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Concept Paper

The Nature of NSSI: Displaced Anger Under Attachment Constraint in AAM and SArc

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Abstract

NSSI is often framed as emotion regulation, self-punishment, or interpersonal influence, yet these accounts under-specify how mobilization becomes urgent affect, why NSSI wins moment-to-moment behavioral competition, and how attachment constraint shapes whether anger-linked action readiness is routed outward or inward. The Arousal Appraisal Model (AAM) treats emotion as one regime within a broader control problem: calibrating physiological mobilization to state-dependent deployable capacity for coherent expression and integrative processing. The Survival Architecture of Coping (SArc) frames severe self-harm risk as system states that emerge when activation (urgency/action-readiness) rises as deployable coping capacity declines across biological, cognitive, relational, and meaning domains. Integrating AAM and SArc, this paper conceptualizes NSSI as a learned, high-control state-transition policy that becomes increasingly selectable when mobilization/activation rises under high constraint appraisal and low deployable capacity. Developmentally, a common pathway is proposed in which anger-linked mobilization is routed inward when outward expression is appraised as unsafe, forbidden, futile, or relationally catastrophic; punitive self-appraisals may then function as a permission/coherence scaffold that authorizes injury while preserving attachment and immediate safety. The model yields falsifiable predictions for intensive longitudinal research and clinical implications emphasizing capacity restoration, constraint repair, legitimization of anger as signal (not aggression), and expansion of safe throughput pathways.

Keywords: nonsuicidal self-injury; arousal; appraisal; attachment; anger; self-punishment; decision-making; ecological momentary assessment; coping capacity; suicidality

Introduction

Nonsuicidal self-injury (NSSI)—the deliberate destruction of one's own body tissue without suicidal intent and not culturally sanctioned—occurs across clinical and community samples and is consistently associated with emotion dysregulation, trauma exposure, interpersonal stress, and elevated risk for later suicidal thoughts and behaviors (Cipriano et al., 2017; Glenn et al., 2017; Hamza et al., 2012). Despite increasing empirical clarity about correlates and outcomes, much of the literature still explains NSSI primarily in descriptive terms: the behavior is organized by self-reported “functions,” motives, or broad labels (e.g., “emotion regulation,” “self-punishment”). These descriptions are often accurate as phenomenology and report, but they frequently leave key mechanistic links under-specified—especially the moment-to-moment dynamics by which a particular act becomes selected under stress, and the developmental learning history by which that act becomes a high-probability default.

Three issues are central to a mechanistic account. First, functional descriptions typically identify payoffs (e.g., “relief”) without specifying the control problem that generates urgency: how physiological mobilization becomes subjectively experienced as pressured, negatively appraised affect rather than being metabolized into coherent action or integrative processing. Second, many accounts under-theorize real-time behavioral competition: why, in a given high-load moment, injury becomes more executable than communication, leaving, boundary-setting, or cognitive integration—

particularly when time horizon compresses and options narrow. Third, developmental acquisition and generalization are often treated as background assumptions (reinforcement occurs; behavior spreads) rather than modeled as a structured learning process that links early relational ecologies to later policy selection across diverse triggers. Constraint appraisals are parsed into predicted relational cost, perceived futility/low controllability, and permission/prohibition—each of which can independently narrow outward throughput.

Several findings converge on the need for a selection-focused framework. Intensive longitudinal research indicates that NSSI risk concentrates in proximal windows marked by worsening internal state, narrowed perceived options, and rising self-directed punitive cognition near urges and episodes (Burke et al., 2021a; Burke et al., 2021b). Daily-life studies highlight the regulatory relevance of interpersonal threat and co-regulation availability: interpersonal conflict and perceived social support track fluctuations in NSSI urges and behavior, consistent with the idea that relational context can expand or compress available regulatory options in real time (Turner et al., 2016). Complementing these observations, conceptual and empirical work increasingly frames self-injury as a distress-driven decision policy: as urgency rises, immediate controllability becomes overweighted, and the body becomes a reliably executable site for rapid state change (Hooley & Franklin, 2018). Trauma-linked syndromes further underscore pathways through which dysregulation and impulsivity amplify risk for self-destructive behavior under threat (Tull, Weiss, & McDermott, 2016).

The present paper advances a control-oriented account of NSSI by integrating two complementary models. The Arousal Appraisal Model (AAM) conceptualizes emotion as one regime within a broader regulatory control problem: calibrating physiological mobilization to state-dependent deployable capacity for coherent expression and integrative processing (Passaro, 2025a). AAM specifies graded experiential regimes along a mobilization–capacity continuum and clarifies when mobilization is converted into organized output versus carried as urgent affect under narrowing time horizon. The Survival Architecture of Coping (SArC) extends this logic by framing suicidal crises and severe self-harm risk as system states that emerge when activation (urgency/action-readiness) rises as deployable coping capacity declines across biological regulation, cognitive flexibility, relational co-regulation, and existential meaning (Passaro, 2025b). Together, AAM and SArC supply a measurable state-space within which the selection problem can be specified and tested.

Taken together, these lines of work suggest that NSSI is not only maintained by reinforcement but also selected within a constrained state-space characterized by escalating activation, reduced deployable capacity, and constraint appraisals that gate outward throughput. To make this selection problem explicit, the next section states a canonical selection rule that will be referenced (rather than restated) in later sections.

Selection Rule: State-Dependent Policy Competition

In this manuscript, NSSI is treated as a learned state-transition policy whose selection becomes intelligible within a constrained control problem. Selection probability rises when: (1) mobilization and/or activation increases; (2) deployable capacity for coherent throughput (cognitive flexibility, biological reserve, and access to co-regulation) is low; and (3) constraint appraisals predict that outward expression or boundary action will be unsafe, forbidden, futile, or relationally catastrophic. Under this configuration, outward throughput is gated, the feasible action set compresses toward immediate, privately controllable maneuvers, and short-horizon criteria (immediacy, certainty, low predicted relational cost) dominate policy competition. When present, self-punishment cognitions can function as a permission/coherence scaffold, reducing decision conflict and accelerating inward routing (Burke et al., 2021a; Burke et al., 2021b).

Acquisition and Generalization

Consistent with the selection rule above, this section addresses how NSSI becomes available as a high-control maneuver in the first place and why it generalizes across triggers over development. The central etiological claim is not that every episode must be consciously labeled as anger, but that a common learning route involves early contexts in which aggressive mobilization in attachment-relevant situations was unsafe, prohibited, or predicted to be relationally catastrophic, biasing the system toward inward, privately executable state-change actions. Over time, reinforcement and generalization can render this policy selectable across stressors that recreate the same state profile (high mobilization/activation under constraint with low deployable capacity), even when anger is not phenomenologically salient or verbally reported. Anger is proposed as a common developmental substrate for acquisition, not a required proximal phenomenon in every episode. In a subset of cases, onset may instead be seeded primarily by dissociation relief or pain-offset mechanisms; here these are treated as alternative acquisition ecologies that can converge on the same proximal selection state-space. Operationally, this implies that a common developmental pathway can be tested prospectively by assessing early constraint ecologies (predicted relational cost, prohibitions on expression, and repair reliability) as predictors of later within-person coupling between mobilization/activation, constraint appraisal, and NSSI selection.

Once enacted, NSSI has unusually strong learning properties. It is (a) immediately executable, (b) private, (c) reliable in producing rapid attentional reorganization and arousal shift, and (d) comparatively low in immediate relational cost relative to outward confrontation. Over time, reinforcement consolidates the policy: when injury reliably reduces aversive mobilization, numbs urgency, or restores local controllability, its expected utility—and therefore its selection weight—increases under similar state conditions. Generalization then expands the cue set. NSSI becomes selectable not only in the original attachment-anger contexts but across diverse stressors that reproduce the same state signature (elevated mobilization/activation, constrained outward throughput, and reduced deployable capacity), even when anger is not phenomenologically salient or verbally reported.

This developmental account yields a specific implication: what appears clinically as “heterogeneity” across triggers may reflect a shared selection rule operating over a broad cue space. Different stressors can converge on the same state configuration—mobilization outpacing capacity under constraint—thereby recruiting the same learned maneuver. In this sense, etiological acquisition and proximal selection can be conceptually separated: anger under attachment constraint may seed the learning history, while any later stressor capable of recreating the relevant mobilization–constraint–capacity configuration can evoke the behavior.

Proximal Selection Conditions

Per the selection rule specified above, NSSI is predicted to be most selectable when the following proximal conditions converge:

- **Attachment relevance:** The provocation implicates dependency, belonging, or identity stability, elevating the anticipated cost of outward expression (e.g., caregiver, partner, authority, therapist).
- **High predicted relational cost:** Outward expression (anger, disappointment, protest, boundary-setting) is forecast to produce abandonment, escalation, humiliation, punishment, or rupture.
- **Low deployable capacity:** State-dependent cognitive flexibility, co-regulation access, and biological reserve are insufficient for integrative processing and effective boundary action, increasing reliance on rapid, high-certainty maneuvers.
- **Permission/coherence scaffold:** Punitive self-appraisals or related self-governing cognitions reduce decision conflict and accelerate inward routing under constraint (Burke et al., 2021a; Burke et al., 2021b).

Defining Boundary Conditions

If NSSI is acquired as a learned state-transition policy seeded by attachment-constrained aggression, then boundary conditions are best framed not as “other reasons,” but as alternative acquisition routes or distinct learning ecologies. The displaced-anger acquisition pathway would be weakened if prospective developmental data repeatedly document NSSI onset in contexts characterized by low relational constraint and no evidence of aggressive mobilization, suggesting that a subset of cases is seeded through different pathways (e.g., primary conditioning via dissociation relief or pain-offset mechanisms). These questions are best adjudicated via prospective developmental designs and within-person intensive longitudinal methods rather than cross-sectional endorsements alone.

Falsifiability and Tests

Stating these claims in biological and learning terms keeps the model falsifiable. Disconfirming evidence would include within-person EMA or multimodal findings showing that NSSI reliably occurs in low-constraint windows characterized by minimal interpersonal threat, low attachment salience, and little or no anger-linked mobilization; such a pattern would weaken displaced anger as a proximal driver and point to an alternative acquisition route. A second disconfirming pattern would be that urge-to-action transitions and post-episode state shifts are better predicted by sensory/dissociative variables independent of constraint and mobilization. Supportive evidence, by contrast, would include predictable coupling between rising mobilization/urgency and constraint appraisals, followed by NSSI as a rapid controllability-restoring maneuver, and developmental patterns in which early attachment-constrained anger contexts predict earlier onset, faster habitization, and stronger cue–response coupling over time (Hooley & Franklin, 2018; Burke et al., 2021a; Burke et al., 2021b).

Contemporary Accounts of NSSI: What They Explain—and What They Leave Underspecified

Functional and Reinforcement-Based Models

A dominant approach conceptualizes NSSI as a behavior maintained by reinforcement contingencies across intrapersonal and interpersonal domains (Nock & Prinstein, 2004). From a learning perspective, this framework makes an essential contribution: it explains why NSSI can become a stable behavioral policy once acquired—namely, because it reliably produces short-latency consequences that are negatively reinforcing (rapid reduction of aversive internal states), positively reinforcing (generation of desired states), or socially reinforcing under certain contingencies. Consistent with this, reviews indicate that rapid intrapersonal downshifting of negative affect is among the most commonly endorsed outcomes associated with NSSI (Klonsky, 2007).

What functional accounts often leave underspecified is the real-time state-space in which NSSI wins behavioral competition. In reinforcement terms, “distress reduction” identifies a payoff; it does not specify (a) how physiological mobilization becomes urgent, negatively appraised affect, (b) why alternative actions (communication, leaving, boundary-setting, cognitive integration) become unavailable or noncompetitive under load, or (c) why the body becomes the most executable control lever when time horizon compresses. In short, reinforcement models are strong on maintenance but often underspecified about the proximal selection dynamics that make NSSI most competitive under mobilization–capacity mismatch and constraint.

Self-Punishment, Self-Criticism, and Permission/Coherence Scaffolds

Self-criticism, shame, and punitive self-relating have long been associated with NSSI and with developmental pathways involving trauma and internalized blame (Glassman et al., 2007; Hooley & Franklin, 2018). Intensive longitudinal work further suggests that self-punishment cognitions are

proximally linked to urges and episodes and can differentiate those with versus without NSSI histories (Burke et al., 2021a; Burke et al., 2021b). These findings are often discussed as “motive” (punishment), but they can also be interpreted mechanistically: punitive cognition may function as a permission/coherence scaffold that reduces decision conflict and organizes action under pressure.

Yet “self-punishment” can conceal the central mechanistic question: punishment for what, and by whom? As an explanatory label, “punishment” risks functioning as a moral narrative that stops inquiry precisely where momentary selection dynamics should be specified. In attachment-loaded contexts, punitive self-appraisal can operate as a proximity-preserving strategy: relocating blame to the self may stabilize the bond by preserving an idealized representation of the attachment figure and maintaining the self as the “problem” that can be controlled. Under relational constraint, self-punishment can therefore do more than narrate meaning after the fact; it can function as a selection mechanism by increasing action permissibility (“this is allowed/deserved”), reducing ambiguity and ambivalence, and becoming the cognitive bridge that makes injury executable at the moment outward anger or protest is appraised as unsafe, forbidden, futile, or relationally catastrophic (Burke et al., 2021a; Burke et al., 2021b).

Emotion Dysregulation and Experiential Avoidance Models

Emotion dysregulation and experiential avoidance models emphasize heightened affective intensity, impaired modulation, and the use of NSSI to escape or reduce aversive internal experience (Gratz, 2003; Chapman et al., 2006). These frameworks contribute an important organism-level insight: when internal states are appraised as intolerable or unacceptable, behavior is recruited to rapidly alter those states. Meta-analytic evidence supports robust associations between emotion dysregulation and NSSI across studies and samples (Wolff et al., 2019).

However, many emotion-regulation accounts leave two mechanistic links under-specified. First, they often do not specify how physiological mobilization becomes experienced as urgent affect—rather than being metabolized into coherent action or integrative processing. Second, they often underemphasize relational constraint—particularly in attachment systems—as a gating variable that determines whether mobilization is routed outward into boundary action or inward into somatic control. When constraint appraisals are high and deployable capacity is low, the feasible action set compresses toward behaviors that are immediately executable and privately controllable. A model that explicitly links mobilization, appraisal, capacity, and real-time policy competition is therefore needed to specify when and why NSSI outcompetes other regulatory actions under load.

Bridge to AAM and SArC: From Descriptive Functions to State-Space and Policy Selection

Taken together, functional, cognitive, and emotion-regulation models capture important correlates and maintaining processes, but they often leave the selection problem under-specified: how rising mobilization becomes urgent phenomenology, why the feasible action set collapses in the moment, and what makes NSSI win competition among regulatory options under time pressure. The Arousal Appraisal Model (AAM) contributes a graded account of mobilization–capacity regimes that clarifies when mobilization is metabolized into coherent output versus carried as excess-load affect or restricted throughput (Passaro, 2025a). The Survival Architecture of Coping (SArC) specifies how severe risk states emerge when activation rises as deployable capacity declines across domains (Passaro, 2025b). As stated above, integrating AAM and SArC reframes NSSI as a learned state-transition policy whose selection is intelligible within a measurable state-space of mobilization/activation, constraint appraisal, and deployable capacity.

The Arousal Appraisal Model (AAM): Mobilization–Capacity Calibration as the Core Regulatory Problem

AAM reconceptualizes “emotion” as one regime within a broader regulatory control problem: calibrating physiological mobilization to momentary deployable capacity for coherent expression

and integrative processing (Passaro, 2025a). The model begins with a biologically grounded premise: organisms must allocate mobilization (energy and action readiness) in a way that matches what can be executed and integrated *now*—given cognitive bandwidth, relational safety, and physiological reserve. Subjective experience is treated as an emergent readout of this calibration problem: when mobilization is metabolized into coherent output, experience tends toward organized action; when mobilization exceeds deployable capacity, experience tends toward urgent affect and narrowing; when exceedance persists under constraint, throughput becomes restricted via collapse, freeze, or dissociation.

Core Constructs: Mobilization, Deployable Capacity, Appraisal, and Throughput

Mobilization refers to physiological energy and action readiness (e.g., sympathetic arousal, muscle tension, vigilance). Mobilization is not equivalent to emotion; it is the energetic substrate from which affective phenomenology can emerge under particular appraisal and capacity conditions.

Deployable capacity refers to state-dependent resources available to convert mobilization into organized output and integration. It includes (a) cognitive integration (working-memory bandwidth, inhibitory control, reappraisal availability, mentalizing), (b) relational access (availability of co-regulation and predicted safety of disclosure), and (c) biological reserve (sleep/recovery balance, autonomic flexibility, depletion). Capacity is defined as what is deployable under load, not what the person can do in principle.

Appraisal is the mapping function linking mobilization and capacity to action selection. In AAM, appraisal includes rapid predictions about controllability, permissibility, and cost—especially the predicted relational cost of outward expression. Appraisal therefore shapes not only felt experience but the relative competitiveness of candidate actions.

Throughput refers to the system's ability to route mobilization into coherent action and integration rather than carrying it forward as pressured urgency. Throughput is compromised when constraint appraisals (e.g., predicted relational cost, prohibition, futility) forecast high cost or low safety for expression, when cognitive bandwidth is depleted, or when co-regulation is unavailable. Under throughput restriction, mobilization remains unspent and is experienced as urgency, agitation, tension, or shutdown.

With the selection rule stated in the Introduction as the organizing assumption, AAM's added value is to specify where in the mobilization–capacity continuum risk concentrates—particularly during regime shifts in which mobilization outpaces deployable capacity and outward throughput is constrained (Passaro, 2025a).

Four Graded Experiential Regimes Along the Mobilization–Capacity Continuum

AAM proposes four experiential regimes defined by the relationship between mobilization and deployable capacity. These regimes are time-varying states, not person-level types.

Low-Load Contemplation: Mobilization Below Action Threshold

When mobilization remains below the threshold for coordinated output, experience tends toward quiet readiness and exploratory attention. Cognition is relatively flexible, time horizon is extended, and option search remains wide.

Matched-Load Action: Mobilization Matched to Deployable Capacity

When mobilization approximates deployable capacity, energy is metabolized into coherent output. Attention organizes, sequencing becomes fluent, and experience is effortful yet integrated. Mobilization can be high; the signature is efficient conversion into action and meaning-making. In this regime, boundary actions (speaking, leaving, asserting, repairing) remain executable because throughput pathways are open.

Excess-Load Emotion: Mobilization Exceeds Deployable Capacity

When mobilization outpaces deployable capacity, surplus activation is carried as urgency, tension, and differentiated affect. Appraisal compresses under load: time horizon shortens, perceived controllability decreases, and the action repertoire narrows toward rapid, high-certainty maneuvers.

This is the regime in which NSSI becomes increasingly selectable—not because pain is sought, but because the control problem becomes dominated by the need for rapid state change under limited throughput.

Overload Collapse/Freeze: Throughput Restriction Under High Constraint

When exceedance persists and output is appraised as constrained (low controllability, high predicted relational cost), the system protectively restricts throughput via collapse, freeze, shutdown, or dissociation. Physiological mobilization may be high (agitated freeze) or low (shutdown). The defining signature is restricted output coupled with diminished integrative processing under constraint—capturing the clinical paradox of intense internal pressure alongside immobility or wordlessness.

AAM Implications for NSSI as a State-Transition Maneuver

AAM predicts that high-risk windows cluster around excess-load emotion and persistence under constraint into overload collapse/freeze, because these regimes are defined by mobilization-capacity mismatch and restricted throughput—conditions under which rapid, high-certainty state transitions become disproportionately attractive (Passaro, 2025a).

Operational Definitions for Measurement: Making AAM and SArc Testable in Real Time

Conceptual models gain traction only to the extent that their constructs can be measured. This section specifies measurement-ready definitions suited to within-person tests using ecological momentary assessment (EMA), sleep metrics, and ambulatory physiology.

AAM State Variables

Mobilization: Physiological Energy and Action Readiness

State-level physiological activation reflecting increased readiness to act (e.g., sympathetic arousal, muscle tension, vigilance, restlessness). Mobilization is the energetic substrate from which urgent affect can emerge but is not itself “emotion.”

Indices: EMA arousal items (e.g., “My body feels keyed up/activated”), wearable heart rate (HR), heart-rate variability (HRV) as a proxy marker of autonomic flexibility, and sleep/recovery indices as upstream contributors to reserve.

Activation: Urgency and Action Pressure

Subjective action-imperative pressure (“must act now”) that can remain high even when behavioral output is restricted (e.g., shutdown or freeze). Activation is separable from mobilization: urgency can be high without felt physiological “revving,” and arousal can be high without coherent urgency.

Indices: EMA urgency items (e.g., “I need to do something right now,” “I can’t sit with this”), paired when feasible with behavioral markers (agitation, pacing, inability to remain still).

Deployable Capacity: Resources Available Now for Throughput and Integration

State-dependent availability of resources that allow mobilization to be converted into coherent action and meaning-making. Capacity is defined as deployable under load, not as trait coping skill. It includes:

- **Cognitive capacity:** working-memory bandwidth, inhibitory control, reappraisal access, mentalizing availability.

- **Relational capacity:** perceived/actual availability of co-regulation; predicted responsiveness if disclosure occurs.
- **Biological capacity:** sleep reserve, autonomic flexibility, depletion/fatigue.
Indices: EMA items for clarity/bandwidth (“I can think clearly”), flexibility (“I can see more than one option”), co-regulation access (“There is someone I could reach out to and it would help”), plus sleep metrics and HRV proxies.

Constraint Appraisal: Predicted Cost and/or Futility of Outward Expression

Rapid predictions that outward expression or action will be unsafe, forbidden, ineffective, or relationally catastrophic. For measurement, constraint is parsed into separable components:

- **Relational cost prediction:** “If I express this, I’ll lose them / be punished / it will blow up.”
- **Efficacy/futility prediction:** “Nothing I do will help / I can’t change this.”
- **Permission/prohibition:** “I’m not allowed to feel/say this.”
Indices: brief EMA items targeting each component.

Throughput Restriction: Blocked Conversion of Mobilization into Output and Integration

A state in which mobilization cannot be routed into speech, boundary action, or integration; output is restricted and cognition becomes less integrative.

Behavioral markers: freezing, shutdown, reduced speech, inability to initiate action.

Experiential markers: dissociation, going blank, numbness, immobilized agitation.

Indices: EMA items (e.g., “I feel numb/unreal,” “I can’t speak/act”), with optional event-contingent probes when urges intensify.

Permission/Coherence Scaffold: Punitive Self-Appraisal as a Selection Accelerator

Momentary self-governing beliefs that render inward harm permissible, coherent, or necessary under constraint (e.g., “I deserve pain,” “I must pay,” “I have to punish myself”). In this framework these cognitions are treated as selection accelerators (reducing decision conflict under load), not merely retrospective “reasons.”

Indices: EMA items assessing intensity/presence of self-punishment beliefs in proximal windows (Burke et al., 2021a; Burke et al., 2021b).

Model-Implied Within-Person Test

These definitions support a testable selection hypothesis: NSSI risk increases when mobilization and/or activation are high, deployable capacity is low, and constraint appraisals restrict outward throughput—especially when a permission/coherence scaffold increases the action’s immediate executability. This can be evaluated using time-lagged within-person models, event-contingent sampling, and interaction terms (e.g., mobilization × constraint; activation × low capacity).

The Survival Architecture of Coping (SArC): Suicidality and Severe Self-Harm as System States

SArC reframes suicidal crises and severe self-harm risk as system states—late-stage configurations of an overloaded regulatory architecture that emerge when escalating activation outpaces deployable coping capacity (Passaro, 2025b). Coping capacity is modeled as an interdependent function of four coupled domains that can fluctuate and fail under sustained load:

Biological Regulation

Sleep–recovery balance, autonomic flexibility, endocrine mobilization, pain sensitivity, and somatic depletion.

Cognitive Flexibility

Appraisal breadth, set shifting, inhibitory control, working-memory bandwidth, and capacity to hold competing representations (including mentalizing self and other).

Relational Co-Regulation

Perceived/actual availability of stabilizing others; attachment security; responsiveness during distress; willingness/ability to seek help.

Existential Meaning

Future-oriented value, reasons for living, narrative coherence, identity integration, and the felt possibility of a livable next step.

Across domains, SArc predicts that risk concentrates when activation rises as deployable capacity declines, producing progressive option narrowing and increasing reliance on fast, high-control survival maneuvers.

Activation Versus Arousal

SArc distinguishes activation (urgency/action-readiness; “must act now”) from arousal/mobilization (physiological energy and sympathetic readiness). Although they often covary, they can dissociate in clinically important ways: activation may remain high during physiological shutdown (collapse/freeze profiles), or arousal may be high without coherent goal-directed activation (agitated, disorganized profiles). In both profiles, risk rises when activation is high and deployable capacity across biological, cognitive, relational, and meaning domains is low—clarifying why “urgency” can persist even when behavior is immobilized.

SArc Implications for NSSI

Within SArc, NSSI is best understood as a behavior whose selection probability rises when the system enters late-stage configurations marked by high activation and multi-domain capacity erosion (biological, cognitive, relational, meaning), thereby increasing option narrowing and reliance on short-horizon, high-control maneuvers (Passaro, 2025b). Accordingly, SArc predicts that NSSI selection should be concentrated in windows where activation is high, deployable capacity is low, and constraint appraisals compress outward throughput—especially in attachment-loaded contexts.

Displaced Anger Under Attachment Constraint: Why the Self Becomes the Target*Core Claim*

When aggressive mobilization rises in an attachment-relevant context and outward throughput is appraised as unsafe, forbidden, or relationally catastrophic, the system enters a constrained optimization problem: it must achieve rapid state change under tight limits on what can be expressed outward. In that state-space, high-control, low-relational-cost maneuvers are weighted upward, inward routing becomes executable, and NSSI becomes a selectable high-control state-transition policy (Passaro, 2025a; Passaro, 2025b; Hooley & Franklin, 2018).

Relational Constraint as the Gating Variable

AAM and SArc converge on a gating principle: mobilization + constraint + low perceived controllability compresses the feasible policy set toward actions that are immediate, privately controllable, and low in predicted relational cost (Passaro, 2025a; Passaro, 2025b). Attachment contexts intensify this compression because interpersonal conflict and perceived support shape daily-life fluctuations in urges and behavior (Turner et al., 2016). In these contexts, predicted costs of outward anger—abandonment, retaliation, humiliation, escalation, or rupture—can be experienced as threats to the broader survival architecture, not merely social discomfort.

Operational signature: the same level of mobilization becomes far more behaviorally risky when outward expression is appraised as “not allowed,” “won’t work,” or “will cost the relationship.”

Anger Defined Biologically: Aggressive Mobilization, not a Required Label

Here, *aggressive mobilization* refers to boundary-relevant action readiness, not aggression-as-harm. In this framework, anger is treated as aggressive mobilization—action readiness recruited when autonomy, dignity, boundary integrity, or relational fairness is threatened—rather than as a necessarily conscious or verbally endorsed emotion label. The key question is not “is the person aware of anger?” but: where can aggressive mobilization be routed given the constraint landscape?

This definition accommodates the clinical reality that anger may be displaced, muted, dissociated, or moralized into self-attack while mobilization remains high and action-imperative.

Why Inward Routing Becomes Highly Selectable Under Attachment Constraint

When outward expression is gated, the organism must solve a concrete control problem:

- **Need:** rapid state change (mobilization is high; urgency compresses time horizon).
- **Constraint:** outward action is forecast as relationally catastrophic, unsafe, prohibited, or futile.
- **Feasible channel:** the self is continuously available and requires no negotiation with the external environment.

Thus, inward routing becomes biologically intelligible: the self becomes the target not because it is “deserved,” but because it is executable under constraint.

A plausible developmental pathway follows: in relational ecologies marked by power asymmetry and unreliable repair, a child may consolidate an implicit rule—“I cannot be angry at you; if something is wrong, it must be me.” This preserves proximity while training a policy architecture in which outward routes are gated and inward routes remain reliably available.

Why Self-Punishment Functions as a Permission/Coherence Scaffold

EMA findings suggest that self-punishment cognitions (distinct from global self-criticism) rise proximally around NSSI urges and episodes and differentiate those with versus without NSSI histories (Burke et al., 2021a; Burke et al., 2021b). In a selection framework, these cognitions can be read as a permission/coherence scaffold that reduces decision conflict under load:

- **Permission:** “I’m allowed to do this to myself.”
- **Coherence:** “This action makes sense right now.”
- **Acceleration:** reduced ambivalence increases the probability of selecting a rapid, high-control maneuver.

Under attachment constraint, punitive self-appraisal can both preserve proximity (by relocating blame inward) and increase the immediate permissibility of injury under load.

Why NSSI Is Selected: High-Control State Transition Under Constraint

Per the manuscript’s selection rule, NSSI becomes increasingly selectable because it is fast, private, and reliably executable under constrained throughput—providing a high-certainty state transition (arousal shift, attentional reorganization, restored local controllability) when outward boundary action is appraised as costly, unsafe, or futile (Hooley & Franklin, 2018).

Importantly, NSSI is not selected because it is globally preferred; it is selected because, within the momentary configuration of mobilization, capacity, and constraint, it is a high-certainty maneuver for rapid state change.

Repetition: Reinforcement Plus Unresolved Constraint

If NSSI reliably produces short-latency relief—downshifting mobilization, numbing urgency, or restoring a sense of control—then the system learns a simple rule: *this works when I’m in this state*. But

if the constraint landscape is unchanged—if outward expression still feels unsafe, forbidden, futile, or relationally catastrophic—then similar situations will keep recreating the same high-risk configuration. When they do, the feasible action set compresses again toward immediate, privately controllable maneuvers, and the same high-certainty solution is reselected. Over time, reinforcement consolidates the policy and generalization expands the cue set to any stressor that reproduces the same mobilization–capacity mismatch under constraint (Nock & Prinstein, 2004; Hooley & Franklin, 2018).

Brief Empirical Signpost

This pathway is consistent with converging evidence that self-punishment cognitions rise proximally around urges/episodes, interpersonal conflict and perceived support shape daily-life risk, and distress-driven option narrowing increases the valuation of immediate controllability (Burke et al., 2021a; Burke et al., 2021b; Turner et al., 2016; Hooley & Franklin, 2018).

Clinical Illustration: From Displacement to Expression

A young adult client presented with recurrent NSSI and described her mother as “the best,” emphasizing relational stability and goodness. Following a disagreement with her mother, the client engaged in NSSI. A chain analysis yielded a state-sequence consistent with the proposed selection architecture: (1) an attachment-relevant provocation, (2) rising mobilization and urgency, (3) a constraint appraisal that outward expression would be unsafe or relationally catastrophic (e.g., “If I say what I feel, it will get worse / I’ll lose her”), and (4) reduced deployable capacity for integrative throughput (narrowed time horizon, diminished cognitive flexibility, and low perceived access to co-regulation). Within this configuration, NSSI functioned as a high-control state-transition maneuver—private, rapidly executable, and low in predicted relational cost relative to confrontation or disclosure—producing short-latency relief and restored local controllability (Hooley & Franklin, 2018). The client’s punitive self-appraisal (e.g., “I deserve pain”) appeared to operate as a permission/coherence scaffold, reducing decision conflict and accelerating inward routing at precisely the moment outward anger was appraised as prohibited or dangerous (Burke et al., 2021a; Burke et al., 2021b).

In the subsequent week, the client reported unexpected anger toward the therapist and noted that she was unable to enact NSSI despite strong urges. When she attempted to injure herself, an image of her mother became salient and the behavior stalled. This observation is offered as hypothesis-generating within the model: as the linkage between (a) anger toward an attachment-relevant figure and (b) self-punishment cognition became more explicit in awareness, the permission scaffold may have weakened—i.e., the act no longer “fit” its internal justification as seamlessly. Clinically, the client began to tolerate more ambivalent representations (e.g., “my mother can be loving and also hurtful”) and to recognize alternative expressive routes as less catastrophic than previously appraised, coinciding with reduced reliance on NSSI as a regulatory solution.

From an AAM perspective, these shifts are consistent with increased deployable capacity and expanded throughput, reducing the likelihood that mobilization would persist as excess-load emotion requiring rapid somatic discharge (Passaro, 2025a). From a SArC perspective, increased relational co-regulation and cognitive flexibility reduced crisis-level option narrowing, decreasing the relative competitiveness of high-control survival maneuvers (Passaro, 2025b). This vignette is presented as an illustrative clinical pattern—not causal evidence—and is intended to motivate within-person tests of the proposed mechanisms.

An Integrated Model of NSSI Within AAM and SArC

Core Sequence

This section applies the selection rule above to a typical episode trajectory. The aim is not to restate the rule, but to render it procedural: a common state-sequence by which previously learned NSSI becomes selectable as a high-control state-transition maneuver.

A representative trajectory:

- **Baseline vulnerability / priors:** reduced reserve (e.g., sleep debt, physiological depletion), reduced co-regulation access, cognitive rigidity, and/or elevated habit strength (learned expected utility of NSSI).
- **Trigger:** a provocation that increases mobilization (often interpersonal and attachment-loaded, but not required).
- **Escalation:** rising mobilization/activation with time-horizon compression and increasing action pressure.
- **Constraint gating:** outward throughput is appraised as unsafe, forbidden, ineffective, or relationally catastrophic.
- **Capacity failure:** deployable capacity under load is insufficient for integrative processing and coherent boundary action.
- **Option narrowing → selection:** the policy set collapses toward immediate, privately controllable maneuvers; NSSI becomes locally competitive as a high-control state-transition.
- **Reinforcement → recurrence:** short-latency relief/numbing/control restoration increases the probability of re-selection when similar state conditions recur.

Model mapping. In AAM terms, this trajectory reflects movement into excess-load emotion with potential transition into restricted-throughput collapse/freeze; in SArC terms, it reflects a late-stage configuration in which activation rises as deployable coping capacity erodes across biological, cognitive, relational, and meaning domains.

Testable Predictions

The present account treats NSSI as a state-dependent selection outcome: a learned maneuver that becomes locally competitive under a particular configuration of mobilization/activation, constraint appraisal, and deployable capacity. The empirical task is therefore not simply to show that distress precedes NSSI, but to test whether interactions among state variables—and a small set of policy-bridging mechanisms—explain (a) when urges intensify and (b) when urges convert into action.

Core Test 1: Selection Rule in Real Time

Mobilization/Activation × Constraint → Urge/Behavior: Capacity Moderation. Within persons, momentary increases in mobilization and/or activation should prospectively predict NSSI urge intensity and the probability of NSSI behavior most strongly during high-constraint windows, operationalized as elevated predicted relational cost, low controllability/futility, and/or permission/prohibition appraisals. These effects should be amplified when deployable capacity is low, indexed by reduced cognitive flexibility/bandwidth, reduced perceived access to co-regulation, and/or reduced biological reserve. Statistically, this implies (a) a mobilization/activation × constraint interaction (steeper slopes under high constraint) and (b) capacity moderation (stronger translation of mobilization/activation into urges/behavior when capacity is low), consistent with the claim that constraint gates outward throughput and low capacity compresses policy competition toward rapid, high-certainty maneuvers.

Core Test 2: The Bridge from Urge to Action

Permission/Coherence Scaffold Mediates the Urge → Enactment Transition. Momentary punitive self-appraisals should function as a permission/coherence scaffold that accelerates inward routing by reducing decision conflict and increasing action permissibility under constraint. Accordingly, punitive self-appraisals should prospectively predict the urge-to-action transition above and beyond distress intensity, and should partially mediate the relation between high-risk state configurations (high mobilization/activation under high constraint with low capacity) and subsequent NSSI behavior (Burke et al., 2021a; Burke et al., 2021b). In lagged terms (adjusted to sampling frequency), an expected pattern is: constraint/mobilization at t → permission/coherence at $t+1$ → urge escalation and/or enactment at $t+2$, with effects strongest during low-capacity windows.

Core Test 3: AAM Regime Signatures Around Episodes

Regime-Transition Clustering Around Excess-Load Emotion and Overload Collapse/Freeze. NSSI urges and episodes should cluster around transitions into AAM-defined high-risk regimes—especially excess-load emotion (mobilization exceeding capacity with urgency and narrowing) and oscillations between excess-load emotion and overload collapse/freeze (restricted throughput under high constraint; dissociation/wordlessness or immobilized agitation). Operationally, high-risk windows should show rising mobilization and/or activation, increasing throughput restriction, and compressed perceived options. Post-episode reports should show a state-transition signature—relief and/or numbness accompanied by increased perceived control—consistent with NSSI functioning as a rapid, high-certainty state transition (Hooley & Franklin, 2018; Passaro, 2025a).

Secondary Predictions and Extensions

A) Target-Shift Signature Under Attachment Constraint

When the provoking context is attachment-loaded and outward expression is appraised as unsafe, the model predicts a target shift: anger-at-self (or inward-directed aggressive mobilization) should increase more steeply than anger-at-other (and/or anger-in-body, if measured), relative to the individual's baseline and relative to non-attachment stressors. This shift should be strongest in high-constraint windows and should precede increases in NSSI urges/behavior, consistent with inward routing when outward throughput is gated.

B) Sleep and Autonomic Flexibility as Next-Day Capacity Amplifiers

Because deployable capacity is state-dependent, upstream physiological reserve should function as a capacity amplifier. Poor sleep and reduced autonomic flexibility (ambulatory HR/HRV proxy indices) should prospectively predict next-day increases in activation, increases in constraint appraisals, reductions in deployable capacity, and elevated NSSI urge intensity above the individual's baseline (Passaro, 2025b). (Measurement note: ambulatory HR/HRV indices should be modeled with appropriate controls for movement/posture and timing.)

C) Arousal–Activation Dissociation Profiles

SARc distinguishes activation (“must act now”) from arousal/mobilization, predicting clinically meaningful dissociations. High-risk windows should include both (a) shutdown profiles—high activation with relatively low outward physiological output and high throughput restriction/dissociation—and (b) agitated profiles—high activation with high mobilization. Across both profiles, NSSI risk should be highest when constraint is high and deployable capacity is low.

D) Experimental Constraint Manipulation

In laboratory or analogue paradigms involving interpersonal threat/criticism, increasing perceived expressive permission and relational safety (e.g., validation, repair cues, structured co-

regulation) should reduce option narrowing and punitive permission scaffolds and attenuate NSSI urges/behavioral proxies relative to suppression/prohibition conditions, with stronger effects among individuals with higher attachment insecurity and/or invalidation histories (Turner et al., 2016).

Clinical Implications

A focus on preventing imminent harm is necessary in high-risk contexts, but it is not sufficient as a primary explanatory or translational frame. Multiple traditions converge on the observation that NSSI can produce rapid, reliable, short-latency state change (Nock & Prinstein, 2004; Chapman et al., 2006; Klonsky, 2007; Hooley & Franklin, 2018), and meta-analytic evidence supports robust associations between emotion dysregulation and NSSI (Wolff et al., 2019). In the present framework, this reliability is not incidental: it is the signature of a learned, high-control state-transition policy. Clinical relevance therefore follows most directly from the model's mechanistic claim—namely, that sustained reductions in NSSI should be mediated by measurable shifts in the state variables that make NSSI highly selectable under load.

Constraint Repair as a Multi-Domain Target

In this framework, “constraint” is not only an appraisal; it is the set of conditions—internal and external—that repeatedly close outward throughput and compress the action set. Clinically, it helps to map constraint into families so interventions are specific: biological constraints (sleep deprivation, autonomic rigidity, chronic hyperarousal/depletion) call for recovery and downshifting work; cognitive constraints (rigidity, catastrophic forecasting, self-attack, low mentalizing under load) call for flexibility and permission/coherence interventions; interpersonal constraints (fear of conflict, low repair reliability, lack of safe disclosure, power asymmetry) call for co-regulation scaffolding, graded assertion, and repair-based practice; and existential constraints (hopelessness, meaning thinning, “no next step” imaginability) call for meaning restoration, future linking, and micro-goals that reopen time horizon. Naming constraint this way clarifies why behavior suppression alone fails: if the constraint landscape is unchanged, the same high-risk configuration is repeatedly recreated, and the system will continue to overweight high-certainty private state-change maneuvers.

Because NSSI selection follows the state-dependent rule outlined in the Introduction, clinical implications are best framed as mediator targets: (a) reduce entry into the high-risk configuration (high mobilization/activation + high constraint + low capacity), (b) expand safe outward throughput during escalation, and (c) weaken permission/coherence scaffolds that accelerate the urge-to-action transition (Burke et al., 2021a; Burke et al., 2021b; Passaro, 2025a; Passaro, 2025b). Put clinically, durable change should track capacity restoration and constraint repair, rather than behavior suppression alone.

Attenuate Mobilization/Activation Dynamics

Durable risk reduction should be mediated by reduced amplitude, volatility, and duration of activation spikes—especially in interpersonal threat contexts. Accordingly, improvement should be detectable as fewer or shorter high-activation episodes, reduced volatility, and weaker coupling between activation spikes and option narrowing. In multimodal designs, this aligns with next-day reserve markers such as sleep and autonomic flexibility: improved sleep-related reserve and stronger autonomic flexibility should reduce the probability that ordinary stressors escalate into mobilization-capacity mismatch regimes in which policy compression occurs (Passaro, 2025b).

Increase Deployable Capacity Under Load

In AAM terms, risk rises when mobilization exceeds deployable capacity for coherent output and integrative processing (Passaro, 2025a). Translationally, successful care should be associated with greater state-dependent cognitive flexibility and bandwidth in high-arousal moments, more consistent access to co-regulation in relevant windows, and stronger biological reserve. The key

prediction is not simply “more coping skills,” but a measurable increase in the system’s ability to metabolize mobilization into coordinated action rather than carry it forward as excess-load affect or restricted throughput.

Reduce Constraint Appraisals and Reopen Outward Throughput

Because predicted relational catastrophe, futility, and prohibition close outward throughput, reductions in these appraisals should mediate decreases in NSSI selection probability—especially in attachment-relevant contexts in which anger-linked outward expression is forecast as unsafe (Turner et al., 2016). Mechanistically, this should appear as weakened moderation effects (mobilization predicts urges less strongly as constraint declines) and a broader perceived action set in previously high-constraint situations.

A clinically practical corollary is that constraint should be assessed *as prediction*, not as character. For example, constraint can be parsed into: (a) predicted relational cost (“If I show this, I’ll lose them”), (b) prohibition/permission (“I’m not allowed to feel/say this”), and (c) efficacy/futility (“Nothing I do will help”). Mapping which component dominates determines what must be repaired—relational safety, permission structures, or controllability.

Decrease Throughput Restriction and Improve State Mobility

When throughput is restricted (collapse/freeze profiles characterized by shutdown, dissociation, or wordlessness), the action repertoire compresses toward immediately executable somatic maneuvers and integrative processing declines. Risk reduction should therefore be mediated by decreased frequency or duration of throughput-restricted states and by faster transitions out of overload collapse/freeze into regimes where coordinated output and integration are possible (Passaro, 2025a). The signature is not the absence of distress, but improved state mobility.

Weaken Permission/Coherence Scaffolds That Bridge Urge to Action

Intensive longitudinal evidence indicates that self-punishment cognitions rise proximally around urges and episodes and differentiate those with versus without NSSI histories (Burke et al., 2021a; Burke et al., 2021b). In this model, these cognitions increase immediate executability by reducing decision conflict under constraint. Translationally, successful care should be associated with reduced frequency, intensity, and proximal impact of punitive self-appraisals during high-constraint windows, and a weaker prospective bridge from punitive cognition to behavior—even when distress remains high.

A key clinical refinement is to treat “self-punishment” not only as a retrospective explanation but as a state-linked permission structure (“this is allowed/deserved/necessary”) that collapses choice under load. De-moralizing the account—without minimizing risk—can be mechanistically useful: NSSI is harmful, yet functional. Clinically, the task is to build function-matched alternatives that can compete with NSSI’s immediacy and certainty in the relevant state-space (Nock & Prinstein, 2004; Hooley & Franklin, 2018).

Reframing “Self-Punishment” Without Minimizing Risk

NSSI is often labeled “self-punishment,” but this label can operate as moral shorthand rather than mechanism. Moralized framings (“bad coping,” “deserved pain”) may inadvertently amplify shame and concealment—states that increase constraint, reduce co-regulation access, and compress the feasible action set toward privately controllable, high-certainty maneuvers. In a selection framework, this matters because shame-linked prohibition/permission rules (e.g., “I’m not allowed to feel this,” “I deserve this”) can function as a proximal permission/coherence scaffold that lowers decision conflict and increases the immediate executability of injury.

A mechanistic reframe preserves a clear stance against harm while reducing self-contempt: *the behavior is harmful, yet historically intelligible as a rapid state-change attempt under load*. The clinical task

is therefore not to excuse NSSI but to translate moral language into testable and targetable processes—identifying the short-latency payoff (arousal downshift, dissociation interruption, control restoration, avoidance of relational catastrophe) and building function-matched alternatives that can compete with NSSI's immediacy and certainty while weakening punitive permission structures.

Treat Anger as Signal, Not Aggression

A common clinical error is to treat anger as a contaminant—a dangerous substance that must be suppressed to keep relationships intact. In the displaced-anger pathway, this stance strengthens constraint appraisals that gate outward throughput (e.g., “If I feel it, I’m bad”; “If I show it, I’ll be abandoned”; “If I name it, it will escalate”), increasing the likelihood that aggressive mobilization will be routed inward. A mechanistically cleaner approach differentiates anger-as-signal from aggression-as-behavior: anger-as-signal is boundary intelligence (threatened dignity, violated limits, unfairness, unmet need) that recruits action readiness, whereas aggression-as-behavior is one possible output—often costly, sometimes unsafe, and never required for anger to be legitimate. Operationally, anger work can be organized as a graded triad: permission → precision → pathways. Permission legitimizes anger’s presence and adaptive function while maintaining a clear stance against harm; precision identifies what the anger is about and which constraint component blocks expression (predicted relational cost, prohibition/shame, or futility); and pathways build graded, socially coherent outputs that can carry mobilization without injury or relational catastrophe, progressing from low-risk throughput (private naming, journaling, non-injurious somatic discharge, brief scripts) to relational throughput (assertive statements, limits, repair attempts, and help-seeking).

Use Relationship as Co-Regulation, Not Control

Because the model is explicitly state-based, the therapeutic relationship functions as a regulatory context, not merely a delivery system for skills. Coercive responses—threats, ultimatums, punitive restriction, reflexive escalation to forced control—can inadvertently strengthen a client’s core appraisal that disclosure leads to control (“If I tell you what’s happening, you’ll take over / punish me / tighten surveillance”). When that appraisal is activated, clients predictably shift toward concealment and solitary regulation, which increases shame, reduces co-regulation access, and amplifies the very constraint conditions that make inward routing more selectable. In this sense, coercion can replicate the client’s original constraint ecology: high arousal + low perceived permission + low controllability—conditions under which privately controllable maneuvers (including NSSI) gain comparative advantage. To support real-time mapping of constraint appraisals in session, Box 1 provides brief, gentle prompts organized by constraint component.

Box 1. Constraint Appraisal Assessment Toolkit: Gentle Prompts for Real-Time Mapping

Constraint appraisals are state-dependent predictions. The aim is to identify which predicted cost is gating outward throughput so intervention can target the relevant constraint component.

- **Safety/repair anchor:** “Who is most steady for you when you’re activated—and what does repair look like with them?”
- **What feels dangerous about expression?:** “If you said it directly, what do you expect would happen right away—and later?”
- **Relational cost (attachment threat):** “What’s the worst relational outcome your system is protecting you from?”
- **Permission/prohibition:** “Is there a rule here about what you’re not allowed to feel or say?”
- **Efficacy/futility:** “In that moment, does it feel like anything you do would matter?”
- **Objective power/safety constraint:** “Would being direct actually make things less safe in the real world?”

- **Automatic safety move:** “What does your system do first to keep things safe—go quiet, smooth it over, fix it fast, shut down?”
- **Link to selection:** “When that prediction turns on under activation, options narrow toward what’s immediate and privately controllable.”

Discussion

Empirical Convergence: Three Findings, One Proximal Architecture

Across methods, three contemporary findings converge on a shared proximal architecture for NSSI selection. First, intensive longitudinal studies show that self-punishment cognitions rise in the immediate windows around urges and episodes, suggesting a proximal permission/coherence process that can accelerate the urge-to-action transition under load (Burke et al., 2021a; Burke et al., 2021b). Second, daily-life work indicates that interpersonal conflict and perceived social support track fluctuations in urges and behavior, consistent with relational context acting as a gating variable that expands or compresses the feasible action set in real time (Turner et al., 2016). Third, decision-focused accounts propose that as distress and urgency rise, options narrow and immediate controllability becomes overweighted, rendering the body a reliably executable lever for rapid state change (Hooley & Franklin, 2018). Taken together, these findings support a selection framework in which NSSI becomes most competitive when mobilization/activation rises under constraint and low deployable capacity, especially when punitive permission/coherence reduces decision conflict and increases executability.

The proposed integration is conservative in one sense and ambitious in another. It is conservative insofar as it accepts a robust clinical reality: NSSI can produce short-latency state change (Nock & Prinstein, 2004; Klonsky, 2007; Hooley & Franklin, 2018). It is ambitious insofar as it specifies *why* that state change is so reliable and *when* the behavior wins competition—by treating NSSI as the output of a measurable selection problem within a constrained state-space. In the model, high-risk moments are a constrained optimization problem: as mobilization/activation rises under high constraint and low deployable capacity, the system favors rapid, privately controllable state-change actions; punitive self-appraisals can then function as a permission/coherence scaffold that lowers decision conflict and shifts selection toward inward routing.

A central contribution of the present account is to shift explanation from descriptive “functions” to state-dependent regulatory selection. Within AAM, urgent affect is an indicator of mobilization outpacing deployable capacity for coherent output and integration, and restricted-throughput states clarify why escalation can culminate in collapse, shutdown, or dissociation rather than outward action (Passaro, 2025a). Within SArC, severe risk states emerge as activation rises while deployable coping capacity erodes across biological regulation, cognitive flexibility, relational co-regulation, and existential meaning—producing progressive option narrowing and increasing reliance on fast, high-control maneuvers (Passaro, 2025b). Together, these models supply the measurement-ready architecture required to adjudicate mechanisms rather than simply enumerate motives.

Against this backdrop, the Displaced Anger Under Constraint pathway is advanced as a parsimonious, testable mechanism that links relational gating to inward routing without requiring that anger be consciously labeled in every episode. When aggressive mobilization is evoked in attachment-relevant contexts and outward throughput is appraised as unsafe, forbidden, futile, or relationally catastrophic, the feasible policy set compresses. In that compressed state-space, NSSI becomes comparatively attractive because it is privately controllable, rapidly executable, and reliably produces a state transition (Hooley & Franklin, 2018). The model further specifies a proximal cognitive bridge: self-punishment beliefs can function as permission/coherence scaffolds that reduce decision conflict and increase the immediate executability of injury under constraint (Burke et al., 2021a; Burke et al., 2021b).

This selection-based framing yields concrete research and clinical payoffs. It generates within-person predictions about (a) interactions among mobilization/activation and constraint, (b)

moderation by state-dependent capacity, (c) the urge-to-action bridge via permission/coherence scaffolds, and (d) regime-transition clustering around excess-load emotion and restricted-throughput states (Passaro, 2025a; Passaro, 2025b). Clinically, it focuses attention on mediator targets that are measurable and modifiable: reducing activation volatility, restoring deployable capacity, repairing constraint appraisals that gate outward throughput, increasing state mobility out of collapse/freeze states, and weakening permission structures that accelerate inward routing.

Limitations

This paper advances a mechanism-level model, and several limitations are explicit.

First, measurement development is required. Operationalizing constraint appraisal (relational cost, permission/prohibition, efficacy/futility) and throughput restriction states requires careful item construction and validation. Measures must distinguish anger as aggressive mobilization (boundary-relevant action readiness) from aggressive intent, and must assess predicted relational costs without presuming caregiver malignancy or pathologizing culturally normative deference. Similarly, throughput restriction measures must differentiate dissociation/collapse from low arousal states and remain sensitive to activation–arousal dissociation profiles emphasized by SArc (Passaro, 2025b).

Second, heterogeneity is expected even under a unifying selection algorithm. The same individual may arrive at NSSI through different proximal pathways depending on sleep reserve, coregulation accessibility, relational context, and constraint appraisals. Although the model proposes a common acquisition route (attachment-constrained aggression), some individuals may acquire NSSI through alternative learning ecologies (e.g., sensory regulation, dissociation relief, pain-offset mechanisms) or later episodes may be dominated by habitization. These are not “other reasons” so much as differences in acquisition and reinforcement history that require developmental and within-person designs to adjudicate.

Third, causal inference requires multimethod work. Because the account hinges on dynamic coupling among mobilization/activation, appraisal, capacity, and selection, stronger tests will require intensive longitudinal designs with temporal ordering (EMA), experimental manipulation of expressive permission/constraint and interpersonal threat, and physiological measurement (sleep and autonomic indices) to evaluate mobilization–capacity coupling and activation–arousal dissociations (Passaro, 2025a; Passaro, 2025b). Cross-sectional endorsement patterns and retrospective motives are insufficient to adjudicate the proposed selection algorithm.

Fourth, the model implies limits on introspective access and construct labeling in the very windows of interest. Under high mobilization with elevated constraint and reduced deployable capacity, appraisal compresses and throughput may be restricted (freeze/shutdown/dissociation), which can reduce real-time emotion labeling and shape post-episode reconstruction. Accordingly, self-reports that emphasize relief or deny anger content may reflect measurement limits under high load rather than the absence of aggressive mobilization. This possibility should be treated as a measurement challenge—not an interpretive claim about motives—and is best adjudicated with within-person designs that concurrently index constraint appraisals, target salience, anger-at-self/anger-at-other, dissociation, and urgency.

Future Directions

Future work should develop and validate low-burden EMA batteries that directly operationalize the model’s state variables: mobilization, activation, deployable capacity (cognitive/relational/biological), constraint appraisal components, throughput restriction, option narrowing, and permission/coherence scaffolds. Where feasible, EMA should be paired with sleep and ambulatory physiology to index reserve and autonomic flexibility, enabling tests of next-day amplification and within-day coupling (Passaro, 2025b).

Several research directions follow directly from the model:

Selection algorithm tests. Time-varying models should evaluate whether mobilization/activation predicts urge intensity and behavior most strongly under high constraint and low capacity, and whether these effects are mediated by option narrowing and permission/coherence scaffolds (Burke et al., 2021a; Burke et al., 2021b).

Target-shift and attachment salience. Studies should test whether attachment-loaded contexts preferentially increase anger-at-self relative to anger-at-other (or anger-in-body), particularly under high predicted relational cost, consistent with inward routing when outward throughput is gated (Turner et al., 2016).

Regime-transition signatures. Multimodal analyses should examine whether episodes cluster around transitions into excess-load emotion and oscillations with restricted-throughput states, and whether post-episode shifts show the predicted state-transition signature (relief/numbing + perceived control) (Passaro, 2025a; Hooley & Franklin, 2018).

Experimental constraint manipulation. Laboratory and analogue paradigms should manipulate expressive permission and relational safety versus suppression/prohibition to test whether reduced constraint widens perceived options, attenuates permission scaffolds, and reduces inward routing under mobilization (Turner et al., 2016).

In parallel, treatment studies can test whether interventions that directly target model mediators—sleep/recovery enhancement, autonomic downshifting, cognitive flexibility under load, co-regulation scaffolding, constraint repair, and graded outward throughput pathways—reduce NSSI above and beyond generic emotion regulation skills. A central clinical prediction is that decreasing constraint appraisals and increasing safe outward throughput will reduce the comparative advantage of NSSI as a high-control maneuver under escalation.

Conclusion

NSSI is often described in terms of “functions” or broad labels (emotion regulation, self-punishment, interpersonal influence), but such descriptions can obscure the moment-to-moment logic by which self-injury becomes the selected action. The present manuscript advances a control-oriented mechanistic account that links physiological mobilization, appraisal, deployable capacity, and policy selection. Within AAM, urgency and affective pressure are signatures of mobilization outpacing deployable capacity for coherent output and integrative processing, and restricted-throughput states clarify why escalation can culminate in shutdown, dissociation, or wordlessness (Passaro, 2025a). Within SARc, risk concentrates when activation rises as deployable coping capacity declines across biological regulation, cognitive flexibility, relational co-regulation, and existential meaning (Passaro, 2025b).

Integrating these models, the Displaced Anger Under Constraint pathway specifies one plausible acquisition route and proximal selection mechanism. When aggressive mobilization toward an attachment-relevant target is gated by high predicted relational cost, prohibition, or futility, outward throughput collapses and inward routing becomes executable; NSSI is selected not because it is globally preferred but because it is a high-certainty state-transition maneuver within a constrained momentary state-space (Hooley & Franklin, 2018). Proximally, self-punishment cognitions can function as permission/coherence scaffolds that reduce decision conflict and accelerate the urge-to-action transition under constraint (Burke et al., 2021a; Burke et al., 2021b).

By locating NSSI within a measurable state-space of mobilization–capacity regimes and multi-domain coping architecture, AAM and SARc provide a framework for research that can adjudicate mechanisms and for clinical work that reduces reliance on injury by shifting the variables that make it highly selectable in the moment. Translationally, durable risk reduction should be mediated by reduced activation volatility, increased deployable capacity under load, decreased constraint appraisals, reduced time in restricted-throughput states, weakened permission/coherence scaffolds, and expanded safe outward pathways for aggressive mobilization without relational catastrophe.

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References

- Burke, T. A., Fox, K., Kautz, M., Siegel, D. M., Kleiman, E. M., & Alloy, L. B. (2021a). Real-time monitoring of the associations between self-critical and self-punishment cognitions and nonsuicidal self-injury. *Behaviour Research and Therapy*, 137, 103775. <https://doi.org/10.1016/j.brat.2020.103775>
- Burke, T. A., Fox, K., Kautz, M., Rodriguez-Seijas, C., Bettis, A. H., & Alloy, L. B. (2021b). Self-critical and self-punishment cognitions differentiate those with and without a history of nonsuicidal self-injury: An ecological momentary assessment study. *Behavior Therapy*, 52(3), 686–697. <https://doi.org/10.1016/j.beth.2020.07.006>
- Chapman, A. L., Gratz, K. L., & Brown, M. Z. (2006). Solving the puzzle of deliberate self-harm: The experiential avoidance model. *Behaviour Research and Therapy*, 44(3), 371–394. <https://doi.org/10.1016/j.brat.2005.03.005>
- Cipriano, A., Cella, S., & Cotrufo, P. (2017). Nonsuicidal self-injury: A systematic review. *Frontiers in Psychology*, 8, Article 1946. <https://doi.org/10.3389/fpsyg.2017.01946>
- Glassman, L. H., Weierich, M. R., Hooley, J. M., Deliberto, T. L., & Nock, M. K. (2007). Child maltreatment, nonsuicidal self-injury, and the mediating role of self-criticism. *Behaviour Research and Therapy*, 45(10), 2483–2490. <https://doi.org/10.1016/j.brat.2007.04.002>
- Glenn, C. R., Lanzillo, E. C., Esposito, E. C., Santee, A. C., Nock, M. K., & Auerbach, R. P. (2017). Examining the course of suicidal and nonsuicidal self-injurious thoughts and behaviors in outpatient and inpatient adolescents. *Journal of Abnormal Child Psychology*, 45(5), 971–983. <https://doi.org/10.1007/s10802-016-0214-0>
- Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice*, 10(2), 192–205. <https://doi.org/10.1093/clipsy/bpg022>
- Hamza, C. A., Stewart, S. L., & Willoughby, T. (2012). Examining the link between nonsuicidal self-injury and suicidal behavior: A review of the literature and an integrated model. *Clinical Psychology Review*, 32(6), 482–495. <https://doi.org/10.1016/j.cpr.2012.05.003>
- Hooley, J. M., & Franklin, J. C. (2018). Why do people hurt themselves? A new conceptual model of nonsuicidal self-injury. *Clinical Psychological Science*, 6(3), 428–451. <https://doi.org/10.1177/2167702617745641>
- Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review*, 27(2), 226–239. <https://doi.org/10.1016/j.cpr.2006.08.002>
- Nock, M. K., & Prinstein, M. J. (2004). A functional approach to the assessment of self-mutilative behavior. *Journal of Consulting and Clinical Psychology*, 72(5), 885–890. <https://doi.org/10.1037/0022-006X.72.5.885>
- Passaro, M. J. (2025a). *The arousal appraisal model (AAM): Mobilization–capacity regimes and testable predictions for emotion and regulation* [Preprint]. Preprints. <https://doi.org/10.20944/preprints202512.0507.v2>
- Passaro, M. J. (2025b). *Suicide and the survival architecture of coping (SArC): A system-state model of load–capacity imbalance across domains* [Preprint]. Preprints. <https://doi.org/10.20944/preprints202512.1395.v2>
- Tull, M. T., Weiss, N. H., & McDermott, M. J. (2016). Post-traumatic stress disorder and impulsive and risky behavior: Overview and discussion of potential mechanisms. In C. R. Martin, V. R. Preedy, & V. B. Patel (Eds.), *Comprehensive guide to post-traumatic stress disorders* (pp. 803–816). Springer. https://doi.org/10.1007/978-3-319-08359-9_16
- Turner, B. J., Cobb, R. J., Gratz, K. L., & Chapman, A. L. (2016). The role of interpersonal conflict and perceived social support in nonsuicidal self-injury in daily life. *Journal of Abnormal Psychology*, 125(4), 588–598. <https://doi.org/10.1037/abn0000141>

Wolff, J. C., Thompson, E., Thomas, S. A., Nesi, J., Bettis, A. H., Ransford, B., Scopelliti, K., Frazier, E. A., & Liu, R. T. (2019). Emotion dysregulation and non-suicidal self-injury: A systematic review and meta-analysis. *European Psychiatry*, 59, 25–36. <https://doi.org/10.1016/j.eurpsy.2019.03.004>

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