NEUROLEARN

Neurolearn Resource: Understanding Neurodivergent Social Interaction Patterns

1. Reconceptualising the Social Landscape

In the field of neurodiversity, social interaction has traditionally been viewed through a prism of deficit, where any departure from neurotypical norms is labelled as a social impairment. For the Neurocoach, it is essential to move towards a more nuanced understanding of socio-cognitive diversity. This academic shift acknowledges that neurodivergent individuals, encompassing those with Autism, ADHD, Dyslexia, and other neurological differences, process, interpret, and broadcast social information in a way that is structurally different, yet internally consistent and valid.

Academic rigour demands that we move beyond the superficial social skills model and instead analyse the underlying mechanisms of communication. This involves recognising that social success is an environmental and relational outcome, rather than an innate trait belonging to an individual.

2. The Double Empathy Problem: A Relational Mismatch

A significant barrier to understanding neurodivergent interaction is the Double Empathy Problem, a concept that challenges the notion that social difficulties reside solely within the neurodivergent person. As research by Milton and others suggests, empathy is a bi-directional process. When two people with different internal experiences of the world interact, they will often struggle to empathise with one another.

Example: A neurotypical teacher may interpret a student's lack of eye contact as defiance or disinterest. Conversely, the autistic student may find eye contact so sensory-intense that it prevents them from hearing the teacher's words. Both are experiencing a failure of empathy, where the teacher fails to understand the student's sensory reality and the student fails to meet the teacher's cultural expectation.

3. Distinct Social Modalities and Examples

To facilitate effective coaching or educational support, one must identify the specific patterns of neurodivergent interaction. These are often characterised by an emphasis on truth, transparency, and deep cognitive engagement.

3.1 Info dumping as an Act of Generosity

Info dumping, the practice of speaking at length and in great detail about a specific interest, is often pathologised as monologuing. However, in a neuro-affirming context, this is recognised as a primary social love language. It is an invitation into the individual's mental space.

- **Practical Example:** In a university seminar, a neurodivergent student might respond to a question about historical architecture by providing a ten-minute detailed analysis of Victorian masonry. While a lecturer might see this as going off-task, a Neurocoach recognises this as the student's most authentic way of connecting with the subject and their peers.

3.2 Parallel Engagement and Body Doubling

For many neurodivergent people, the most comfortable form of socialisation is being alone together. This is known as parallel play in children or body doubling in adults.

- **Practical Example:** Two neurodivergent colleagues may sit in a staff room for an hour, both wearing noise-cancelling headphones and working on separate projects. They may not speak a word, yet they leave the room feeling socially recharged and connected. The shared presence provides the social connection without the exhaustion of performative conversation.

3.3 Direct Communication and the Absence of Hidden Curriculum

Neurodivergent individuals often operate without the hidden curriculum, which refers to the unwritten social rules that neurotypical people seem to pick up by osmosis. This leads to a communication style that is literal, honest, and free from subtext.

- **Practical Example:** If a manager asks, "Do you think you could have this report finished by five?", a neurodivergent employee might simply say, "No," because they have calculated the workload. A neurotypical manager might find this rude, whereas the employee is simply providing an accurate, helpful fact to allow for better planning.

4. Supplementary Case Study: The Post-Graduate Seminar

Participant: Leo, a post-graduate student with a diagnosis of Autism and ADHD.

Setting: A high-pressure research seminar involving peer feedback.

Observation:

During the seminar, Leo frequently looked at the ceiling while peers were speaking. When it was his turn to provide feedback, he did not use "softening" language, such as "I feel" or "perhaps," and instead pointed out logical inconsistencies in a peer's data directly. The peer felt attacked, and the seminar lead noted that Leo was being "confrontational."

Neurocoach Analysis and Intervention:

Following the principles of Lane Anthony, the Neurocoach identified that Leo's upward gaze was a regulatory strategy to reduce visual input, allowing him to focus entirely on the auditory data. His direct feedback was not an act of aggression but an expression of academic integrity and a desire for communal accuracy.

Action Plan:

1. **Environmental Adaptation:** The seminar lead was advised to allow Leo to use a fidget tool or look away, acknowledging this as a sign of deep listening.
2. **Translation:** The Neurocoach facilitated a session where Leo explained his communication style to his peers, reframing his directness as a commitment to the quality of their shared research.
3. **Validation:** Using the Dynamic Development Plan, Leo's ability to spot data inconsistencies was highlighted as a core strength, rather than a social deficit.

5. Supplementary Case Study: Primary Education – Year 4

Student: Maya, aged nine, with a profile of Autism and Dyslexia.

Setting: A collaborative group task within a Year 4 Science lesson.

Observation of Interaction Patterns

During a group experiment involving electrical circuits, Maya appeared to disengage from her peers. While her classmates discussed the task, Maya sat at the edge of the group, focused on spinning a copper wire between her fingers. When a peer asked her to help connect the battery, Maya did not respond immediately, leading the peer to complain to the teacher that Maya was being "lazy" and "not helping". Later, when the circuit failed to work, Maya reached over and adjusted a single component without speaking, successfully completing the circuit, yet she remained silent when her peers celebrated.

Neurocoach Analysis using the Double Empathy Problem

A neuro-affirming analysis reveals that Maya was not disengaged. Her use of the copper wire was a form of tactile stimming, which, as Lane Anthony (2024) suggests, serves to regulate her nervous system in a noisy, high-arousal classroom environment. Her delayed response to her peer was a processing requirement rather than a lack of willingness. Maya's silent intervention to fix the circuit demonstrated a high level of technical empathy and problem solving, although she did not perform the expected social signals of celebration.

Strategic Interventions and DDP Application

- **Validation of Communication Style:** The teacher was encouraged to recognise Maya's "silent contribution" as a valid form of group participation. In the Dynamic Development Plan (DDP), this is framed as a shift from requiring verbal performance to valuing functional outcomes.
- **Environmental Adaptation:** To support Maya's sensory needs, the group was moved to a quieter corner of the room. By reducing the auditory "clutter," Maya's social bandwidth increased, allowing her to offer short, direct verbal instructions to her peers.
- **Reframing for Peers:** The Neurocoach worked with the class to explain that some people think better when they are moving their hands or looking away. This reduced the "empathy gap" between Maya and her classmates, fostering a culture of mutual respect rather than frustration.
- **Direct Instruction:** Instead of vague prompts like "be a team player," the teacher provided Maya with a clear, written list of her specific responsibilities within the experiment, which utilised her strengths in logical sequencing and reduced the anxiety associated with the hidden curriculum of group work.

Academic Reflection

This case study illustrates that for primary-aged children, social interaction is often inextricably linked to sensory regulation. As Lane Anthony posits, when the sensory environment is hostile, social communication becomes a secondary priority to survival. By applying the DDP, the school moved away from "social skills drills" and instead created a sensory-safe environment where Maya's natural technical strengths could be recognised as a form of social contribution.

References

- **Anthony, L. (2024).** *Sensory Modulation and the Social Workspace*. London: Academic Press.
- **Milton, D. E. (2012).** *On the Ontological Status of Autism: The 'Double Empathy' Problem*. Disability & Society, 27(6).
- **Paulo, N. (2025).** *The Dynamic Development Plan: A Strengths-based Blueprint for Pupil Support in UK Schools*.