

## **“The Social Dimension of Neurodevelopmental Disorders: A ‘Neurosocial’ Overview”**

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Skill is a behavior that is learned from the environment while ability is a behavior that is biologically encoded in the brain. The skills of social/emotional competence are: awareness of own emotional state, awareness of other’s emotional state, emotional use of words, ability to cope with emotional distress and ability to attend to the reaction of others.

ADHD is not caused by child-rearing practices or environmental experiences. Brain damage is the only environmental impact to cause ADHD; 85% of ADHD is genetic. Almost all Learning Disorders (LD) and Autism Spectrum Disorders (ASD) are neurobiological and genetic in origin.

Neurosocial Disorder = Neurosocial Learning Disorder - 34-59% of LD children have social interaction problems. The core deficit of ASD children is social interaction. Over half of all ADHD children will suffer social rejection because of social interaction problems. Most children with ADHD have the social skills but cannot pick up on the social cues to know when to use them. Many children with Non-Verbal Learning Disorders (NVLD) have trouble reading the emotions of others and have social difficulties. Social behavior is at least in part a brain function just like memory or language. 70% of ADHD children have a co-morbid diagnosis; 35% have more than two.

Social interaction can be broken into three parts that are intertwined. They are:

- Social Perception - The ability to perceive social interactions.
- Social Interpretation - How we understand social interaction after it is perceived.
- Social Skills - Emotional, cognitive, verbal and nonverbal ways we socially behave.

Emotional intelligence is deeply wired into the brain. The capacity for compassion differentiates “humans” from other animals. Three things make humans behaviorally different. They are:

- Ability to delay our response to the environment.
- Ability to plan and carry out plans to get results.
- Ability to sacrifice self for others.

Alexithymia, from the perspective of development, implies a glitch in the process that permits the expression of feelings in words. Those with alexithymia:

- Tend not to have fantasies, no feelings, and have sharply limited emotional vocabularies.
- Have colorless dreams.
- Cannot tell bodily sensations from emotions and are baffled by them.
- Have great difficulty making decisions because they lack “gut feelings.”

Frequently, 25% of children with ADHD, Aspergers or ASD have a co-morbid diagnosis with Alexithymia. Mirror neurons also don’t work so they can’t access memory or “empathize” with what another person is experiencing. Non-verbal language must be learned by observation and imitation. 55% of ADHD kids are also co-morbid with developmental coordination disorder. For many with LD/ADHD, the extra effort of trying to cope with continuous social and academic demands every day is exhausting.

Those with neurodevelopmental disorders must learn to use social skills consciously. Their social skills will never be as automatic or efficient as those of neurotypical individuals- creating frustration. When additional stimuli is added it requires a cognitive shift and learned skills tend to break down; it splits the attention and focus away from the task and increases their anxiety of making mistakes/ failures in both tasks and social interactions.

Most peoples’ social interactions are automatic and they frequently do not understand the struggles of those who must socialize on a cognitive level. This can become an additional source of frustration and anxiety for those with neurodevelopmental/neurosocial disorders.