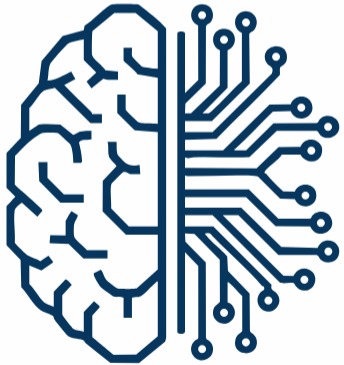
MAIN SESSION 1 | Dr. Elizabeth Loyola

The Intersection of



TRAUMA & NEURODIVERSITY

How Far We've Come — Reframing the Story of Childhood Challenges

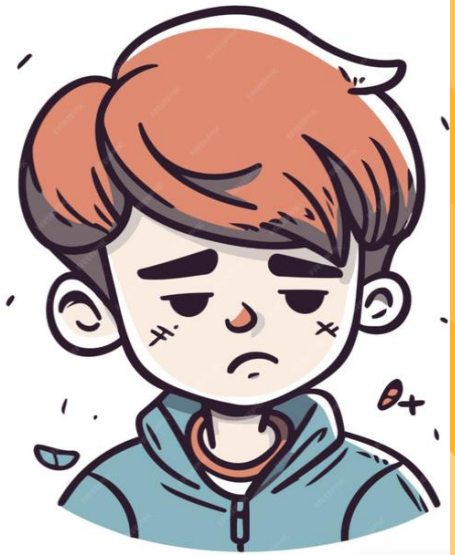
From misunderstood behaviors to integrative, brain-based care.

A Little About Me

- Bachelor's Degree in Psychology from UC Davis
- Worked as Instructional Aide in a Middle School for 3 years
- Doctoral Training at PGSP-Stanford PsyD Consortium
  - Emphasis on children and families
  - Clinical and research focus on ASD and Trauma
- Clinical training done in community mental health settings, schools, academic medical centers
- Worked for UC Davis Health for 6 years
- Started Child Psychology Center Jan 2024
  - Providing neuroaffirming care ages 2+

More info in my bio!

Meet “Marcus”



- Marcus is a 9-year-old boy.
- He flaps his hands when he’s overwhelmed.
- He startles easily.
- He refuses to go to school almost daily.
- He shuts down when corrected.

- He has a history of three foster placements.
- His IEP says Autism, but his therapist wonders about PTSD.
- Many adults think he’s just being defiant.

The real question isn’t: Which diagnosis is correct?
The real question is: What happened to Marcus and how is he trying to adapt?

Raise Your Hand If You've Ever Been Around a Child Where You Weren't Sure

- Is this the impact of Trauma?
- Is this ADHD?
- Is this Autism?
- Is this a Learning Disability?
- Is this all of it?

Most often, uncertainty is not a sign of incompetence. It's an indication of complexity. Our goal is to make complexity a little easier to navigate.

“When we know better, we do better.”
- Maya Angelou

When Risk Compounds

- Autistic children are twice as likely to experience four or more Adverse Childhood Experiences (ACEs)
- Youth exposed to ACEs are 1.7x more likely to be diagnosed with ADHD
- Higher ACE exposure in autistic youth is linked to poorer mental and physical health outcomes
- Trauma exposure in neurodiverse youth is under-recognized and under-treated

Back to Marcus

- Marcus has experienced chronic adversity and instability.
- How might chronic stress shape his developing brain?
- Before we answer that question, we need to first understand developmental trauma and how it forms over time.

Developmental Trauma

Developmental Trauma: Origins

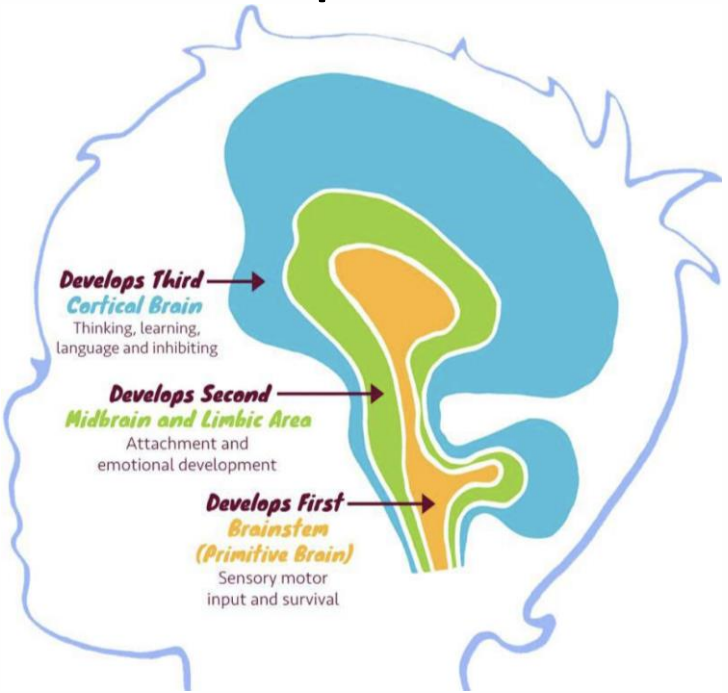
- Late 20th Century: Recognition of Complex PTSD
- 1998: ACE Study demonstrates cumulative dose-response effects
- Early 2000s: Proposal of Developmental Trauma Disorder
- Field shifts from single-event trauma to chronic relational adversity
- Growing recognition that early stress alters brain development

Developmental Trauma

- Chronic exposure to adversity during childhood
- Often interpersonal and relational
- Includes instability, neglect, emotional harm, loss
- Repeated activation of the stress response
- Oftentimes don’t meet diagnostic criteria for PTSD
- Produces complex regulatory symptoms

How Developmental Trauma Shows Up

- Thinking and Learning
  - Executive functioning difficulties
  - Inattention or Slower processing
- Emotion Regulation
  - Intense reactions
  - Anxiety or irritability
- Relationships
  - Withdrawal or clinginess
  - Misreading social cues
- Body & Sensory
  - Somatic complaints
  - Sensory sensitivities or sleep disruption



What Story Do We Tell Ourselves?

When a child melts down in public, what is the first explanation that flashes through your mind?

Go to menti.com
Enter code: 4700 8586

Interpretation is not Neutral

- Our interpretation of dysregulation shapes our response
- Trauma lens → increase safety
- ADHD lens → increase structure
- Autism lens → increase predictability, decrease sensory input
- Defiance lens → increase consequences and rewards

Without the full context, we risk treating the symptoms and can miss the root cause.

Back to Marcus

- He startles easily and shuts down when corrected.
- He avoids school and flaps his hands when overwhelmed.
- He has experienced chronic adversity.
- If you were evaluating Marcus, what would you want to consider?
  - Trauma-related dysregulation?
  - ADHD?
  - Autism?
  - Learning Differences?

The challenge isn't choosing a label.
The challenge is understanding what processes are at play and how to support his development.

Neurodevelopmental Differences

Neurodevelopmental Differences: An Evolving Understanding

Historically

- Framed primarily as behavioral disorders
- Deficits and impairment
- Emphasis on “normalization”
- Limited understanding of complex sensory and executive functioning differences
- Negative language, blaming of parents

Neurodevelopmental Differences: An Evolving Understanding

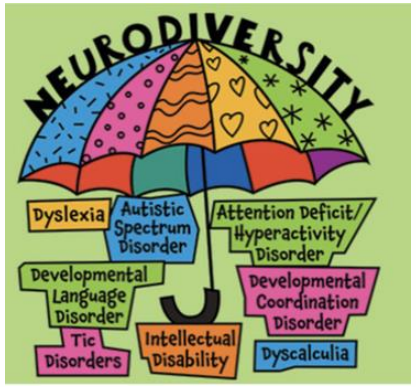
Today

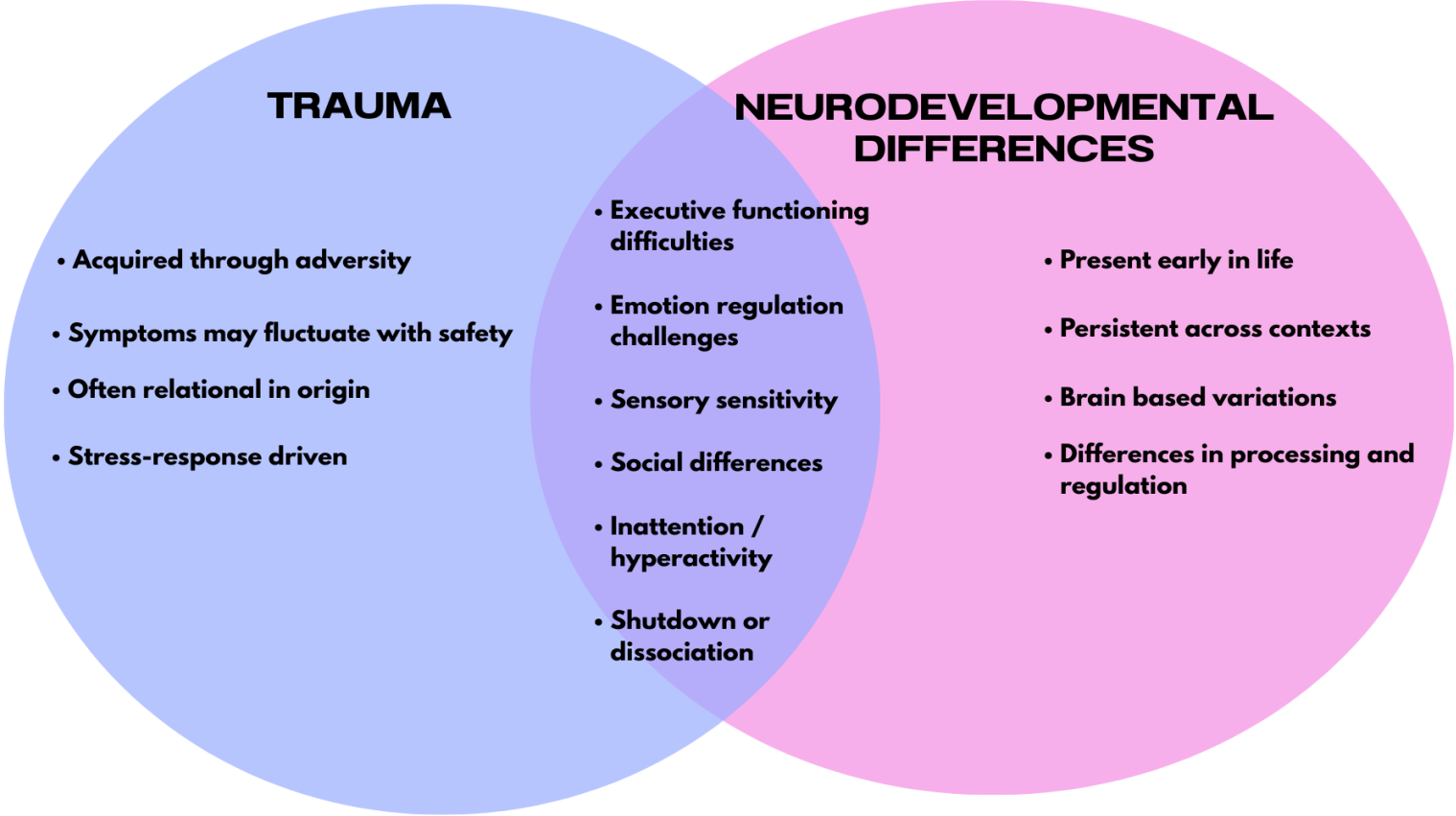
- Understood as brain-based developmental differences
- Recognized as dimensional and variable
- Emphasis on strengths, identity, environmental fit
- “Neurodiversity” became a more widely used term in 2010s

Neurodiversity

- Begin early in development (even if identified later)
- Reflect differences in brain development and functioning
- Influence attention, learning, communication, behavior
- Vary widely in presentation, strengths, and support needs

Neurodevelopmental differences are variations in how the brain processes the world.




TRAUMA
• Acquired through adversity
• Symptoms may fluctuate with safety
• Often relational in origin
• Stress-response driven
NEURODEVELOPMENTAL DIFFERENCES
• Present early in life
• Persistent across contexts
• Brain based variations
• Differences in processing and regulation
• Executive functioning difficulties
• Emotion regulation challenges
• Sensory sensitivity
• Social differences
• Inattention / hyperactivity
• Shutdown or dissociation

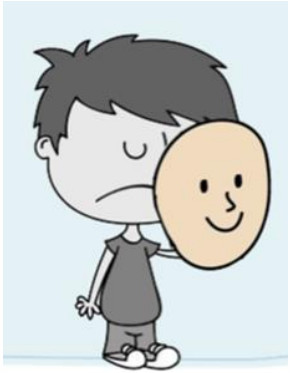
How Trauma and Neurodevelopment Interact

- Trauma can intensify existing differences
  - Heightened sensory sensitivity
  - Greater emotional reactivity
  - Chronic stress can exacerbate learning and processing difficulties
- Neurodiversity can increase vulnerability to adversity
  - Social communication difference may increase victimization
  - Difficulty interpreting social cues

Similar behaviors may reflect different underlying processes. Together, they amplify complexity.

Masking & Compensation: Adding Complexity

- Some youth compensate for neurodevelopmental differences by:
  - Suppressing their need to move or stimming behaviors
  - Forcing eye contact
  - Rehearsing or scripting social interactions
- Over time, masking may contribute to
  - Exhaustion
  - Irritability
  - Withdrawal or shutdown
  - Heightened anxiety
  - Burnout



Compensation can conceal needs until stress removes the mask.

Back to Marcus: What Would You Want to Know?

- Now that we understand the complexity of trauma and neurodiversity, what questions would you want answered before making a diagnosis?
- How can we tease apart trauma and neurodiversity?
- What would you want to explore first?
  - Developmental history
  - Trauma exposure and placement history
  - Sensory processing differences
  - Academic and learning profile
  - Social and family relationships

Assessment

Assessment Requires Multiple Sources

- Developmental history
  - Early milestones, medical history, sensory sensitivities
- Trauma and ACEs history
  - Exposure to instability, chronic stress, placement history, family history
- Social and Academic history
  - Learning profile, friendships, interests, early play
- Standardized measures
- Behavioral observations across settings
  - Child's regulation, communication, behavior, social interactions
- Collateral information from caregivers, teachers, other providers
- Thorough review of available records and historical information

No single source or test tells the whole story. Formulation emerges from patterns across sources.

Key Questions to Consider

- When did the behavior(s) first appear?
- Does the behavior(s) occur across contexts?
  - Home, school, with peers, structured vs. unstructured situations?
- What helps the child regulate?
  - Safety, predictability, sensory supports, another adult, repetitive movements
- How does the child respond to stress?
  - Fight, flight, shutdown
- What developmental differences were observed before trauma/stress?

Using Standardized Measures Thoughtfully

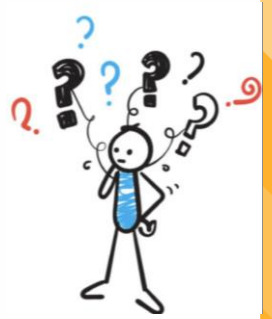
- Standardized tools can help clarify patterns when trauma and neurodevelopment overlap
- Trauma screening tools:
  - Child and Adolescent Trauma Screen (CATS-2)
  - UCLA PTSD Reaction Index
  - Trauma Symptom Checklist for Children (TSCC)
    - Versions available for younger children
- Neurodevelopmental Assessment:
  - Gold standard measures for Autism, ADHD, learning differences
    - Ex: Autism Diagnostic Observation Schedule (ADOS-2)
  - Symptom screening tools/checklists
  - Often more complex to assess for and requires multiple measures

Case Vignette: What Would You Explore First?

- Jasmine is an 11yo student referred for an evaluation
- Teacher's concerns: inattentive in class, incomplete or missing assignments, daydreaming a lot
- Mother's report: trouble falling asleep, irritable at home, avoids schoolwork, trouble keeping friends
- Brief Background:
  - History of domestic violence perpetrated by father
  - No prior developmental evaluations
  - Academically capable but inconsistent performance

Why Formulation Matters

- The goal is not choosing one explanation but understanding how multiple factors interact
- The same behavior may have different underlying causes
- Interventions that ignore trauma may increase distress
- Interventions that ignore neurodevelopment may increase frustration
- Effective support begins with understanding how development and life experiences (stressful or not) shape behavior together



Intervention

Supporting Neurodiverse and Traumatized Children

- Safety and predictability
  - Consistent routines and environments reduce stress responses
- Co-regulation before independence
  - Children regulate through relationships first
- Environmental supports
  - Sensory accommodations, structure, and clear expectations
- Strength-based approaches
  - Recognizing abilities alongside challenges
- Collaboration across systems
  - Caregivers, schools, social workers, clinicians working together

Frameworks for Supporting Neurodiverse and Traumatized Children

- Developmental and relational frameworks help understand how adversity and development shape a child's needs
- Widely used models
  - Attachment, Regulation, Competency (ARC)
  - Neurosequential Model of Therapeutics (NMT)
- Guide to intervention planning and may lead to selection of specific treatments

Approaches to Intervention

- Trauma-Focused Interventions
  - Evidence-based trauma therapies can be adapted for neurodiverse youth
  - Focus directly on trauma and associated symptoms
  - Examples: TF-CBT, Child-Parent Psychotherapy (CPP)
- Neurodevelopmental Interventions
  - Supports targeting specific developmental differences
    - Social skills, executive functioning, challenging behaviors
  - Examples: Parent Management Training (PMT), Social Skills Training (i.e., PEERS)

Return to Marcus

- Marcus has experienced chronic adversity
- He shows signs of neurodevelopmental differences
- Using a developmental framework, what might he need to support:
  - Regulation
  - Relationships
  - School success
  - Healing from trauma

Marcus's Needs

- Regulation
  - Predictable routines
  - Sensory supports
  - Co-regulation strategies with safe adults
- Relationships
  - Safe and consistent adults at home and school
  - Supports for social skill development to help make friends
  - Positive reinforcement for effort at school and positive behaviors
- Developmental Supports
  - School accommodations
  - Executive functioning coaching
- Processing Traumatic Experiences
  - Consider modified trauma treatment when he has sufficient safety and regulation to participate

Key Takeaways

- Trauma and neurodevelopmental differences overlap
- Diagnosis alone does not explain the full picture
- Support should address both development and adversity

When we shift from “What’s wrong with this child?” to “What does this need?” we change outcomes.

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