



Rethinking Attachment Through the School System- Neurodiversity

Attachment theory proposes that early relationships with caregivers shape internal working models (IWMs) of self and others, influencing expectations of safety, connection, and responsiveness across the lifespan (John Bowlby, 1969). Within training contexts, there is often a strong emphasis on the role of parents as the primary source of attachment security or insecurity. While this is both valid and foundational, it risks becoming overly reductive if the wider relational environments surrounding the child are not equally considered.

This piece critically explores the role of the **school system as an attachment-relevant environment**, particularly for neurodivergent children. It argues that attachment is not solely formed within the home but is continually shaped within systems where children are required to exist, often without autonomy. In doing so, it considers how teacher–student relationships, implicit bias, and relational micro–interactions contribute to the development of internal working models.

Attachment Theory Beyond the Home

Bowlby (1969) conceptualised attachment as an innate system organised around proximity–seeking behaviour in response to threat, with caregivers functioning as a secure base. Ainsworth et al. (1978) expanded this understanding through the identification of attachment patterns based on caregiver responsiveness.

While these early relationships are central, attachment theory has since been extended beyond the parent–child dyad. Educational research positions teachers as **secondary attachment figures**, capable of providing emotional security and co-regulation within the classroom (Verschuere and Koomen, 2012). Positive teacher–student relationships are associated with improved emotional regulation, engagement, and social development, while conflictual relationships are linked to behavioural difficulties and withdrawal (Bergin and Bergin, 2009).

This suggests that the school environment is not merely educational, but **relationally formative**.

The School as a Relational System

For children, school is a compulsory environment in which they are required to navigate relationships, expectations, and behavioural norms for extended periods of time. Unlike adults, they do not have the autonomy to remove themselves from relational discomfort.

This introduces a significant power asymmetry. Teachers operate within a professional role they have chosen, while children are required to adapt to the environment presented to them.



Within this system, relational experiences are continuous and cumulative. From an attachment perspective, repeated experiences of attunement support regulation and exploration, whereas repeated misattunement activates the attachment system and may contribute to dysregulation (Bowlby, 1980).

Neurodivergence and the Development of Internal Working Models

For neurodivergent children, particularly those with ADHD, the classroom environment often involves increased relational friction. Research indicates that these children experience higher levels of conflict and reduced closeness within teacher–student relationships (Longobardi et al., 2024; MacLean et al., 2023).

From an attachment perspective, these repeated interactions contribute directly to the shaping of IWMs.

Attachment theory suggests that IWMs are constructed through relational experience, forming beliefs about:

- the self (*am I acceptable?*)
- the other (*are others safe and responsive?*)

For neurodivergent children, these models may develop within a context of **chronic social misattunement**.

Internal Working Models Under Observation

These IWMs are not formed solely through overt rejection or explicit feedback. They are often constructed through **subtle, repeated micro-interactions** that communicate how the child is experienced by others.

Within the classroom, this may include:

- a fleeting grimace in response to behaviour
- a shift in tone not afforded to peers
- visible frustration or impatience
- pauses that signal irritation rather than curiosity

Individually, these moments may appear insignificant. Collectively, they form a **patterned relational experience**.

For the neurodivergent child, particularly those sensitive to social cues, this can organise the self around the belief:

“Who I am, as I am, creates disruption.”



This belief is not taught directly. It is **inferred through repeated relational exposure**.

From Attunement to Hypervigilance

Where secure attachment fosters confidence in both self and other, chronic misattunement can lead to a different adaptation: **hyper-attunement to others at the expense of self**.

The child begins to scan:

- facial expressions for signs of irritation
- tone for shifts in patience
- body language for withdrawal or tension

This reflects not simply social awareness, but **relational vigilance**.

Ambady and Rosenthal (1992) describe how individuals form rapid judgements based on minimal cues, known as thin slice judgements. Within classroom environments, these unconscious evaluations can shape teacher responses before relational understanding has developed.

For the neurodivergent child, this creates a feedback loop:

perception → interaction → child response → confirmation

Over time, behaviour becomes organised not around internal experience, but around **external acceptability**.

The Cost of Adaptation

In response to these relational conditions, the child may begin to modify themselves in order to maintain connection and reduce perceived disruption.

This can include:

- suppressing natural impulses
- over-monitoring behaviour
- anticipating expectations
- minimising visibility

From the outside, this may appear as compliance or resilience. From an attachment perspective, it reflects a shift in the organising principle of the self:

the self is no longer the reference point;
the other is.



This contributes to the development of IWMs in which:

- *“Connection must be maintained”*
- *“I must change to maintain it”*

While adaptive in the short term, this pattern may result in **disconnection from internal experience** and a persistent orientation towards relational approval.

Thin Slice Judgements and Relational Bias (google it)

The concept of thin slice judgements introduces an important dimension to understanding teacher–student relationships. Rapid, automatic interpretations of behaviour can shape expectations and interactions in ways that are not consciously recognised.

For neurodivergent children, whose behaviours may fall outside normative expectations, this increases the likelihood of being positioned within fixed relational roles such as “difficult” or “disruptive”.

Without reflective awareness, these judgements become self-reinforcing, limiting the possibility for relational repair or re-evaluation.

This highlights the importance of reflective practice within educational settings, not only in relation to education, but in relation to the adult’s own internal responses and biases.

Trauma, Regulation, and the Limits of ‘Reflection’ in the classroom

From a trauma-informed perspective, behaviour cannot be understood outside of the nervous system states that underpin it. When a child experiences relational threat, whether through overt conflict or subtle misattunement, the autonomic nervous system responds through adaptive survival strategies commonly described as **fight, flight, freeze, or fawn** (Stephen Porges, 2011).

Within the school environment, however, children often have limited or no access to these regulatory pathways. Unlike adults, they cannot leave the environment (flight), challenge authority safely (fight), or fully withdraw without consequence (freeze). The very strategies designed to preserve psychological safety are therefore **constrained within a compulsory system**.

This creates a significant tension. The child’s nervous system may be activated in response to perceived threat, yet the environment requires continued participation and compliance.

In this context, behaviours frequently interpreted as defiance, disruption, or non-compliance may instead reflect **blocked or incomplete survival responses**.



The Paradox of 'Reflection Time'

A common response within schools to dysregulated behaviour is the use of "reflection time", detention, or escalating to removal from stimulating environments 'isolation'. These approaches are often framed as opportunities for the child to consider their actions and make different choices.

However, this assumes the presence of a level of cognitive and emotional regulation that may not be available in the moment.

Neuroscientific research highlights the central role of the **prefrontal cortex** in reflective functioning, impulse control, and decision-making (Daniel Siegel, 2012). Crucially, this area of the brain undergoes prolonged development and is not fully mature until early adulthood, typically around the mid-twenties (Casey, Jones and Hare, 2008).

For children, particularly those who are neurodivergent or in states of heightened arousal, access to prefrontal functioning may be significantly reduced. In such states, behaviour is driven more by subcortical systems associated with threat detection and survival (Porges, 2011).

Within this framework, the expectation that a dysregulated child can engage in meaningful reflection may be **developmentally and neurologically misaligned**.

Neurodiversity and the Role of Stimulation in Regulation

For many neurodivergent children, regulation is not achieved through stillness or reduced stimulation, but through **appropriate levels of sensory input and movement**.

Research into ADHD suggests that stimulation can support attention, regulation, and executive functioning, rather than hinder it (Barkley, 2015). Removing stimulation through isolation or enforced stillness may therefore have the opposite effect, increasing dysregulation rather than resolving it.

In this context, "reflection time" may inadvertently function as a form of **sensory deprivation**, placing the child in a state where regulation becomes more difficult, not less.

This raises an important consideration:

what is framed as a behavioural intervention may, in practice, be a **mismatch between the child's regulatory needs and the environment's expectations**.

Development, Capacity, and Responsibility



The concept of the **zone of proximal development**, introduced by Lev Vygotsky (1978), emphasises that learning occurs within the space between what a child can do independently and what they can achieve with support.

Applied to emotional regulation, this suggests that children require **co-regulation and relational support** in order to develop reflective capacity, rather than being expected to access it in isolation.

This becomes particularly relevant when considering the asymmetry within the classroom.

Children are expected to:

- regulate under pressure
- reflect on behaviour
- adapt to relational dynamics

Yet adults within the same environment are not always held to equivalent standards of reflection in relation to their own responses.

If reflective capacity is developmentally linked to prefrontal functioning, then it is worth noting that adults, whose prefrontal cortex is fully developed, are **better positioned neurologically to engage in reflection and self-regulation**.

This raises a critical question:

where does the responsibility for regulation sit within the relational system?

Relational Accountability in Attachment-Informed Practice

An attachment-informed approach would suggest that regulation develops through **safe, attuned relationships**, not through isolation or withdrawal of connection.

If children are expected to develop reflective capacity, then the relational environment must first provide the conditions in which such capacity can emerge. This includes:

- consistent emotional attunement
- repair following rupture
- awareness of adult responses within interaction

Without this, interventions such as “reflection time” risk becoming less about supporting development and more about **enforcing compliance in the absence of relational safety**.

Critical Reflection



During a recent training session, I became aware of a strong emotional response to the framing of attachment as primarily parent-driven. My reaction reflected not only personal experience but also clinical observation of how children, particularly those who are neurodivergent, are shaped within systems that extend beyond the home.

In reflecting on this, I recognise the value in considering the attachment histories of educators themselves. However, I also hold that **understanding does not remove responsibility**.

If a child repeatedly experiences relational discomfort, shaming, or misattunement within a compulsory environment, this must be considered within any attachment-based formulation.

To locate the source of insecurity solely within the parent risks overlooking the **relational impact of systems entrusted with the child's care**.

Long-Term Impact: Neurodivergence, Relational Experience, and Adult Outcomes

Long-term outcomes for neurodivergent individuals, particularly those with ADHD, are well documented within the literature. However, contemporary research suggests that these outcomes are not solely attributable to neurodevelopmental differences but are significantly shaped by **cumulative relational and environmental experiences across development**.

Longitudinal and umbrella review studies indicate that ADHD is associated with increased risk of a range of adverse adult outcomes, including anxiety, depression, substance misuse, and antisocial behaviour. These findings are supported by prospective research demonstrating that individuals with childhood ADHD are more likely to experience poorer mental health, substance use difficulties, and broader psychosocial challenges in adulthood.

Importantly, these outcomes are not uniform. Research suggests that variability in adult functioning is influenced by **contextual factors**, including the quality of early relationships, educational experiences, and access to support.

Self-Esteem, Social Functioning, and Internal Working Models

A large-scale review of long-term ADHD outcomes found that individuals with untreated ADHD experience significantly poorer outcomes in **self-esteem and social functioning** compared to non-ADHD controls. Difficulties were particularly evident in relationships, social skills, and engagement in everyday activities.

From an attachment perspective, these findings align with the development of internal working models (IWMs). Repeated relational experiences of misattunement, rejection, or misunderstanding may contribute to internalised beliefs such as:



- *“I am difficult or problematic”*
- *“I must adapt to be accepted”*

These beliefs can persist into adulthood, shaping identity, relational expectations, and self-worth.

Educational Pathways and Adult Functioning

Educational experiences represent a significant pathway through which long-term outcomes are shaped. Research indicates that individuals with ADHD are more likely to experience:

- lower educational attainment
- disengagement from school
- reduced occupational status in adulthood

Additionally, young adults with persistent ADHD are significantly more likely to be **not in education, employment, or training (NEET)** and to experience financial instability compared to peers without ADHD.

These findings suggest that school environments do not simply reflect existing difficulties, but may contribute to **cumulative disadvantage over time**, particularly when relational and regulatory needs are not met.

Relational Patterns and Hypervigilance in Adulthood

The relational adaptations developed in childhood frequently persist into adult life. Individuals who experienced chronic misattunement or relational tension may continue to demonstrate:

- heightened sensitivity to others' emotional states
- anticipatory behaviour to avoid conflict
- people-pleasing or masking
- difficulty identifying and expressing personal needs

These patterns can be understood as **adaptive responses to early relational environments**, rather than inherent deficits.

Research highlights that social and interpersonal difficulties remain a core feature of adult ADHD presentations, even when symptoms of hyperactivity or impulsivity reduce over time.

Mental Health and Cumulative Risk



Long-term studies consistently demonstrate increased rates of mental health difficulties among adults with a history of ADHD, including mood disorders and substance use disorders.

The concept of **cumulative risk** is particularly relevant. Early vulnerabilities, when combined with environments characterised by misunderstanding, punishment, or exclusion, may compound over time, increasing the likelihood of adverse outcomes.

This reinforces the importance of considering not only the presence of neurodivergence, but the **quality of the environments in which it is expressed and responded to**.

Reframing Outcome: Adaptation, Not Deficit

While the literature highlights increased risk across multiple domains, it is equally important to recognise that these outcomes are not inevitable. Evidence indicates that appropriate support, intervention, and understanding can significantly improve long-term trajectories, particularly in relation to self-esteem and social functioning.

From an attachment-informed perspective, many of the relational patterns observed in adulthood can be understood not as dysfunction, but as **adaptive strategies developed within specific relational contexts**.

This reframing shifts the focus from:

“What is wrong with the individual?”

to:

“What has the individual adapted to?”

Conclusion of Section

The long-term impact of neurodivergence cannot be understood in isolation from relational and systemic context. Educational environments, particularly when characterised by chronic misattunement or punitive approaches, may contribute to the shaping of internal working models that persist into adulthood.

As such, adult outcomes reflect not only neurodevelopmental differences, but the **interaction between the individual and the environments in which they developed**.

Conclusion

Attachment is not a static construct formed solely in early childhood. It is a dynamic, relational process that continues to be shaped across contexts.



For neurodivergent children, the school environment represents a significant relational system in which internal working models are reinforced, challenged, or reshaped. Subtle cues, rapid judgements, and repeated interactions all contribute to how the child comes to understand themselves in relation to others.

An attachment-informed approach to working with children must therefore extend beyond the home and into the systems they inhabit. Without this broader lens, there is a risk that the burden of adaptation remains with the child, rather than being shared across the relational environment.

Bibliography

- Ambady, N. and Rosenthal, R. (1992) 'Thin slices of expressive behaviour as predictors of interpersonal consequences', *Psychological Bulletin*, 111(2), pp. 256–274.
- Ainsworth, M.D.S. et al. (1978) *Patterns of Attachment*. Hillsdale, NJ: Erlbaum.
- Bergin, C. and Bergin, D. (2009) 'Attachment in the classroom', *Educational Psychology Review*, 21(2), pp. 141–170.
- Bowlby, J. (1969) *Attachment and Loss: Volume 1*. London: Hogarth Press.
- Bowlby, J. (1980) *Attachment and Loss: Volume 3*. London: Hogarth Press.
- Longobardi, C. et al. (2024) 'Teacher–student relationships and developmental outcomes', *Frontiers in Psychology*.
- MacLean, J. et al. (2023) 'The student–teacher relationship and ADHD', *Journal of Attention Disorders*.
- Verschueren, K. and Koomen, H. (2012) 'Teacher–child relationships from an attachment perspective', *Attachment & Human Development*.
- Porges, S.W. (2011) *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. New York: Norton.
- Perry, B.D. and Szalavitz, M. (2017) *The Boy Who Was Raised as a Dog (3rd edn)*. New York: Basic Books.
- French, B. et al. (2024) 'The impacts associated with having ADHD: an umbrella review', *Journal of Attention Disorders*.
- Owens, E.B. et al. (2015) 'Persistence of ADHD into adulthood', cited in CHADD (2023).
- Harpin, V. et al. (2013) 'Long-term outcomes of ADHD', *Journal of Attention Disorders*.
- www.bloom-room.co.uk



Agnew-Blais, J. et al. (2018) 'Young adult mental health and functional outcomes', *Journal of Child Psychology and Psychiatry*.

Cherkasova, M.V. et al. (2022) 'Adult outcomes of ADHD', *Journal of the American Academy of Child & Adolescent Psychiatry*.

French, B. et al. (2024) 'The impacts associated with having ADHD: an umbrella review', *Journal of Attention Disorders*.

Owens, E.B. et al. (2015) 'Persistence of ADHD into adulthood', cited in CHADD (2023).

Harpin, V. et al. (2013) 'Long-term outcomes of ADHD', *Journal of Attention Disorders*.

Agnew-Blais, J. et al. (2018) 'Young adult mental health and functional outcomes', *Journal of Child Psychology and Psychiatry*.

Cherkasova, M.V. et al. (2022) 'Adult outcomes of ADHD', *Journal of the American Academy of Child & Adolescent Psychiatry*.