

ASTC 2025 RESEARCH PRESENTATION HANDOUT

Polyvagal Theory in the Courtroom: A Neurobiological Lens Interpreting Behavior, Juror Perception, and Trial Consulting Practice

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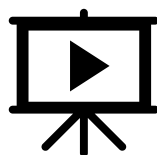
Part I: Extended Summary of Research & Applications

Presentation Objectives

- Explore how jurors perceive credibility through nervous system bias
 - Introduce Polyvagal Theory as a framework for interpreting courtroom behavior
 - Present trial consulting innovations, including the Polyvagal-Informed Juror Assessment Tool (PIJAT)
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Understanding the Nervous System: Polyvagal Theory

- Developed by Dr. Stephen Porges (2011)
- Describes three autonomic states:
 - **Ventral Vagal:** calm, social, regulated
 - **Sympathetic:** fight/flight
 - **Dorsal Vagal:** freeze/shutdown
- These shifts happen via **neuroception** — the body's subconscious detection of safety or threat
- Courtroom behavior is shaped more by survival physiology than conscious logic

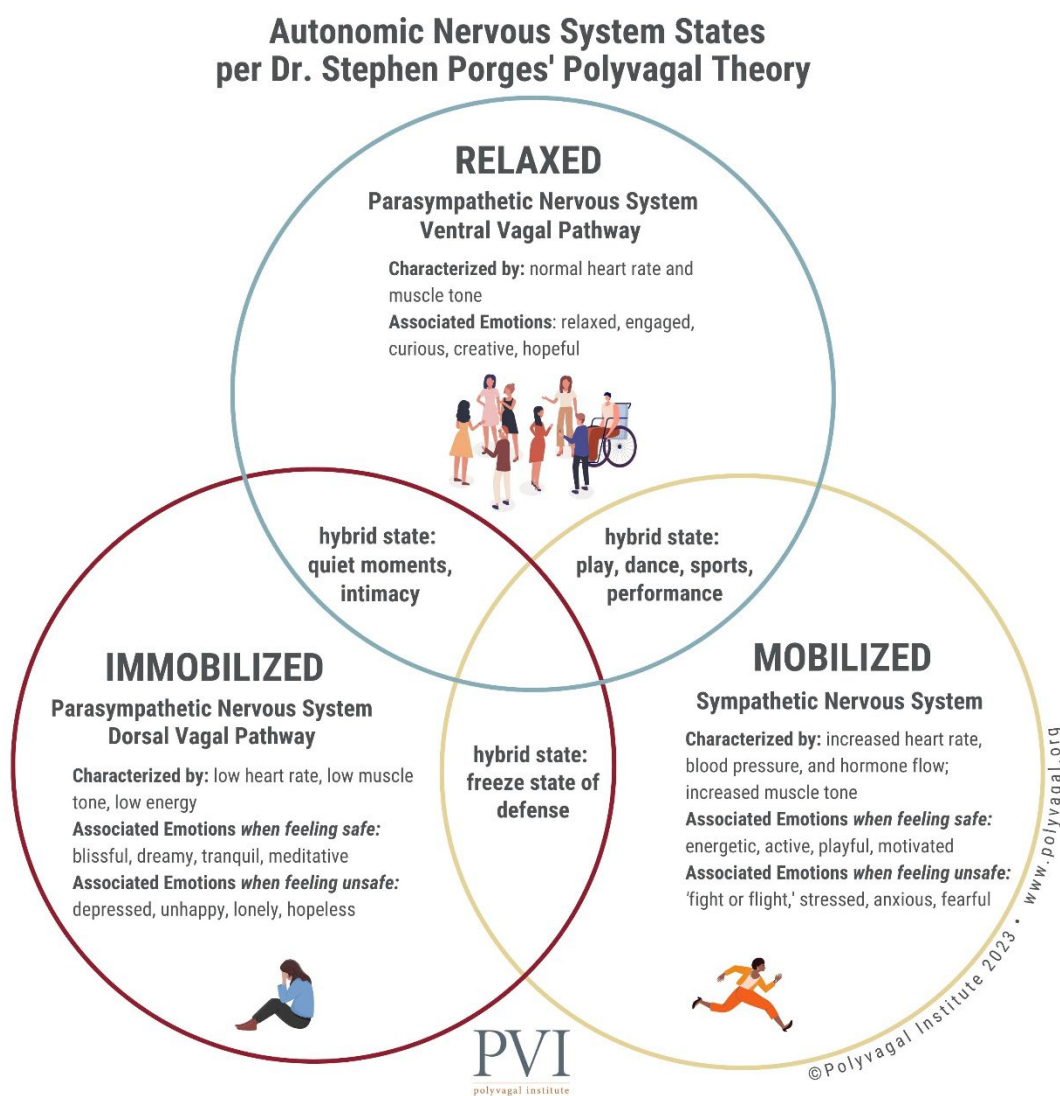


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<https://youtu.be/uH5JQDAqA8E>

Figure 1

Autonomic Nervous System States per Dr. Stephen Porges' Polyvagal Theory



Source: Polyvagal Institute (2023),

<https://www.polyvagal institute.org/whatispolyvagaltheory>

1. Why the Courtroom Is a Nervous System Arena

Courtrooms are high-stakes social arenas saturated with uncertainty, power dynamics, and intense emotional stimuli. Every person in the room—from the defendant to the judge to the

jury—is operating under the influence of their autonomic state, even if that influence is invisible or unconscious.

Behavior is constantly evaluated in court:

- 🔪 Is the witness lying?
- 🔪 Does the defendant look guilty?
- 🔪 Is the juror connecting with the plaintiff?

Polyvagal Theory gives us a physiological framework to understand and reframe these judgments. Instead of interpreting behavior as solely strategic or intentional, we can ask: *What state is this person in?* And what might their body be trying to protect them from?

Group Dynamics & Co-Regulation

- Human nervous systems are social and co-regulating
 - In deliberations:
 - A dysregulated juror can escalate group tension
 - A calm judge or attorney can act as a regulatory anchor
 - Judges and attorneys often operate in sympathetic dominance (stress, control urgency)
 - Regulation is contagious — for better or worse
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Bias Meets Biology: How Identity Shapes Perception in Court

- Jurors assess behavior through identity and state
 - Misreadings occur when autonomic bias meets social stereotypes:
 - **Race:** Calm Black defendants seen as unremorseful (Goff et al., 2008)
 - **Gender:** Stoic women labeled cold or dishonest (Hopkins et al., 2021)
 - **Class:** Low-income individuals misjudged as evasive or less credible (Weiss & Cramer, 1996)
 - Behavior isn't read in a vacuum — it's filtered through nervous system state + implicit bias
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Case Study: The Haunted Juror

The case of Eric Smokes & David Warren (1987–2024):

- Wrongfully convicted as teens; exonerated after 30+ years

- Juror Luana Dunn later admitted she felt unsure but voted guilty out of fear and pressure (Eckholm, 2024)
- **Polyvagal interpretation:**
 - **Sympathetic activation** (fight/flight): urgency, tension, need to resolve
 - **Dorsal shutdown:** withdrawal, emotional collapse, going along with the group
 - Her body perceived threat — not from facts, but from courtroom stress

Courtroom Mapping: Who's in What State?

Key Points:

- We often mistake nervous system states for moral qualities (e.g., calm = trustworthy).
Instead, we need to interpret behavior through a trauma-informed, biological lens.
- Courtroom behaviors often mirror nervous system states
- Understanding these cues can reframe assumptions about truthfulness, cooperation, and credibility.

Figure 2

Courtroom Roles Mapped to Polyvagal States

Courtroom Roles Mapped to Polyvagal States	
Juror (Empathic, Focused)	Ventral Vagal (Social Engagement)
Juror (Anxious, Distracted)	Sympathetic (Fight/Flight)
Juror (Withdrawn, Shut Down)	Dorsal Vagal (Freeze/Shut Down)
Defendant (Present, Regulated)	Ventral Vagal (Social Engagement)
Defendant (Hyperaroused, Defensive)	Sympathetic (Fight/Flight)
Defendant (Frozen, Disconnected)	Dorsal Vagal (Freeze/Shut Down)
Judge (Calm, Observant)	Ventral Vagal (Social Engagement)
Judge (Stressed, Rigid)	Sympathetic (Fight/Flight)
Attorney (Grounded, Persuasive)	Ventral Vagal (Social Engagement)
Attorney (Overactivated, Reactive)	Sympathetic (Fight/Flight)

Created by Michaela Sabruno (2025), adapted from Polyvagal Theory (Porges, 2011)

Practical Applications in Jury Selection and Trial Strategy

Voir Dire

- Screen for rigid beliefs about victim behavior
- Notice physiological signs of reactivity

Trial Design

- Regulate pacing of emotional content
- Use narrative structure to support ventral state

Attorney/Witness Prep

- Teach grounding techniques (breath, posture)
- Practice tone and facial expression regulation

Environment

- Breaks, lighting, sound, seating — all affect neuroception
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PIJAT: Polyvagal-Informed Juror Assessment Tool

https://docs.google.com/forms/d/e/1FAIpQLSeVqCOCX18QrJT1wTJq8RW97N0ko6O_NijpF1cNRvCCiOzwzQ/viewform?usp=header

PIJAT is a consulting tool developed to assess juror readiness and support trauma-informed perception in the courtroom.

Core Components:

- Scenario-based questionnaire
- Short psychoeducation module (e.g., “Flat affect ≠ lying”)
- Optional self-report on nervous system regulation

Purpose: Filter out bias-prone jurors and prepare others to interpret trauma behavior with a biologically informed lens.

- **Voir Dire:** Screen for rigidity and autonomic reactivity
- **Trial Design:** Regulate emotional pacing, use storytelling to support ventral engagement
- **Attorney & Witness Prep:** Teach regulation strategies (breath, grounding, pacing)
- **Environment:** Use tone, breaks, seating, and lighting to support courtroom neuroception

PIJAT: Next Steps in Development

- **Pilot Studies:** Test in mock trials and research labs
 - **Validation:** Develop assessment scales for emotional state perception
 - **Psychoeducation:** Short, scalable training for jurors
 - **Partnerships:** Legal psychology, consulting, and academic collaborations
 - **Goal:** Integrate PIJAT into voir dire and juror preparation materials
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Making It Practical: The Nervous System Lens in Consulting

Trial consultants can begin incorporating Polyvagal Theory by:

- 📌 Using body-based check-ins in prep sessions (e.g., “Where do you feel tension as you recall that moment?”)
- 📌 Observing autonomic state shifts during jury selection
- 📌 Coaching legal teams to recognize the role of tone, pace, and presence in courtroom regulation
- 📌 Offering trauma-informed feedback that considers behavior through a physiological lens
- 📌 Enhancing post-trial evaluations to reflect on how autonomic states may have influenced case progression or juror engagement

This approach centers *state awareness* over assumption—empowering legal professionals to interpret behavior more accurately and humanely.

*“Justice is best served when behavior is understood not as performance — but as protection.” –
Michaela Sabruno*

Interactive Demonstration Summary

During the session, three known speakers participated in a “Two Truths and a Lie” exercise. Participants had previously seen these individuals present confidently. Now, stripped of preparation, their autonomic responses became more visible.

Audience members often misidentified the lie based on demeanor rather than content. Those appearing regulated were assumed truthful; those appearing disfluent or nervous were suspected of lying.

Takeaway: We’re not just judging statements. We’re reading nervous systems. And sometimes, we get it wrong.

Key Takeaways

- Behavior is state-dependent. Trauma responses are often misread.

- Jurors interpret testimony through their own physiology.
 - Bias and biology intersect in ways that shape verdicts.
 - Trial consultants play a critical role in regulating court climate.
 - Polyvagal Theory offers a framework for building humane, informed, and accurate legal processes.
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Part II: Q&A

Understanding the Basics of Polyvagal Theory

Q1: What is the Polyvagal Theory in the simplest terms?

A: It's a theory about how our body automatically responds to feelings of safety or threat—without us even realizing it. These responses shape how we act, speak, or even make decisions.

Q2: Why does this matter in the courtroom?

A: Because people's behavior isn't always a reflection of guilt, truthfulness, or confidence—it may just be how their body is trying to survive a stressful moment.

Q3: How can someone be in a “freeze” state without realizing it?

A: When we're overwhelmed, our body can shut down to protect us—like a possum playing dead. The person may go quiet, look detached, or feel numb—but inside, they're just trying to feel safe.

Q4: Isn't this just anxiety?

A: Not quite. Anxiety is often linked to the fight/flight system, while Polyvagal Theory includes a freeze/shutdown response that goes even deeper. It's about full-body responses, not just emotions.

Q5: Is this theory accepted in court?

A: While it's newer in courtroom application, Polyvagal Theory is widely respected in psychology, trauma, and neuroscience. It's gaining traction in legal settings through education and expert testimony.

Applying Polyvagal Theory to Jury Consulting Practice

Q6: How is this different from what jury consultants already do when assessing bias?

A: Traditional bias assessments focus on what people say or believe. Polyvagal-informed approaches look at how people are functioning—in their nervous system. A juror might say all the “right” things but be stuck in a threat response that skews their perception.

Q7: How can this be applied practically without crossing into therapy or diagnosis?

A: Polyvagal Theory isn't about pathologizing. It's about observation. Trial consultants can notice patterns, make regulation-supportive suggestions, and advocate for pacing or breaks without labeling anyone.

Q8: Can trauma really make someone look dishonest?

A: Yes. Dissociation, appeasement, and shutdown can all resemble avoidance or deception. Polyvagal Theory explains these as protective strategies—not manipulations.

Q9: How do we train others to understand this?

A: Through narrative, modeling, and examples. Sharing short case stories, using relatable metaphors (e.g., “deer in headlights”), and offering simple nervous system explanations can make this work accessible.

Q10: What if a juror becomes visibly dysregulated?

A: Recommend a break. Adjust sensory input (lower lighting, reduce pressure). In post-trial analysis, note their engagement pattern and how it may have impacted deliberations.

Q11: How can I use this theory in jury selection?

A: Look beyond answers. Notice a potential juror’s body posture, tone, and regulation. Are they calm and grounded? Or tense, defensive, or disengaged? These clues may reveal who is in a reactive state, which can influence how they perceive testimony and make decisions.

Q12: What does “autonomic reactivity” look like in jurors?

A: It might be a furrowed brow, fast speech, crossed arms, or shut-down silence. You might see them fidget or zone out. These are signs they’re experiencing internal stress—even if their answers sound fine.

Q13: Can I ethically use this knowledge without “diagnosing” someone?

A: Absolutely. You’re not labeling trauma—you’re noticing patterns. This is about understanding behavior in context, not pathologizing it.

Q14: How does this help with witness prep?

A: A dysregulated witness may lose access to their memory, freeze, or appear untrustworthy. Preparing them with grounding techniques can help them stay in a state where they can think, speak, and connect with the jury.

Q15: What’s one small change consultants can make using this theory?

A: Start by tracking your own state. If you walk into jury selection in sympathetic overdrive, you’re likely to overlook subtle cues. Slow your breathing, ground your posture, and observe from a calm state. It will change what you see.

Q16: What role does trauma history play in juror behavior?

A: A juror with unresolved trauma may have strong reactions to certain testimony—shutting down, over-identifying, or reacting punitively. Recognizing this helps avoid misjudging their fitness to serve fairly.

Q17: How do we debrief trials through a polyvagal lens?

A: After a verdict, reflect on moments when dysregulation might have occurred—tense jury exchanges, a witness shutdown, or misread behavior. Ask: Was this a cognitive decision—or an autonomic reaction?

Q18: How do we make this part of consultant training?

A: Integrate nervous system education into interview techniques, body language interpretation, and trial simulations. Emphasize the physiology behind behavior—not just the behavior itself.

Q19: Are there suggested questions I can use to explore a juror's potential trauma response?

A: Yes. While direct trauma questions aren't appropriate in voir dire, you can ask:

- "How do you tend to respond in high-pressure group situations?"
- "Do you prefer to speak up or listen during stressful conversations?"
- "How do you feel about emotionally intense topics being discussed in a group setting?"
- "What kind of environments help you feel focused and comfortable?"
- "Have you ever had to manage a strong emotional reaction during a professional or serious conversation? What helped you stay composed?"
- "How do you usually feel physically when you're under stress—tense, quiet, reactive, or withdrawn?"
- "What helps you stay clear-headed when things feel intense or uncertain?"
- "How would you describe your comfort level with emotionally complex or upsetting information?"

These questions give insight into a juror's stress response style, tolerance for emotional material, and regulatory capacity—without requiring them to disclose personal trauma.

Q20: How can trauma-informed tools be built into our assessments?

A: Add observations of posture, tone, and emotional regulation into juror profiles. Include stress tolerance, capacity for pause, and reactivity to high-stakes topics. Develop mock voir dire prompts that test for regulation, not just reasoning. For example:

- "Tell me about a time you had to make a decision that felt emotionally complicated—what helped you sort through it?"
- "Imagine someone on the stand becomes overwhelmed—how do you think you'd respond internally?"

Q21: Can trauma responses affect how jurors interpret witness behavior?

A: Absolutely. A juror who is personally dysregulated may see a flat, freezing witness as deceptive, or interpret tears as manipulation. Understanding jurors' physiological states helps predict how they may receive trauma narratives.

"When we regulate the room, we restore fairness."

—Michaela Sabruno

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