Autonomous Regulation and Boundary Integrity Scale (ARBIS-45): Instrument Development and Pilot Validation Protocol

SOVEREIGN INTEGRITY INSTITUTE
EST. 2026

Authors: David Humble
Affiliation: Sovereign Integrity Institute (SII)
Date: April 22, 2026
Document Type: Research Protocol / Instrument Development
Classification: Psychological Assessment / Psychometrics

Abstract

This paper presents the development and proposed validation protocol for the Autonomous Regulation and Boundary Integrity Scale (ARBIS-45), a 45-item multidimensional self-report instrument designed to assess nine domains associated with self-regulation, autonomy, and interpersonal boundary management. The instrument integrates constructs from polyvagal theory (Porges, 2011), locus of control research (Rotter, 1966), emotional regulation literature (Gratz & Roemer, 2004), and field observations of extraction dynamics and sovereign resilience (Humble, 2026a, 2026b, 2026c). The nine domains assessed are: (1) Autonomic & Emotional Regulation, (2) Response Inhibition (Strategic Non-Reactivity), (3) Social-Cognitive Pattern Recognition, (4) Behavioral Documentation Practices, (5) Boundary Integrity, (6) Co-Regulation Capacity, (7) Outcome Detachment, (8) Sustained Regulation Capacity (Energetic Stability), and (9) Self-Ownership (Internal Locus of Control). The paper includes the complete item pool, scoring procedures, preliminary interpretive ranges, and a pilot validation study design. The ARBIS-45 is intended for research use in psychological profiling, resilience studies, and pre/post intervention assessment, particularly in populations exposed to chronic stress, extraction, or institutional gaslighting.

Keywords: autonomous regulation, boundary integrity, self-regulation, polyvagal theory, locus of control, sovereignty, assessment, psychometric validation, ARBIS-45

1. Introduction

1.1 Theoretical Background

The construct of psychological sovereignty—the capacity to maintain self-regulation, boundary integrity, and autonomy in the face of external pressure—has emerged from multiple theoretical traditions. Polyvagal theory (Porges, 2011) describes the neurophysiological basis of autonomic regulation, distinguishing between sympathetic (fight/flight), dorsal vagal (shutdown), and ventral vagal (social engagement) states. Locus of control research (Rotter, 1966) distinguishes between internal and external attribution of reinforcement. Emotional regulation literature (Gratz & Roemer, 2004) identifies difficulties in emotion regulation as transdiagnostic risk factors. Boundary integrity research (Nartova-Bochaver, 2014) conceptualizes psychological sovereignty as the capacity to protect one's psychological space from intrusion.

More recently, field observations of extraction dynamics and sovereign resilience (Humble, 2026a, 2026b, 2026c) have identified nine domains of functioning associated with resistance to extraction, institutional gaslighting, and chronic stress. These domains include nervous system regulation, strategic non-reaction, pattern recognition, documentation practices, boundary integrity, co-regulation capacity, outcome detachment, energetic stability, and self-ownership.

1.2 Need for a Unified Instrument

Existing instruments assess related but distinct constructs. The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) measures emotional regulation but not boundary integrity or pattern recognition. Rotter's Locus of Control Scale (Rotter, 1966) measures internal vs. external attribution but not nervous system regulation. The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) measures stress perception but not resilience or co-regulation capacity.

No existing instrument integrates all nine domains identified in field observations of sovereign resilience. The ARBIS-45 was developed to address this gap.

1.3 Instrument Objectives

The ARBIS-45 is designed to:

1. Assess individual differences in nine domains associated with autonomous regulation and boundary integrity
2. Provide a profile of strengths and development areas for personal development
3. Enable pre/post assessment for sovereignty-focused interventions
4. Support research on psychological sovereignty, extraction resilience, and related constructs

2. Instrument Development

2.1 Construct Definition

The ARBIS-45 operationalizes autonomous regulation as the capacity to maintain self-regulation, boundary integrity, and autonomy in the face of external pressure, extraction attempts, or institutional gaslighting. The instrument comprises nine factors, each representing a distinct but interrelated domain.

2.2 Factor Descriptions

Factor	Description	Theoretical Basis
F1: Autonomic & Emotional Regulation	Capacity to maintain physiological calm, return to baseline after stress, and rest without hypervigilance	Polyvagal theory (Porges, 2011)
F2: Response Inhibition (Non-Reactivity)	Ability to pause before responding, withhold expected reactions, and choose inaction strategically	Field observation (Humble, 2026b)
F3: Social-Cognitive Pattern Recognition	Capacity to distinguish authentic from performative behavior, recognize gaslighting, and map systemic patterns	Field observation (Humble, 2026a)
F4: Documentation Practices	Systematic recording, preservation, and organization of information as a counter to gaslighting	Field observation (Humble, 2026c)
F5: Boundary Integrity	Capacity to say no, recognize boundary violations, disengage from harm, and protect time and energy	Nartova-Bochaver (2014)
F6: Co-Regulation Capacity	Ability to stabilize others through presence without becoming dysregulated oneself	Polyvagal theory (Porges, 2011)
F7: Outcome Detachment	Capacity to act on values regardless of outcomes, tolerate uncertainty, and accept external events beyond control	Field observation (Humble, 2026a)
F8: Sustained Regulation Capacity	Ability to maintain consistent energy, function under prolonged stress, and recover efficiently	Field observation; Repeater State (Humble, 2026d)
F9: Self-Ownership (Internal Locus of Control)	Recognition of responsibility for one's life, internal decision-making, and autonomy from external systems	Rotter (1966)

2.3 Item Generation

Items were generated based on:

1. Field observations from a seven-year case study of extraction and recovery (Humble, 2026a)
2. Existing instruments (DERS, Rotter I-E, PSS, BRS) adapted for the sovereignty construct
3. Theoretical literature on polyvagal theory, locus of control, and boundary integrity

4. Qualitative interviews with individuals reporting high levels of sovereign resilience (n=5, informal)

Initial item pool: 90 items. Following content review and redundancy elimination, the pool was reduced to 45 items (5 per factor).

2.4 Response Format

Items are rated on a 5-point Likert scale:

Score	Label
0	Never
1	Rarely
2	Sometimes
3	Often
4	Always

Respondents are instructed to rate their typical behavior over the past 30 days.

3. The ARBIS-45 Item Pool

Factor 1: Autonomic & Emotional Regulation (5 items)

1. I can remain physically calm in stressful situations.
2. I return to emotional baseline quickly after stress.
3. I can sit quietly without restlessness for at least 10 minutes.
4. I use regular practices to maintain emotional stability.
5. I can rest without persistent vigilance or threat scanning.

Factor 2: Response Inhibition (Non-Reactivity) (5 items)

6. I can pause before responding when emotionally triggered.
7. I choose not to respond when engagement would escalate conflict.
8. I recognize attempts to provoke emotional reactions.
9. I can tolerate discomfort without immediate reaction.
10. I intentionally choose inaction when it is beneficial.

Factor 3: Social-Cognitive Pattern Recognition (5 items)

11. I distinguish between authentic and performative social behavior.
12. I recognize when information is being distorted or misrepresented.

13. I identify recurring interpersonal patterns across situations.
14. I analyze systems and relationships beyond individual actors.
15. I anticipate likely outcomes based on observed patterns.

Factor 4: Documentation Practices (5 items)

16. I maintain records of important communications.
17. I preserve information that may be relevant later.
18. I refer back to records rather than relying on memory alone.
19. I organize information in a structured and retrievable format.
20. I document events when accuracy is important.

Factor 5: Boundary Integrity (5 items)

21. I can say no without excessive justification.
22. I recognize when my boundaries are being crossed.
23. I disengage from harmful interactions without escalation.
24. I maintain a stable sense of identity under pressure.
25. I protect my time and energy intentionally.

Factor 6: Co-Regulation Capacity (5 items)

26. Others appear calmer when interacting with me.
27. I remain stable when others are distressed.
28. I can support others without becoming overwhelmed.
29. I do not rely on others' distress to regulate myself.
30. I maintain at least one stable, supportive relationship.

Factor 7: Outcome Detachment (5 items)

31. I act according to my values regardless of outcome.
32. I do not rely on external validation for decisions.
33. I tolerate uncertainty without excessive distress.
34. I accept when outcomes are outside my control.
35. I continue constructive action even without immediate results.

Factor 8: Sustained Regulation Capacity (5 items)

36. I maintain consistent energy throughout the day.
37. I can function effectively under prolonged stress.
38. I avoid emotional exhaustion in demanding environments.
39. My presence tends to stabilize rather than escalate situations.
40. I recover efficiently from extended effort.

Factor 9: Self-Ownership (Internal Locus of Control) (5 items)

41. I feel responsible for the direction of my life.
42. I make decisions based on internal values rather than external pressure.
43. I believe I can influence my circumstances.
44. I recognize when external systems attempt to shape my behavior.
45. I maintain autonomy in decision-making.

4. Scoring and Interpretation

4.1 Scoring Procedures

Each factor score is calculated by summing the five items within that factor (range: 0-20). The total score is calculated by summing all 45 items (range: 0-180).

Score	Range
Per factor	0-20
Total	0-180

4.2 Preliminary Interpretive Ranges

Based on field observation (n ≈ 10-15), the following preliminary ranges are proposed. These ranges require validation in larger samples.

Total Score Range	Interpretation
0-60	Low regulation/autonomy. Priority: nervous system regulation, boundary restoration, documentation.
61-120	Moderate development. Emerging sovereignty. Priority: strategic non-reaction, co-regulation, reducing leakage.
121-180	High regulation/autonomy. Repeater state emerging. Likely serving as a node in coherent network.

4.3 Factor Profile Interpretation

Lower scores (0-5) on any factor indicate a priority development area. Higher scores (16-20) indicate mastery. The profile of factor scores provides a roadmap for targeted intervention.

5. Pilot Validation Study Design

5.1 Objectives

The pilot validation study aims to:

1. Assess internal consistency reliability (Cronbach's alpha) for each factor and the total scale
2. Evaluate the hypothesized nine-factor structure using exploratory factor analysis (EFA)
3. Establish convergent validity with established measures
4. Identify preliminary normative ranges for future research

5.2 Study Design

Parameter	Specification
Type	Cross-sectional pilot study
Target sample size	n = 100-150
Population	Adults (18-65 years)
Sampling method	Convenience sampling + online recruitment
Data collection	Online survey (Qualtrics / Google Forms)
Duration	Approximately 15 minutes
Ethics	Anonymous, voluntary participation, informed consent

5.3 Validation Measures

Construct	Validation Measure	Expected Correlation
Emotional regulation	Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004)	Negative with F1
Locus of control	Rotter's Internal-External Locus of Control Scale (Rotter, 1966)	Positive with F9
Perceived stress	Perceived Stress Scale (PSS; Cohen et al., 1983)	Negative with total score
Resilience	Brief Resilience Scale (BRS; Smith et al., 2008)	Positive with total score

5.4 Hypotheses

Hypothesis	Statement
H1	ARBIS total score will show a positive correlation with resilience (BRS)
H2	ARBIS Factor 1 (Regulation) will show a negative correlation with perceived stress (PSS)
H3	ARBIS Factor 9 (Self-Ownership) will show a positive correlation with internal locus of control (Rotter)
H4	ARBIS Factor 5 (Boundary Integrity) will show a negative correlation with emotional dysregulation (DERS)

5.5 Statistical Analysis Plan

Analysis	Method	Criterion
Reliability	Cronbach's alpha	$\alpha \geq 0.70$ for each factor; $\alpha \geq 0.85$ for total scale
Factor structure	Exploratory Factor Analysis (EFA)	Eigenvalues > 1; factor loadings ≥ 0.40
Convergent validity	Pearson correlations	$r \geq 0.30$ with validation measures
Descriptive statistics	Mean, SD, range	For total and factor scores

5.6 Expected Outcomes

1. Identification of strong and weak factors (reliability)
2. Potential item reduction (e.g., ARBIS-30 short form)
3. Preliminary normative ranges by age, gender, and other demographic variables
4. Recommendations for confirmatory factor analysis in a larger sample

5.7 Limitations

Limitation	Mitigation
Small sample size	Designated as pilot; confirmatory study planned
Self-report bias	Future studies to include behavioral and physiological measures
Convenience sampling	Replication in diverse samples planned
Cross-sectional design	Longitudinal validation planned

6. Future Research Directions

6.1 Confirmatory Validation

Following pilot validation, a confirmatory factor analysis (CFA) with a larger sample (n ≥ 300) will test the hypothesized nine-factor structure.

6.2 Longitudinal Validation

Test-retest reliability (2-4 week interval) with a subset of participants (n ≥ 50) to assess temporal stability.

6.3 Clinical and Specialized Populations

Validation in populations exposed to:

- Chronic stress or burnout
- Institutional gaslighting or extraction
- Trauma or prolonged adversity
- High-control environments

6.4 Behavioral and Physiological Correlates

Convergent validation with:

- Heart rate variability (HRV) as a measure of vagal tone
- Cortisol awakening response as a measure of stress regulation
- Behavioral observation of boundary-setting and non-reactivity

6.5 Cross-Cultural Validation

Translation and validation in non-English speaking populations to assess cross-cultural applicability.

7. Discussion

7.1 Potential Applications

The ARBIS-45 is intended for:

1. **Research use:** Psychological profiling, resilience studies, sovereignty research
2. **Clinical and coaching practice:** Pre/post intervention assessment, development prioritization
3. **Personal development:** Self-assessment, progress tracking, targeted practice

7.2 Comparison to Existing Instruments

Instrument	Domains	ARBIS-45 Adds
DERS	Emotional regulation	Pattern recognition, documentation, boundary integrity
Rotter I-E	Locus of control	Regulation, co-regulation, outcome detachment
PSS	Perceived stress	Sustained regulation capacity, energetic stability
BRS	Resilience	Response inhibition, co-regulation capacity

7.3 Theoretical Contributions

The ARBIS-45 operationalizes the construct of psychological sovereignty in a manner that integrates neurophysiological (polyvagal), cognitive (locus of control), and behavioral (documentation, non-reactivity) domains. It provides a unified framework for understanding resistance to extraction and institutional gaslighting.

8. Conclusion

The Autonomous Regulation and Boundary Integrity Scale (ARBIS-45) is a 45-item multidimensional self-report instrument assessing nine domains associated with self-regulation, autonomy, and interpersonal boundary management. The instrument integrates constructs from polyvagal theory, locus of control research, emotional regulation literature, and field observations of extraction dynamics and sovereign resilience.

The pilot validation study design outlined in this paper will assess internal consistency reliability, factor structure, convergent validity, and preliminary normative ranges. Following pilot validation, confirmatory factor analysis, longitudinal validation, and cross-cultural validation are planned.

The ARBIS-45 is intended for research use in psychological profiling, resilience studies, and pre/post intervention assessment, particularly in populations exposed to chronic stress, extraction, or institutional gaslighting.

9. References

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54.

Humble, D. (2026a). The Farm and the Farmers: A Structural Analysis of Extraction Networks in Laos and the Global System. *SII Working Paper Series*, 2026(19).

Humble, D. (2026b). Strategic Non-Reaction: Disrupting Extraction Without Escalation. *SII Research Library*.

Humble, D. (2026c). From Documentation to Stillness: The Sovereign Witness Protocol. *SII Research Library*.

Humble, D. (2026d). The Repeater State: A Phase Transition in Coherent Field Development. *SII Field Report Series*, 2026(1).

Nartova-Bochaver, S. K. (2014). The Personal Sovereignty as a boundaries phenomenon. *Personality and Individual Differences*, 60, S54.

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. W.W. Norton.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1-28.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200.

10. Appendices

Appendix A: ARBIS-45 Full Instrument

[See Section 3 for complete item pool]

Appendix B: Scoring Sheet

Factor	Items	Score (0-20)
F1: Autonomic & Emotional Regulation	1-5	_
F2: Response Inhibition	6-10	_
F3: Pattern Recognition	11-15	_
F4: Documentation Practices	16-20	_
F5: Boundary Integrity	21-25	_
F6: Co-Regulation Capacity	26-30	_
F7: Outcome Detachment	31-35	_
F8: Sustained Regulation Capacity	36-40	_
F9: Self-Ownership	41-45	_
Total	**1-45**	_ / 180

Appendix C: Permission for Use

The ARBIS-45 is available for non-commercial research use. Please cite: Humble, D. (2026). Autonomous Regulation and Boundary Integrity Scale (ARBIS-45). *SII Assessment Series*, 2026(1). For commercial use or large-scale validation studies, contact the Sovereign Integrity Institute.

Acknowledgements

The author acknowledges the Sovereign Integrity Institute (SII) for institutional support. The author thanks the field observation participants and pilot study volunteers.

Conflict of Interest Statement

The author declares no conflicts of interest.

Data Availability Statement

Pilot validation data will be made available upon reasonable request following study completion.

Citation: Humble, D. (2026). Autonomous Regulation and Boundary Integrity Scale (ARBIS-45): Instrument Development and Pilot Validation Protocol. *SII Assessment Series*, 2026(1).

Comments