

Neuroception and the PDA Brain

by Casey Ehrlich, Ph.D.



“Neuroception” is a key concept for understanding your Pathologically Demand Avoidant (PDA) child through the nervous system lens, rather than the “behavioral” lens. Most approaches for supporting children in the educational, therapeutic, and parenting space are based on the assumption that a child or teen's behavior is motivated, intentional, and under their conscious control. However, a nervous system-based approach places “neuroception” at the center and recognizes that your child’s behavior is driven by the survival brain, not goal-oriented, and initiated on a subconscious level in a split second.

“Neuroception” is a term coined by Dr. Stephen Porges in 2004 and explains the “neurobiological process that results from the subconscious perception of situations, people, and interactions as safe, dangerous or life-threatening.” (19) For many neurodivergent children, the perception of safe vs. threatening situations is the root cause for challenging behavior, difficulty accessing basic needs (toileting, eating, sleeping, and hygiene), and trouble engaging in the world around them (“safe and social” state) (Fulton et al. 2021). As Porges explains, “By processing information from the environment through the senses, the nervous system continually evaluates risk...Because of our heritage as a species, neuroception takes place in the primitive parts of the brain, without our conscious awareness” (2021: 11)

PDA children have hypersensitive neuroception that is constantly detecting threat in situations that – from an outside perspective – look completely safe. As Dr. Mona Delahooke explains in her book *Beyond Behaviors*, “a child with a vulnerable nervous system or a trauma history can mistakenly detect threat in the environment even when the child is safe, triggering defensive reactions, hence faulty neuroception” (2019: 20).

In many ways, the PDA brain is similar to a brain that has experienced complex trauma, but the key difference with PDA is that the root cause of the perception of threat is related specifically to how the child’s brain perceives autonomy and equality. (Of course, trauma can also be layered on top of this brain-wiring). Any time the PDA brain perceives that a loss of autonomy (“freedom and choice”) or equality (in stature, authority, position, power) the brain tells the nervous system, “We are going to die!” and the behavior that results is the following: fight (“defiance”), flight (“avoidance”) or freeze (“shut down” or “ignoring”), or fawn.

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The perception of a loss of autonomy or equality is often driven by external cues – what is happening around the child such as a parents’ behavior or a teacher’s tone of voice – but also can be more general and in response to broader societal expectations like saying “please” and “thank you” or experienced internally, like the sudden pang of hunger that feels like a loss of control in the body. The detection of a person, situation, or environment as “safe” or “dangerous” occurs “even though we may not be aware of danger on a cognitive level, on a neurophysiological level” the child’s body “has already started a sequence of neural processes that would facilitate adaptive defense behaviors such as fight, flight, or freeze. (Porges 2021: 12)

Neuroception is what keeps us safe and the way your body responds when it detects danger. It is what keeps you alive! Imagine what your body would do if you were going for a walk alone at night and someone came up behind you and grabbed you suddenly? Your heart rate would increase, your pupils would dilate, adrenaline would start coursing through your veins. You might scream, fight to the person, or break free and run, or collapse on the ground. These are all survival responses and not a reflection of your character, personality, or temperament. This is what is happening in your child’s brain and body all the time, even if you can’t see it from the outside. It is an internal, physiological process in response to... Neuroception!

Citations:

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