four domains (body, thought, relationship, meaning). CCI is envisioned not as a diagnostic scale but as a low-burden way to track how much "room to move" remains in each system over time, supporting earlier recognition of overload trajectories and more targeted, process-based intervention.

Finally, SArC invites a reconceptualization of mental health as functional coherence; the system's ability to sustain coordinated motion across its adaptive domains. This argument builds on my earlier proposal that flashbacks may reflect the hippocampal system's effort to restore continuity in fragmented traumatic memory (Passaro, 2025b). In the present model, that same continuity-seeking principle is extended from traumatic recollection to the broader, moment-to-moment regulation of arousal, connection, and meaning across the survival architecture. From this

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perspective, well-being is not the absence of distress but the presence of sufficient capacity to metabolize it. The ultimate therapeutic aim is not to eliminate suffering but to preserve movement through it, so that even intense load can be organized into a life that remains, in some felt sense, livable.

Closing Synthesis

The Survival Architecture of Coping reconceptualizes emotional survival as a living system of oscillations between chaos and coherence. Across body, mind, relationship, and meaning, the organism continually renegotiates the boundary between overload and adaptation. When this motion tightens or stalls, despair arises; when it resumes, life reasserts itself.

In this model, suicide ceases to represent a moral or existential failure and becomes a physiological and psychological event: the endpoint of an overwhelmed adaptive network. What presents as a singular, catastrophic act is recast as the final phase of a system that has been losing regulatory options for a long time; unable to keep converting rising activation into workable forms of thought, action, feeling, or rest.

Restoration, accordingly, is rhythmic. Breath returns before insight; connection before explanation; meaning, if it comes, tends to crystallize after movement has been renewed. The therapist, researcher, or caregiver is invited to see their role less as fixing a broken individual and more as helping a living system remember its capacity to oscillate: to tighten and loosen, to lean into effort and then into rest, to approach and to withdraw without tipping into permanent collapse.

By insisting that coping is an emergent property of dynamic regulation rather than a static trait, SArC offers a way to talk about survival that honors both vulnerability and persistence. It suggests that even in deep despair, something in the organism is still working: a residual, often invisible, effort to keep life going under conditions that feel impossible. The task of care is to join that effort and help it find more room to move.

Conclusion

The Survival Architecture of Coping offers an integrative and empirically tractable framework for understanding and restoring human adaptability. By conceptualizing coping as a dynamic interplay among biological regulation, cognitive flexibility, relational co-regulation, and existential meaning, SArC unites previously fragmented perspectives into a coherent model of emotional survival. It aligns with contemporary process-based and dimensional approaches that emphasize mechanisms of change over static categories, and it provides a shared vocabulary for describing how systems bend or break under load.

Future research can extend this framework along several trajectories. First, multimodal studies can link simple, repeated indicators of regulation (sleep, tension, flexibility of thought, perceived connection, sense of meaning) with physiological markers such as heart-rate variability, cortisol slope, and sleep efficiency. Within this effort, the development and validation of a Coping Capacity Index (CCI) would offer a concrete operationalization of SArC: a brief, multidomain rating framework indexing how much usable capacity remains in each of the four systems at a given time point. Such a tool could clarify how coping capacity erodes, stabilizes, and recovers across trajectories of suicidality and other high-load states.

Second, SArC and CCI can be integrated into clinical training and practice. Assessment and intervention protocols across modalities; CBT, DBT, ACT, psychodynamic, somatic; can be informed by questions such as: How is this person's body carrying load? How rigid or flexible is their thinking under stress? How available is co-regulation? How are your current meanings holding under the weight of experience, and where are they beginning to give way? Framing treatment goals in terms of expanding capacity within and across these domains allows clinicians to see progress even when symptoms are slow to remit.

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Third, SArC points toward the study of collective coping systems. Families, teams, communities, and institutions distribute or concentrate emotional load in patterned ways. Investigating how policies, cultural narratives, and social structures either support or undermine regulation may help explain why certain contexts reliably generate burnout, despair, or suicidality, while others buffer individuals against extreme strain. Suicide prevention, in this light, becomes as much about designing regulative environments as about treating distressed individuals.

Where prior models tend to locate pathology primarily within the person, SArC situates it in the disrupted conversation between systems: between body and mind, self and other, present and future. Healing, therefore, becomes the re-establishment of dialogue; reopening the channels through which activation can be expressed, shared, and integrated rather than accumulating until the system collapses.

Ultimately, the Survival Architecture of Coping stands as both a theory and a practice of coherence. It proposes that the capacity to cope is the human form of persistence: a rhythm that, once restored, allows suffering to be carried without erasing the wish to live, and that can be cultivated at the levels of individual, relationship, and culture alike.

Author Contributions: The author is solely responsible for the conception, drafting, and final approval of this manuscript.

Funding: This research received no external funding.

Ethical Approval: This theoretical work did not involve human participants or animals and therefore required no institutional ethics approval.

Data Availability: No datasets were generated or analyzed for this article.

Conflicts of Interest: The author declares no conflict of interest.

References

1. Arnsten, A. F. T. (2009). Stress signaling pathways that impair prefrontal cortex structure and function. *Nature Reviews Neuroscience, 10*(6), 410–422.
2. Barrett, L. F. (2017). *How emotions are made: The secret life of the brain*. Houghton Mifflin Harcourt.
3. Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. Guilford Press.
4. Bodhi, B. (Trans.). (2000). *The connected discourses of the Buddha: A translation of the Saṃyutta Nikāya*. Wisdom Publications. (See SN 56.11)
5. Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on Psychological Science, 8*(6), 591–612.
6. Borsboom, D. (2017). A network theory of mental disorders. *World Psychiatry, 16*(1), 5–13.
7. Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
8. Breitbart, W., Rosenfeld, B., Gibson, C., Pessin, H., Poppito, S., Nelson, C., ... Olden, M. (2010). Meaning-centered group psychotherapy for patients with advanced cancer. *Journal of Clinical Oncology, 28*(28), 473–478.
9. Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological Bulletin, 92*(1), 111–135.
10. Cozolino, L. (2014). *The making of a therapist: A practical guide for the inner journey*. W. W. Norton.
11. Durkheim, É. (1897). *Le suicide: Étude de sociologie*. Félix Alcan.
12. Feldman, R. (2007). Parent–infant synchrony: Biological foundations and developmental outcomes. *Child Development, 78*(1), 194–218.
13. Ford, B. Q., & Mauss, I. B. (2015). Culture and emotion regulation. *Current Opinion in Psychology, 3*, 1–5.
14. Frankl, V. E. (1959). *Man's search for meaning*. Beacon Press.
15. Freud, S. (1895/1966). Project for a scientific psychology. In *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 1). Hogarth Press.

 doi:10.20944/preprints202512.1395.v1

16. Freud, S. (1920/1955). Beyond the pleasure principle. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 18, pp. 7–64). Hogarth Press.
17. Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford Press.
18. Hayes, S. C., Hofmann, S. G., Stanton, C. E., Carpenter, J. K., Sanford, B. T., Curtiss, J. E., & Ciarrochi, J. (2019). The role of the individual in the coming era of process-based therapy. *Behaviour Research and Therapy, 117*, 40–53.
19. Heinrichs, M., von Dawans, B., & Domes, G. (2009). Oxytocin, vasopressin, and human social behavior. *Human Immunology, 70*(10), 846–850.
20. Hofmann, S. G., & Hayes, S. C. (2019). The future of intervention science: Process-based therapy. *Clinical Psychological Science, 7*(1), 37–50.
21. Hughes, D. A., Golding, K. S., & Hudson, J. (2020). *Healing relational trauma with attachment-focused interventions*. Norton.
22. Joiner, T. E. (2005). *Why people die by suicide*. Harvard University Press.
23. Kang, Y., Strecher, V. J., & Kim, E. S. (2019). Purpose in life and health: A systematic review of the literature and implications for intervention. *American Psychologist, 74*(4), 403–416.
24. Kelso, J. A. S. (1995). *Dynamic patterns: The self-organization of brain and behavior*. MIT Press.
25. Kinreich, S., Djalovski, A., Kraus, L., Louzoun, Y., & Feldman, R. (2017). Brain-to-brain synchrony during naturalistic social interactions. *Scientific Reports, 7*, 17060.
26. Lehrer, P. M., & Eddie, D. (2013). Dynamic processes in regulation and some implications for biofeedback and biobehavioral therapies. *Applied Psychophysiology and Biofeedback, 38*(2), 143–155.
27. Lichtheim, M. (1975). *Ancient Egyptian literature: Volume I: The Old and Middle Kingdoms*. University of California Press. (Includes "The Dispute Between a Man and His Ba")
28. Linehan, M. M., Korslund, K. E., Harned, M. S., Gallop, R. J., Lungu, A., Neacsiu, A. D., ... Murray-Gregory, A. M. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder. *JAMA Psychiatry, 72*(5), 475–482.
29. Marcus Aurelius. (2002). *Meditations: A new translation* (G. Hays, Trans.). Modern Library. (Original work written ca. 170 C.E.)
30. McEwen, B. S. (1998). Protective and damaging effects of stress mediators. *New England Journal of Medicine, 338*(3), 171–179.
31. McEwen, B. S., & Stellar, E. (1993). Stress and the individual: Mechanisms leading to disease. *Archives of Internal Medicine, 153*(18), 2093–2101.
32. Menninger, K. (1938). *Man against himself*. Harcourt, Brace and Company.
33. Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., & Howerter, A. (2000). The unity and diversity of executive functions and their contributions to complex "frontal lobe" tasks. *Cognitive Psychology, 41*(1), 49–100.
34. Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition, 18*(1), 176–186.
35. National Council of the Churches of Christ in the United States of America. (2021). *The Holy Bible: New Revised Standard Version Updated Edition (NRSVue)*. National Council of the Churches of Christ in the USA.
36. Passaro, M. J. (2025a). Rethinking emotion as part of the Arousal Appraisal Model. *Preprints, 202512.0507.v1.* https://doi.org/10.20944/preprints202512.0507.v1
37. Passaro, M. J. (2025b). Toward an integrative model of flashbacks: The hippocampal drive for coherence. *Preprints.* https://doi.org/10.20944/preprints202511.1883.v1
38. Porges, S. W. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation*. W. W. Norton.
39. Robinaugh, D. J., Haslbeck, J. M. B., Ryan, O., Fried, E. I., & Waldorp, L. J. (2020). Invisible hands and fine calipers: A call to use formal theory as a toolkit for theory construction. *Perspectives on Psychological Science, 16*(4), 725–743.
40. Schore, A. N. (2012). *The science of the art of psychotherapy*. W. W. Norton.

 doi:10.20944/preprints202512.1395.v1

41. Sheline, Y. I., Price, J. L., Yan, Z., & Mintun, M. A. (2010). Resting-state functional MRI in depression unmasks increased connectivity between networks via the dorsal nexus. *Proceedings of the National Academy of Sciences, 107*(24), 11020–11025.
42. Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology, 4*, 1–32.
43. Shneidman, E. S. (1985). *Definition of suicide*. Wiley.
44. Siegel, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. Guilford Press.
45. Siegel, D. J. (2020). *The developing mind* (3rd ed.). Guilford Press.
46. Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., & Brown, R. P. (2012). Effects of yoga on the autonomic nervous system, gamma-aminobutyric acid, and allostasis in epilepsy, depression, and post-traumatic stress disorder. *Journal of Psychosomatic Research, 72*(6), 559–565.
47. Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience, 16*(4), 213–225.
48. Wenzel, A., Brown, G. K., & Beck, A. T. (2009). *Cognitive therapy for suicidal patients: Scientific and clinical applications*. American Psychological Association.
49. Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology, 18*(5), 459–482.