



University  
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# The interplay of neurodivergence and trauma

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## Overview

### Setting the Scene:

- **Neurodivergence –ESSENCE framework**
- **Attachment and neurodivergence**
- **Neurodivergence and trauma**
- **Trauma and Stressor Disorders of childhood (RAD and DSED)**
- **Differentiation- autism and RAD/DSED**

# Neurodivergence: ESSENCE (Gillberg, 2010)

Early Symptomatic Syndromes Eliciting Neurodevelopmental Clinical Examination

- Significant challenges/developmental delays in any of the following in early years are suggestive of neurodivergence:

General development

Communication

Social problems

Motor-coordination

Attention

Activity

Behavioural or mood

Sleep



Autism

ADHD

Intellectual Disability

Tics/Tourettes

Developmental Language Disorder

Developmental Coordination Disorder

If there has been maltreatment: DSED or RAD

associated: sensory processing, mental health, sleep and specific learning skills

# Neurodivergence in infancy (**ESSEN** neurodevelopmental **C**linical **E**xamination)

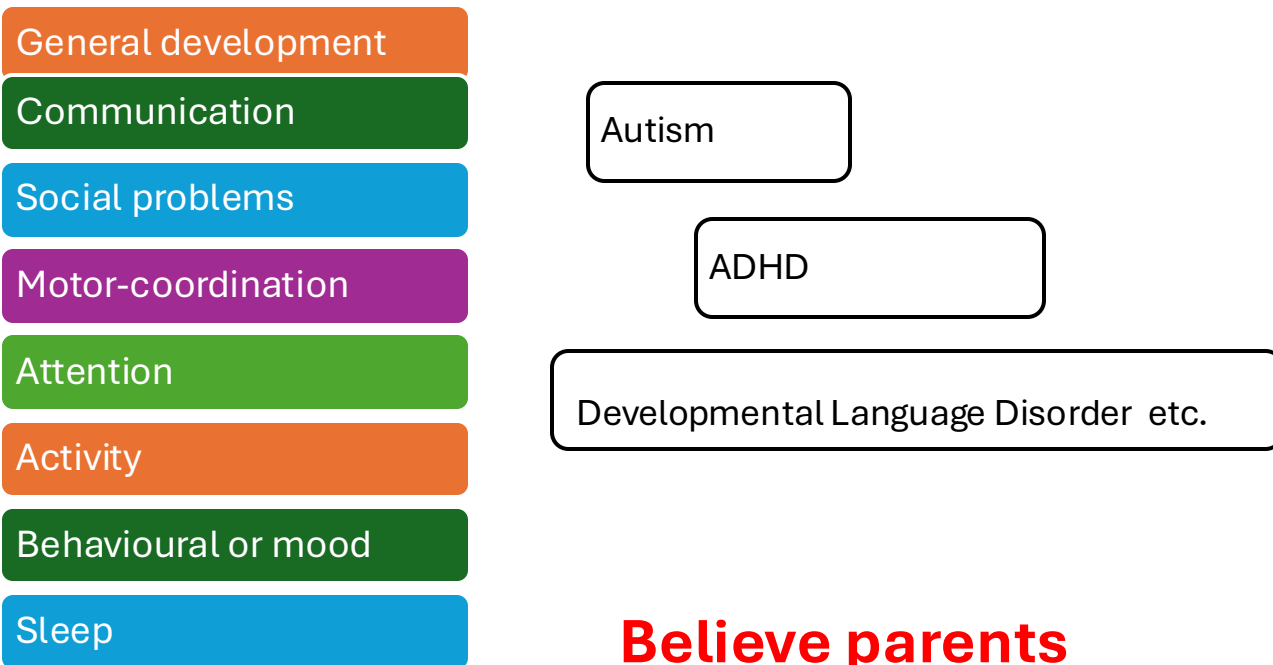
- the neurodevelopmental trajectory may not be clear (under 2's)...

...but the evidence of some form of neurodivergence is often clear:

delay/differences across **multiple** domains is strongly indicative of neurodivergence.

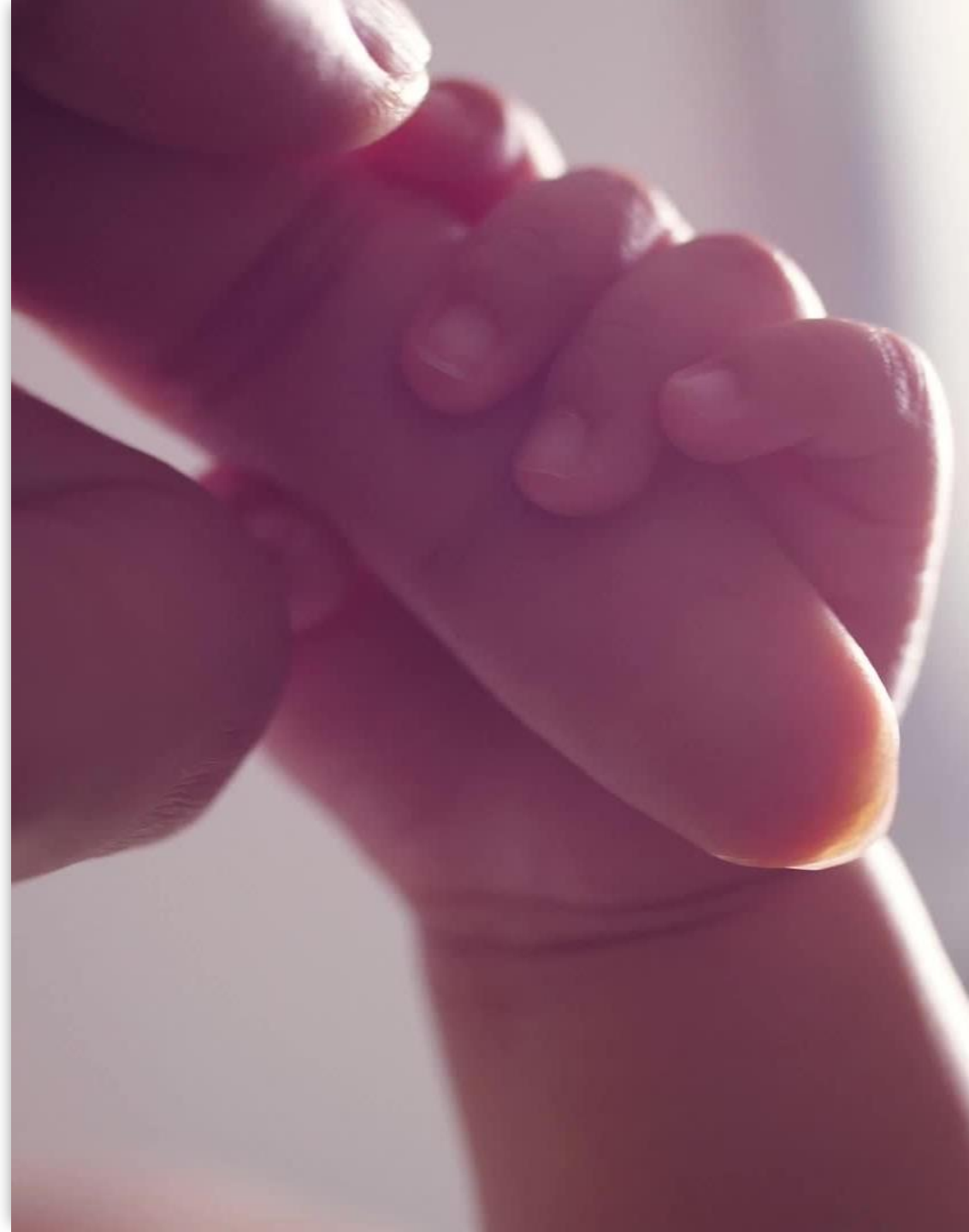
language delay at 30 months predicted one or more of Autism, ADHD etc by 6 years (Miniscalco, 2006):

Autistic differences in babbling (quantity and quality) Many traits are present in under 2's and can often be confident by age 3. (Gillberg, Miniscalco et al).



# Selective attachment and the purpose.

- Attachment is a hard-wired physiological response.
- The purpose of attachment is to reduce stress and to keep an infant safe.
- It is the relationship between the child and *each* caregiver.
- In 'typical' circumstances, selective attachment looks like:
  1. When distressed a child will seek out their caregiver to be soothed, and when soothed by their caregiver their stress will be reduced (comforted).
  2. The child can learn in their environment through exploring, but they will do it within the safe boundaries i.e. they will stay close to their caregiver/check-in to make sure they are still there.



# Attachment Patterns

## *Systematic Review of prevalence*

*(Potter-Dickie, et al., 2020)*

- ▶ **‘neurotypical’: 62% secure attachment**
- ▶ **Neurodivergent children: 42-50% secure attachment**





# Demonstrating Attachment - Yes/No?

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- Woman = Mary, the mum.
- Child = Henry, who is 3 years old. He is friendly, not very shy and quite impulsive.
- Man = James (is a stranger) coming over to speak to mum.

Henry was playing with toys, which are on his other side, out of view.





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- Right: Dad
  - Left: Jack
  - Jack is upset because he fell off his bike
  - Dad tried to offer him a hug, but he resisted, remaining sat on the ground.
  - Dad sat down too.
  - After a few moments, the scene looked like this.







## The ACES load...



What experiences do you think about when you think of neurodivergence and the links with trauma?

Neurodivergent children are at higher-risk of maltreatment, (McDonnell et al., 2019)

Bereavement

Parental Separation/divorce  
Etc.

Physical abuse (of all kinds)

Emotional abuse

Neglect



- Differences in experiencing the world/non-neurodivergent perspectives: even as infants
- Communication differences/frustrations (emotional and behavioural dysregulation)
- Sensory processing differences
  - overload, overwhelm (emotional and behavioural dysregulation)
  - Under responsiveness (motor activity, hyperactivity, sensory seeking behaviours, emotional and behavioural dysregulation).
  - Sensory preferences (food as an example)
- Relational difficulties (parents, peers, nursery teachers, grandparents)
- Masking can be learned very early in life.
- Social isolation, bullying etc.
- later anxiety, depression and other mental health difficulties.
- Trauma cycle.



Autistic young female with co-occurring ADHD.

18 years old, reflecting on her ACE Load  
parental separation,  
paternal drug use,  
mum's doing her best but struggling with her mental health.  
Younger sister undiagnosed neurodivergence.

What **you** *think* is traumatic is not always what **is most** traumatic for me!

Breakfast time: TOAST (melted butter)



- Relational difficulties can manifest for a number of reasons for any parent.
- Parenting a neurodivergent child can be more challenging:
  - Genetic factors
- Neurodivergent parents can, in some ways, be more attuned to the needs of their child (lived experience) but, in other areas, may still require more support.
- What 'support' looks like and how it is offered; may need adapted to meet the needs of neurodivergent parents:
  - Relational work can be intense
  - Language, (less is more - key information carrying words. One piece of information at a time
  - Concrete, visual. Think about generalisability.
  - Predictable, structured, pre-appointment preparation.
  - Use colleagues where you can.





Dinkler, (2017): large twin cohort study.

- Maltreated children were up to 10 times more likely to have one, or more, neurodivergences.
- The maltreatment was NOT the cause of the neurodivergences.
- A good proportion of infants and young people who have social interaction, communication and relational difficulties (with trauma) will also be neurodivergent.



Jumping Forward:



Next area: Maltreatment Associated Disorders

### 1. Reactive Attachment Disorder (RAD)

### 2. Disinhibited Social Engagement Disorder (DSED)

- diagnosed in the context of maltreatment.
- Used to be called Attachment Disorders
- DSED persists even when secure attachments form. More than a disorder of attachment.

# Trauma and stressor disorders of childhood (DSM-5/ICD-11)

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## Reactive Attachment Disorder (RAD)

- occurs when a child experiences a 'shut down' of the attachment system.
  1. RAD is an **absence of seeking comfort or help from a caregiver** when emotionally distressed and/or
  2. **Absence of accepting comfort or help** when emotionally distressed.
- Concerning because the child is **not signalling their needs**.
- It is thought only to occur in neglected/abused children.
- In addition, the child is withdrawn/shut down, hypervigilant and fearful.

*RAD is rare in the population: most maltreated children do not develop RAD.*

*RAD dissipates with committed nurturing care (gentle challenge, Mary Dozier) (attachment-based interventions).*

# Disinhibited Social Engagement Disorder (DSED)

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- Core symptoms:
  - indiscriminate friendliness towards strangers (over-familiar, pals, see themselves on same level as you). Lack of reticence or shyness with strangers.
  - Comfort seeking from strangers.
  - Will wander off with strangers.
  - Poor social boundaries/inhibitory control/oversteps boundaries without awareness of social hierarchy.
- DSED often persists, even when secure attachments have formed. DSED is a social-relatedness disorder.
- Prevalence is estimated to be around 1-1.4% (prevalence of autism, up to 1.9%)



# How unusual is indiscriminate behaviour?

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- If a maltreated child is not jumpy, hypervigilant, withdrawn and is actually very 'sociable', cuddly, willing to go with whoever asks, this may seem positive.
- Part of the purpose of selective attachment is to get needs met/protection.
- At some stages of the child's early experience, it may have been protective.
- Indiscriminate friendliness is not normal in development (McLaughlin et al., 2010, Waiting room observation).
- DSED has been identified in pre-schoolers (often physical overfriendliness and stranger approach).
- In older children, physical and verbal overfriendliness.
- Adolescents and adults –personal disclosure, sexual indiscriminateness etc.
- DSED behaviours shown to persist (even after secure attachments formed); in pre-school might seem cute, but as the child grows social difficulties increase...
- High proportion of DSED in Forensic CAMHS and in youth prisons, (Moran et al).

# Research



More than one study found that the social difficulties in DSED were greater than peers who had been maltreated but did not have DSED.

- DSED can persist into middle childhood, adolescence and even found in early adulthood.
- Children with DSED have greater difficulties with social competencies across many skill areas.
- have greater difficulties with peer relationships.
- May be more likely to be victimised/bullied and/or be bullies themselves.
- May have poorer self-esteem regarding their social competencies.
- May have some language/communication difficulties.

# DSED examples

- 5 year old boy, going out with his adopted mum. Both walked up to the taxi, the boy opened the taxi door and hugged the taxi driver.
- From the research: stranger (researcher) rings the doorbell. Invites the child (6-12 years) to leave with the researcher. Child goes, without a backward glance to his caregiver (Gleason; Guyon-Harris). ?
- 14 year old girl. First meeting. Walking side by side, put hand into back pocket of my jeans. Walking like were pals.



- **Increasing concern among clinicians about differential diagnosis between RAD, DSED and neurodivergence.**
- **Standardised caregiver assessment of RAD and DSED demonstrated that seeking comfort, from caregiver, differentiated RAD from ADHD.**
- **Not seeking comfort from strangers and especially cuddling strangers differentiated ADHD from DSED (Follan et al)**
- **Clinical concerns regarding differentiation tend to regard Autism; important because Autism is NOT caused by maltreatment.**





# RAD versus Autism

- **Overlaps: Reduced eye contact, emotional dysregulation, withdrawal. (Davidson et al., 2015)**
- **Use of attachment figure?**
- **Signalling needs?**
- **Most Autistic children will still signal attachment and signal their needs, even if it is more subtle or in a different way.**
- **Most children who experience maltreatment don't develop RAD.**
- **RAD can be differentiated from autism so probably most autistic children who experience maltreatment also don't develop RAD.**





## **DSED versus Autism**

- **difficulties understanding social boundaries**
- **poor anticipation of social norms**
- **lack of stranger danger/perceived as over friendly**
- **personal disclosure**
- **minimal checking**
  
- **delayed language development, including pre-verbal language skills.**
  - **difficulties with Pragmatic language.**



- Caregiver report does not help differentiate DSED from Autism, or vice versa.
- Davidson et al, (2015): 40% of children with autism, no maltreatment history, (n=56) met diagnostic criteria for DSED on standardised *caregiver* report for DSED ax.
- Davidson et al, (2023): *all* of the children with DSED in my PhD sample (n=11) met diagnostic criteria for autism on standardised *caregiver* report for autism ax.
- But differences in *quality* of interactions can be identified, especially via unstructured play based clinical observation.

(ax= short hand for assessment).

# DSED versus Autism: indiscriminate or not?

- Standing in the queue at a supermarket:



Billy says to his dad “why is that man so fat?” The man turns round. He heard him.

not- he is using their caregiver to get the information

Asking the man directly would be not using the attachment relationship.





- In some pre-school Autistic children, physical overfamiliarity can occur. Less common in primary school age.
- 3yr old boy is brought into clinic with his mum. I call his name. He comes forward, takes my hand and walks into the clinic room, side by side with me. Mum is still behind.
- What factors might you consider when deciding if this was 'indiscriminate' in a DSED way or an autistic way?
  - Would he have done this if mum wasn't there?
  - Would he have taken hand of someone in the street?

# Observational assessments help differentiate (Davidson et al., 2023)

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- When autism and maltreatment come together, it is more tricky to differentiate because you have additional environmental factors to consider.
- This is a complex area (female profile, co-morbidities make it more complex).
- Assessment requires multi-informant information (caregiver, school, clinician observation).
- It requires more nuanced, targeted observational assessment.
- Focus is on the *quality* of the social interaction and communication.



Contents lists available at [ScienceDirect](#)

Research in Developmental Disabilities

journal homepage: [www.elsevier.com/locate/redevdis](http://www.elsevier.com/locate/redevdis)

Using the live assessment to discriminate between Autism Spectrum Disorder and Disinhibited Social Engagement Disorder

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# Case example

- 6 year old girl
  - Adopted from Chinese institution at age 2.
  - Flat head and scars on wrist.
  - In institution, only heard Chinese language
  - Wasn't talking when adopted.
  - Spoken to in English from age 2 years. Only speaks English.
  - Core symptoms of DSED.
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- Hyperactive,
  - mum worried about development and language delay ("*We go park*")
  - Emotional and behavioural dysregulation (wakes up crying, shouting at mum etc)
  - lots of sensory seeking.
  - Sometimes difficulties with peers, but more about nuances of friendships/susceptible to bullying.
  - Mum was becoming increasingly stressed, worried, ruminating (via the internet) . Mum's mental health deteriorating.
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- Mum wondered if the child was autistic

# Factors which differentiated from Autism

- Wasn't shy/lacked stranger danger.
- 2 observational assessments: ADOS and an unstructured play-based assessment.
- In ADOS, lots of **showing and sharing**. e.g. talking about hobbies, "I can do the splits." (i.e. let me show you) (and did).
- In unstructured play based: lots of offering with toys, **shared play, imaginative play, good eye contact. Lots of gestures etc.**
- **Responding to me, interested and asking questions** about things I told her (reciprocal interaction).

# Maltreatment in infants

- Tricky to differentiate:
- Developmental milestones may be delayed
- Expressive language, in particular, may be delayed.
- Social skills may be impacted.
- You may need 'catch up time'
- Balance between 'watchful waiting' and exacerbating problems.
- Watchful-active-waiting:
  - predictability, structure, information processing (clear, simple communication).
  - Use visuals, 1 instruction at a time etc).
  - Consider sensory processing (also differs in maltreated children/RAD/DSED)
- Autism friendly strategies will support *all* maltreated children, and especially if are autistic





- **Complexity often comes when factors overlap:**
- **It is possible to differentiate, but perhaps as helpful to go in with a holistic approach (ESSENCE): *whole profile of strengths and needs.***
- **Neurodivergence: overlap is the norm, not the exception.**
- **This is also true for RAD and DSED.**



# Lets move from thinking *only trauma* or neurodivergence 😊

- Be **open** to the fact that children are often experiencing neurodivergence (autism, ADHD etc) *and* trauma associated challenges. It is often not either or but both.
- If maltreatment, be **open** to the idea that some of the difficulties may fit a DSED or RAD profile and consider what this means specific to the child and families profile of need.
- Neurodivergence **and** trauma/maltreatment-associated problems inc. DSED/RAD **and** the environment impact the child and the family **together** and **both** need supportive action **together**. Changing one without recognition of the other may perpetuate the problem.



**Autism and  
Maltreatment  
associated disorders  
(RAD and DSED):  
similar but different**

## A Zorse Is a Horse, of Course, But It's Also a Zebra

By: [Jesslyn Shields](#) | Updated: May 28, 2024



**Autism and trauma/Maltreatment associated disorders (RAD and DSED) and/or other neurodivergence: often it is BOTH.**