



AUTISM in CONTEXT

from neurodiversity to neuroharmony

Autism and the Predictive Mind, Absolute Thinking in a Relative World: Practical Implications for Treatment and Intervention

Peter Vermeulen, PhD

Autism in Context

Course outline:

Many ideas about the autistic brain are based on conceptions about the human brain that are outdated. The computer as a metaphor for the brain, with its input, processing and output, has been very useful in the past, but seems to be incorrect in the light of recent discoveries in brain science. The brain is not a computer: the brain is guessing more than it is computing. In order to make these smart guesses, the brain has developed a unique characteristic: contextual sensitivity. **The brain uses context to predict the world.** This is known as the predictive coding account of human information processing.

But what if your brain is not so talented in using context? What if your brain does think in absolutes? This is the case in autism. Difficulty seeing and understanding context can explain why people with an autism have difficulties with communication, social interaction, sensory stimuli, and flexible thinking and behaviour in daily living.

We will explain the concept of **absolute thinking (reduced contextual sensitivity in predicting the world)**. The predictive coding perspective offers some thought provoking new ideas, such as why traditional emotion recognition programs and traditional social skills training are not a good idea for children with autism and why autism friendliness is not the same as eliminating or reducing stimuli. But, above all: that we should address **well-being** in the first place, because autistic brains are characterized by **extreme uncertainty** about an unpredictable world, being **hypervigilant** all the time.

Content of the course:

- The iceberg of autism: looking beyond the behaviour
- Copernican revolution in brain science: the predictive coding framework
- Predictive coding and context
- Context blindness 2.0: autism as a reduced contextual sensitivity in predicting the world and coping with prediction errors: absolute thinking in a relative world

- Absolute thinking and sensory issues in autism. Pushing the context button creates an autism friendly sensory world. A relaxed brain will suffer less from sensory overload.
- Absolute thinking and communication issues in autism. Pushing the context button makes your communication autism friendly.
- Absolute thinking and social difficulties in autism. Pushing the context button helps autistic people to navigate the social world.

Learning objectives:

- Knowing why the traditional model of understanding the brain (stimulus-response model) is not correct.
- Understanding what predictive processing is and what the role is of context in predicting the world.
- Understanding the effect of a reduced contextual sensitivity in predicting the world on social interaction, communication; theory of (own) mind and sensory processing.
- Understanding the link between stress, uncertainty and sensory overload.
- Knowing what 'pushing the context button' means and how it is pivotal for communicating with autistic people and for teaching social cognitive and social behavioural skills.
- Reflecting on the extent to which your own practice (teaching, therapy,) supports your clients/students in feeling safe and secure in a world that is highly unpredictable and uncertain for them.