

# Moving from mistrust to trust: social buffering, brain whispering and PACE

by Jonathan Baylin and Daniel Hughes

Fostering a child who has been hurt by other adults is not the same as parenting a birth child with whom you have a long period in which to develop a robustly mutually trusting relationship. Children often come 'into care' after experiencing being 'out of care' in the sense of not having had a safe-enough, predictably trustworthy relationship to develop a secure attachment, the kind of bond that creates a strong bias towards approaching rather than defending against closeness. A hurt child needs to have experiences with fosterers that can be the antidote to the kind of negative, untrustworthy experiences from the child's prior relationships.

A dramatic example from history is the wild boy from Aveyron. Around 1800, in the South of France, this child came out of the forest to live eventually in the home of Dr Itard. When the boy was first being evaluated to determine his potential for being 'civilised', he reacted extremely defensively when the examiners poked and prodded him. In stark contrast, when Dr Itard and his female assistant treated Viktor kindly and patiently, he began to show signs of trust and attachment, a potential only revealed in response to the consistently patient, compassionate approach of Dr Itard (Lane, 1976).

## Neuroception: the beginnings of trust and mistrust

What people didn't know in Viktor's time was that the process of determining whether or not to trust another person begins in our brains preconsciously, before we are aware that we are starting to approach or avoid that person. We don't take the time to think about whether this other person is safe and trustworthy; that would take too long. We have a brain circuit that is dedicated to assessing safety and trustworthiness in other people at warp speed, in the fast and furious range of 30 to 100 milliseconds, faster than the time required for me to consciously 'know' I am seeing you.

This ultra-fast process has been called neuroception to distinguish it from perception, the conscious awareness of sensing (Porges, 2011). Neuroception provides the very beginnings of trust and mistrust, the first take on whether it is safe or not to approach

another person or to let that person come close to us. This is the neuroscience that is so helpful to us as therapists and as caregivers for understanding how to help deeply mistrustful children learn to trust caring adults. Children who have experienced extreme stress have had to adapt their neuroceptive brain system for detecting threats even faster than children who received good care early in life.

A key brain region involved in this ultra-fast, preconscious sensing of safety and threat is the amygdala, especially the amygdala on the right side of the brain. The amygdala is one of the first places in the brain to receive input from our senses. Acting as a first filter for safety and threat, the amygdala essentially begins the process of trusting or mistrusting another person. Neuroception in humans can cause us to react to each other's nonverbal signals such as expressions on our faces or our tones of voice faster than we can understand each other's words.

A large body of research now shows that exposure to harsh conditions of care early in life affects the development of the amygdala, including its internal operations and its connections with other regions of the brain. The long term effect of this experience-dependent 'programming' is to make the child's amygdala more sensitive to social threats and more likely to activate self-defensive processes including fight, flight, and freeze reactions. When the circuitry between the amygdala and regions of the brain stem become strongly connected by exposure to chronic stress, this creates a brain circuit that can generate very rapid and unregulated defensive reactions before the child is even aware of reacting. Intriguingly and tellingly, when a child is raised in an untrustworthy environment, his amygdala gets bigger, stronger, and quicker to activate unmodulated defensive behaviours (fight, flight, freeze).

*“Children who have experienced extreme stress have had to adapt their neuroceptive brain system for detecting threats even faster than children who received good care early in life.”*

## **Social buffering and brain whispering**

Carers and other adults who learn how to help defensive children feel safe in their presence literally have a quieting, calming effect on the child's amygdala-driven defence system. Recent research shows that a trusted caregiver can decrease the reactivity in a child's amygdala just by being near the child. This line of research being conducted by

neuroscientists such as Nim Tottenham (2017) is focusing on the process of 'social buffering', revealing in brain imaging studies of children in the company of trusted mothers that the presence of the mother literally turns off the child's stress system. This research beautifully illustrates just what we are hoping to achieve in attachment-focused therapy with maltreated children: the development of a social buffering relationship between a carer and a mistrustful child.

The clues to how to promote this social buffering process come from brain research about neuroception and the power of nonverbal cues to affect the earliest stages of trust and mistrust in a child's brain. This relates to what we are calling 'brain whispering': the process of using nonverbal signals of safety from our facial expressions, tones of voice, and gestures to have a positive effect on the child's neuroceptive system. This nonverbal safety messaging appears to us to be the underlying process that promotes a shift from core mistrust towards trust, helping the carer become a social bufferer for the child rather than an unwitting source of stress.

### **Connection before correction**

Just knowing this information about neuroception, social buffering, and brain whispering can be tremendously helpful to all of us who are dedicated to helping children recover the ability to trust caring people. This knowledge is the science that tells us that we need to make a safe connection with a mistrusting child before we can engage the child in changing his defensive behaviour. This is why we use the mantra, 'connection before correction'. When a child reacts defensively in a fast and furious way, it isn't really productive to ask the child why he reacted so defensively for seemingly no reason. While there is a brain-based reason, the child has no way of knowing it. So the only honest answer to being questioned about these reactions is, "I don't know". Rather than asking such questions, it will be more helpful for the adults to understand that the child has a hyper-sensitive threat detection system. When carers and therapists and teachers embrace this knowledge, the child truly comes into care, into an enriched holding environment where adults know how to send messages of safety rather than unwittingly triggering defensive reactions.

Carers who can embrace this knowledge have a much better chance of helping a mistrustful child learn to feel safe enough over time to recover from what we call 'blocked trust'. Embracing the processes of brain whispering and social buffering can

help carers resist going into 'blocked care', our term to describe the unintended suppression of a caring state of mind towards a defensive, hard-to-reach child. We always want to help carers and kids avoid or recover from mutually defensive relationships where blocked trust and blocked care can promote endless cycles of mutual mistrust.

Once you accept that your power to be a messenger of safety has much more to do with your eyes and your tone of voice than the words you are saying, you are on the road to helping a mistrustful child in your care start to experience you as safe enough to engage with, to be near, and eventually to hug. Since we are fancy mammals, it is helpful to think about how fellow simpler mammals sense safety or threat in us. Consider how you would help a mistreated pet learn to trust you and you will start to grasp the power of nonverbal communication for helping a hurt, mistrustful child learn to feel safe in your presence.

Invariably in our work, we find that when we can help the adults to embrace this knowledge and shift from a language-based behaviour modification approach to a brain-whispering approach, we begin to see children becoming more trusting, less defensive. This lowering of defences unfolds in stages, and the child is likely to be confused at first by a carer's non-defensive response to their defensiveness. The child has to experience this surprisingly caring kind of response repeatedly until his brain starts to 'get it': you are not the same as people from my past who were untrustworthy. It takes time for the child's brain to make this shift from the fast and furious process of neuroception to the slow and curious process of getting to know the difference between the past and the present.

In science terms, the child has to get above that mindless way of reacting in order to 'contextualise' what they are sensing in the present, a process that requires the activation of another key part of their brains, their hippocampus, a brain region that can help to differentiate between now and then, here and there, you and other people. This part of the brain needs more time to do its job than the time it takes for the amygdala to set off the alarm system. Carers need to give the child's brain this precious chance to shift out of a defensive state long enough for him to begin to make 'better sense' of your relationship and your intentions towards him.

## **The carer's state of mind towards the child**

To be a messenger of safety, the adult needs to feel safe enough both being with and thinking about the child to access and sustain a caring state of mind. Defensive states of mind in relation to the child and to the process of parenting this child are not conducive to sending nonverbal safety messages into the child's 'neuroceptive window'. How can adults regulate their own internal states in order to spend more time feeling safe and being open to the child? This usually takes work on the carer's part because it can be quite challenging to keep from being chronically defensive and self-protective when a child or anyone is being defensive towards you. Knowing your child's history of abuse and neglect helps you, as his carer, to understand the source of his rigid, defensive and challenging behaviours. Such knowledge tends to create in the caregiver's mind a sense of compassion for the child which enables the adult to remain open and engaged and not become defensive.

A model that is helpful for understanding and practising this 'inner state' travel is the polyvagal model of the nervous system developed by Stephen Porges, a neuroscientist. Porges explains that we have three brain systems that determine our state of mind and body, two that are defensive and one that is rooted in a sense of safety when we can be open and engaged with others and our environment (Porges, 2011). This open and engaged system is activated by the brain whispering parent who uses their facial expressions and voice tones to convey safety.

## **Trust in a carer as a resource of knowledge and wisdom**

Beyond the basic level of trust that an adult is not going to harm a child, there are other layers or dimensions of trust. One of them is the trust in an adult to be a guide, a teacher, a mentor in life. When children have a secure attachment with an adult, they can use that adult as a resource, as someone who can provide advice, guidance, and value-based teaching. The concept of putting connection before correction is not meant to negate the value of adults providing guidance to their children. Indeed, the core reason for first helping a child to feel safe in your presence is to give the child access to your wisdom. Adults, parents, teachers, coaches, mentors, do know much more about life than young children and when children have a secure connection with an adult, they have the luxury to trust in that adult's teachings, to give the adult the power to be helpful.

## **Safe teaching and guidance**

Nonverbal communications are the context in which the child will experience safety. When the caregiver is engaged in teaching and guiding the child to adopt appropriate values and habits they necessarily need to also employ words. These words will be much more effective when they maintain the sense of safety that the child was able to attain nonverbally. We have found that words are much more powerful when they are embedded within the attitude of PACE.

## **PACE**

PACE is an acronym that stands for being Playful, Accepting, Curious, and Empathic (Hughes and Golding, 2012). We have found that when the caregiver (or therapist) is conveying the PACE attitude, the mind of the adult is able to hold the child's inner life (thoughts, feelings, wishes, motives) and convey this to the child while teaching the child about socially appropriate behaviours. When the child experiences the adult's PACEful attitude, the child then trusts that the adult accepts and understands the child's inner life while at the same time teaching specific behaviours. The child then begins to trust the motives of the adult. The behavioural directive is not given to upset the child or make him unhappy. The adult is not indifferent to the child's thoughts, feelings, or wishes. The adult is motivated by his belief that what is being taught is in the child's best interests.

Why would this be? Let's look at the four attributes of PACE for a moment. Playfulness conveys a sense of lightness, closeness and often affection that helps to convince the child that they are special to their caregiver. With playfulness, the child often feels closer to the adult. While love might in general create a sense of closeness it could also cause the child to become anxious, sensing that they don't deserve it. The child may mistrust love, believing that it will someday be withdrawn, causing more pain than if the child had never experienced it in the first place. Acceptance helps the child to feel that they are unconditionally wanted even when they misbehave. While their behaviour is being evaluated, their sense of self is accepted. The child is able to trust they are in your mind and heart 'for better or worse'. Curiosity enables you to pause when your child misbehaves and before judging the behaviour (a judgment that often is influenced by an assumed negative motive), you first wonder about the child's motives, reasons, and perceptions that led to the behaviour. Curiosity itself is not judgemental and it keeps

your mind open to the child's reasons, which themselves often reflect his sense of mistrust, fear or shame. Curiosity often keeps your compassion alive, creating understanding (and patience) around challenging behaviours. Finally, empathy communicates to your child that you are able to sense their distress, confusion, loneliness or shame and you are psychologically with them so that they do not have to experience those difficult emotional states alone. Feeling your empathic presence often enables them to stay regulated emotionally and able to reflect on their current situation. Such reflection often leads to their being more able to understand your motives and lead to greater trust in you.

“*We are the teaching species but before we can be the teachers, we need to help our children feel secure being close to us.*”

### **Epistemic trust: from social buffering to mentoring**

In short, when adults embrace the processes of social buffering and brain whispering, they are giving their relationship with the child a chance to be both a source of comfort and joy while also being one that provides guidance and mentoring. When relationships can provide this kind of multi-dimensional enrichment, carers and children are engaging in the most uniquely human levels of being such fancy mammals. We are the teaching species but before we can be the teachers, we need to help our children feel secure being close to us. This 'felt safety' is the gateway to the kind of open engagement that can include the processes of guiding and mentoring along with the more basic processes of social buffering and brain whispering.

This trust in an adult as a source of knowledge has been called 'epistemic trust'. Epistemic refers to sources of knowledge and epistemology is the study of where and how we gain knowledge, of the process of knowing. This conveys a depth of trust that is able to remain present regardless of conflicts, separations, or disagreements.

Two examples of epistemic trust are found in the movies: *The Tender Bar* (2021), a real-life scenario, in which a bartending uncle becomes a trusted source of knowledge and edgy wisdom about life and manhood for a boy whose father is just the opposite – a narcissistic alcoholic who is deeply untrustworthy; and, better still if you are Irish, *Belfast* (2021) shows how a child can experience epistemic trust by being bathed in an environment of loving care even while the surrounding world is full of danger and mayhem.

Children are born with a brain designed to trust their caregivers – a process called ‘attachment’ by researchers. This experience of trust gives them the readiness and ability to learn to relate to others, regulate their emotional states, and reflect on the inner lives of themselves and others. Developing their sense of trust after they have experienced significant mistrust during their infancy is both a significant challenge and the source of a great satisfaction for those who are now caring for them.

## About the authors

**Jonathan Baylin, Ph.D.** received his doctorate in clinical psychology from Peabody College of Vanderbilt University in 1981. For the past 20 years, while continuing his clinical practice, he has immersed himself in the study of neuroscience and in teaching mental health practitioners about the brain. He has given numerous workshops for mental health professionals on ‘Putting the Brain in Therapy’ and has delivered keynote addresses internationally and nationally at conferences on childhood trauma and attachment. Several years ago, Jon began a collaborative relationship with Dan Hughes. Their first book, *Brain-Based Parenting*, was released by Norton Press in 2012. In 2016, their second book, *The Neurobiology of Attachment-Focused Therapy*, was released by Norton. Both books are part of the Norton series on Interpersonal Neurobiology.

**Dan Hughes, Ph.D.** is a clinical psychologist who founded and developed Dyadic Developmental Psychotherapy (DDP), for the treatment of children who have experienced abuse and neglect and who demonstrate ongoing problems related to attachment and trauma. Dan has conducted seminars and workshops and has spoken at conferences throughout the US, Europe, Canada, and Australia for the past 20 years. He is the founder of DDPI, a training institute which is responsible for the certification of professionals in DPP. Information about DDPI can be found on [ddpnetwork.org](http://ddpnetwork.org)

Dan is the author of many books and articles, including *Building the Bonds of Attachment, 3rd Ed.* (2017), *Attachment-Focused Family Therapy Workbook* (2011) and two books along with Jon Baylin, as mentioned above. Along with Kim Golding and Julie Hudson, Dan has recently completed *Healing relational trauma with attachment-focused interventions: Dyadic Developmental Psychotherapy with children and families* (W.W. Norton, 2019). Most recently, he and Ben Gurney-Smith have published *The Little Book of Attachment* (W.W. Norton, 2020).



## References

Branagh, K. (2021) *Belfast* (film).

Clooney, G. (2021) *The Tender Bar* (film).

Fonagy, P. and Allison, E. (2014) 'The role of mentalizing and epistemic trust in the therapeutic relationship', *Psychotherapy*, 51 (3), pp 372–380.

Hughes, D. and Golding, K. (2012) *Creating Loving Attachments: Parenting with PACE to Nurture Confidence and Security in the Troubled Child*. London and Philadelphia: Jessica Kingsley Publishers.

Lane, H. (1976) *The Wild Boy of Aveyron*. Cambridge Massachusetts: Harvard University Press.

Porges, S. (2011) *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-regulation* (Norton Series on Interpersonal Neurobiology) New York: W.W. Norton & Company.

Tottenham, N. and Gabard-Durnam L.J. (2017) 'The developing amygdala: a student of the world and a teacher of the cortex', *Current Opinion in Psychology*, 17, pp 55–60.