

Communication: A Non-Speaker's Perspective

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Communication of the Autistic Community with CCN

Minimally/non-speaking people communicate in different ways other than speech

Complex communication needs (CCN)

- Refers to challenges in language and speech
- Requires additional support
- re augmentative and alternative communication (AAC)
- AAC methods include icons, keyboards, assistive technology



Communicative Competence

Communication is

- A two-way street (Milton, 2012)
- Grounded in social expectations and beliefs
- Social expectations are used to infer communicative competence



Milton, D, (2012). On the ontological status of autism: The “double empathy problem”. *Disability and Society*, 27(3), 883-887

Communication challenges of nonspeaking community

Sensory and processing differences

- Result in unconventional behaviour
- Autistic behaviour interpreted via neurotypical lens seen as deficits, but may serve regulatory and communicative functions

Misreading of autistic behaviour as disinterest results in

- Negative self-fulfilling prophecy
- Presumptions of incompetence



The Biopsychosocial Model of Communication

Three components:

- Neurobiological Makeup
- Psychological/Cognitive Factors
- Sociocultural Context

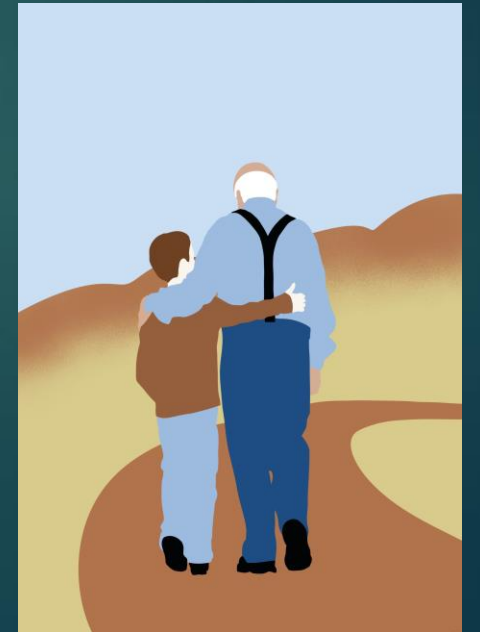
Neurobiological
(Body: autonomic nervous system)



Psychological
(Thinking/feeling)



Social Cultural
(People)



Biopsychosocial Model of Communication

CCN neurobiological differences result in

- challenges in daily living and
- unmet needs for social connection

All people are hard-wired for social connection

Social interaction requires a means to communicate

Communication challenges linked to autistic neurobiological differences



Neurobiological Responses

- We are geared towards survival
- In constant scanning of environment for danger/threats

Sympathetic nervous system activated by cues of danger/threat

- Triggers fight/flight responses
- Requiring additional resources
- Diverting needed resources from metabolic and other functions

The Autonomic Nervous System

Sympathetic NS

Norepinephrine and Epinephrine

Fight, Flight or Freeze

Increases

- Heart rate
- Respiratory rate
- Blood pressure
- Pupil dilation

Decreases

- Digestion
- Urine production

Parasympathetic NS

Acetylcholine

Rest and Digest

Increases

- Digestion

Decreases

- Heart rate
- Respiratory rate
- Blood pressure
- Pupil dilation



Neurobiological responses

Parasympathetic nervous system restored with cues of safety

- State of growth and repair (rest and digest)
- Feelings of safety turn on the social engagement system
- Social engagement system is the basis for communication

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Polyvagal Theory

(Porges, 2022)

Social engagement system is turned on by regulatory pathways via co-regulation

- starts from birth between mother/caregiver and infant
- Secure attachment turns off defensive system
- Open to social interaction and communication

Porges, S. (2022). Polyvagal theory: A science of safety. *Frontiers in Integrative Neuroscience*, Vol.16, p.871227-87122



Co Regulation



Self-Regulation



Communication and the Social Engagement System

Social connection is a core human need that is biologically hardwired

Social connectedness is based on feeling safe with others.

Safety turns on the Social Engagement System

- Overrides defensive reactions
- Promotes co-regulation with trusted people.

The social engagement system is the neurological basis for communication, cooperation, and connectedness



Autistic Neurobiology

Autistic neurobiological differences

Hypersensitivity:

- Environmental input experienced as too intense
seen as threats/danger
- Activate defensive responses
- Constant state of anxiety/stress
- Social engagement system is turned off
- Diminished capability for interaction

Defensive States
Hypervigilance
Arousal

Constant Anxiety
Dysregulated
High Alert State

Social demands associated with high anxiety

- Adaptation by turning on defensive mechanisms
- activation of sympathetic NS responses- fight/flight/freeze/shut down
- behavioural manifestation: meltdown, shutdown, burnout, inertia, PTSD
- restored states of equilibrium vital for communication

Short-term reaction

Medium term responses

Long term conditions

Habituated State

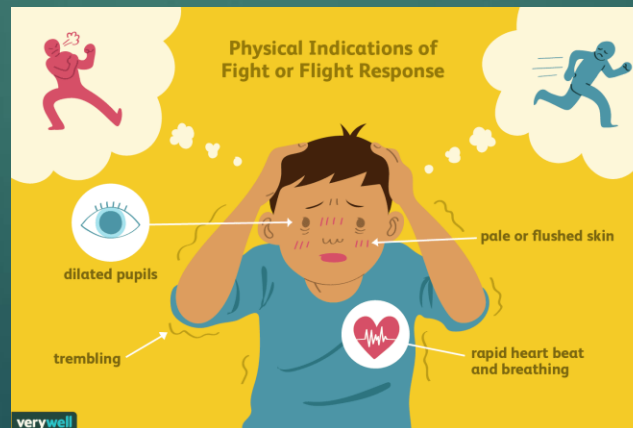
Brain stem neuroception	Mid brain interoception	Mid brain and cortical feelings and thinking	Habituated CNS alignment
Startle reflex	Overwhelm	Dysregulation Dissociation	Hyperarousal Hypervigilance
Fight Flight Freeze	Meltdown Shutdown	Burnout Inertia	PTSD Complex PTSD

Hypersensitivity Challenges in CCN

My case:

Hypersensitivity issues in busy settings

- Environmental stimuli too intense re inability to modulate sensory input
- Sensory overload triggering sensory defensiveness
- Need for self-regulation in restoring equilibrium to be socially involved



Co-regulation and inclusion: My experience

Overwhelmed in unfamiliar social event



Personalised environmental support



Communication Autistic Neurobiological Differences

Sensory issues activate autonomic reactions of defensiveness

Hypervigilance
High Arousal

Dysregulated
Fight/Flight

Freeze
Shut Down

Autistic Neurobiology in sensory defensiveness can be addressed by

Social support and understanding

Environmental adjustment

Successful communication associated with

- understanding the neurobiological basis of autistic self-regulatory behaviour
- presuming competence
- relationships of trust

Communication in CCN: Psychological elements

Cognitive styles re information processing

Ability to attend and focus

Communication success entails

- acknowledgment of differences in perspectives
- empathy and understanding



Diverse Learning Styles

Visual Learners

Auditory Learners

Linguistic Learners

Tactile/Kinesthetic Learners

Multimodal Learners



Matching processing style to educational programs

My experience

Visual thinker with processing via visual spatial skills

Individualised programs promoted my learning capacity in

- matching processing style
- strength and interest based

Enabled mastery of language

- Receptive in pairing words to images
- Expressive in translating images to words
- Cognitive resources in meaning-making



Psychological Components Cognitive Foundation

Attention:

Selectively directing mental processes to daily activities and tasks

Focus:

Concentration on specific environmental aspects



Monotropism

Intense focus on small areas

Ignoring anything outside attentional tunnel

Challenges in multitasking

Social situations with various demands are stressful for monotropic people



Murray, D.; Lawson, W. & Lesser, M. (2005). Attention, monotropism and the diagnostic criteria for autism.

Autism, 9(2), 139-156.

Monotropism

Single channel processing

- Attending to input from one sensory modality at any one time
- Busy situations depleting processing resources
- Limited the ability to call on all resources in meeting demands

Monotropism - Strengths:

- Proficiency in areas of interests
- May lead to flow states



Communication: Social Contexts

Understanding the rules of engagement

Purpose of communication

Interactional competence

- Self- and other-Awareness
- Social roles
- Perspective-taking
- Reciprocity



Communicative Competence

Communication success:

- Process of mutual construction
- Linked to perceived competence
- Based on relationships of mutual trust



CCN Challenges in Social Settings

Sensory and information processing differences

Requiring increased resources to navigate higher cognitive demands

and

Reducing the ability in meeting social expectations in:

- perspectives taking
- showing interest
- responding appropriately
- using AAC in communication

Social situations are stressful for people with CCN



Social Challenges and Communication

Autistic challenges in sensory and information processing impact on

- Meeting demands in social settings
- Necessitates self-regulation

Autistic self-regulatory activities not well understood

Autistics routinely experience social judgment



My experiences at high school

- Busy and unpredictable
- Failed to meet social expectations
- Initial discriminatory practices: prohibited from using FC
- Negotiated reasonable adjustments by disability advocates
- Resumption of FC use (Year 9)



My experience of inclusive environment

Year 11 Legal Studies

Pro-inclusion teacher and support staff enabled

- taking part in all class programs
 - with extra time for typing answers to questions
- participation in excursions
 - County Court
 - Barwon Prison

Assessment of all work (e.g. from home)

Enabling my completion of high school through feeling included and accepted



CCN Communication

Successful communication linked to -

- Understanding and accepting different interactional styles

(double empathy model (Milton, 2012))

- Presuming communicative competence



Optimal Communication Environments for CCN

Strategies for feeling safe

1. Structure and predictability
2. Acceptance of their differences
3. Encourage exploration in predictable ways



Structure and Predictability for Communication

Prioritise feelings of safety

Positive feedback on communication

Behavioural indicators of sensory overload and dysregulation

- Covering face
- Withdrawal
- Non-responsiveness

Behaviours of concern may be linked to sensory issues

Restore self-regulatory states with

- Making fewer demands
- Provide safe spaces for self-regulation
- Use of communication cards



Strategies for Communication: Structure and Predictability

Visual organisers and Graphic displays

- in understanding, introducing and facilitating changes in routines
- Addressing information processing differences
- Hands on activities
- Use visuals and colour coding in worksheets and resources
- Use visual timetables and schedules
- Discussion and displays of rules for interaction
- Social Stories for modelling appropriate behaviour



Acceptance of Diverse Communication

- Acknowledge the message- the “what” – of communication acts
- Acknowledge the means- the “how” - in the preferred AAC method
- Accept differences in cognitive processing needs, e.g. monotropism
- Accept differences in sensory needs, e.g. self-regulation requirement
- Presume competence



Encourage Exploration

Design work based on interest and strength

Encourage communication by open-ended questions on activities

Extend communicative repertoire

Activities in exploration, problem solving and self-expression

Foster communicative opportunities



Guidelines for communicative competence

Presume competence

Promote feelings of safety

Encourage understanding of AAC

Give clear achievable instructions

When students are unresponsive

- Make allowance for uptake time
- Observe behaviour
- Give encouragement
- Help them to stay in control

Design a brag book of successes

Congratulate yourself!

Thank your students!



Additional Resources

- ▶ Tim's website: <https://www.timhchan.com/>
- ▶ “Back From the Brink” – Tim Chan and Sarah Chan
- ▶ Autism Actually website: <https://www.autismactually.com.au>
- ▶ Reframing Autism: <https://reframingautism.org.au/>
- ▶ The I CAN Network: <https://icannetwork.online/>
- ▶ Communication First: <https://communicationfirst.org/>
- ▶ Amy Sequenzia. <https://ollibean.com/author/amy-sequenzia/>
- ▶ Ido Kedar: <https://www.facebook.com/IdoInAutismland/>
- ▶ Jordyn Zimmerman <https://www.jordynzimmerman.com>

Polyvagal Theory <https://positivepsychology.com/polyvagal-theory/>

Monotropism Murray, D., Lesser, M. & Lawson, W. (2005). Attention, monotropism and the diagnostic criteria for autism. *Autism*, vol. 9 (2), p. 139-156.

Questions

1. Could you share any examples of when you have been given opportunities to have influence in your educational journey. What did good teachers do to enable this?
2. What advice would you have for teachers working with young autistic children? What skills should they prioritise helping them to learn?
3. What could teachers do to support students with complex communication needs who do not yet have established means of communicating?
4. What advice would you have for teachers supporting students who are using AAC to communicate?
5. What should teachers focus on to support students with complex communication needs with their emotional wellbeing?