



## **Neurodevelopment and Children with Sexual Behavior Problems**

Understanding the connection between neurodevelopmental issues and sexual behavior problems in children helps us develop better assessment and treatment approaches while preventing us from over-diagnosing the children's motives and intentions.

For the purposes of this paper, we will limit our focus to two client presentations that can reflect neurodevelopmental concerns. The first involves children who present as neurologically atypical, primarily children with an intellectual developmental disorder, an autism spectrum disorder, or both. The second are a significantly larger group of children with sexual behavior problems whose neurodevelopment and behavior has been impacted by experiences of adversity, maltreatment, and trauma. Often, these groups are not distinct, since being a child who is neurologically atypical can place you at greater risk for maltreatment and abuse, making it difficult to differentiate the genesis of the behavioral problems that bring the child into treatment.

### **How Atypical Neurodevelopment Can Influence Sexual Behavior Problems**

Neurodivergence is a non-medical term that refers to variations in the brain regarding sociability, learning, attention, mood, and other mental functions. It includes conditions such as ADHD, autism, dyslexia, intellectual developmental disorder, executive functioning problems, auditory processing disorder, and sensory processing difficulties. Several of these conditions frequently overlap in children and may be associated with problems in emotional regulation, behavioral difficulties, social integration, and relational issues. An estimated 15-20% of the world's population can be viewed as exhibiting some form of neurodiversity (Center for Disease Control, 2022 & 2021).

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder commonly characterized by some impairments in executive functioning skills, social communication, social-emotional reciprocity, and relational maintenance. Other characteristics can include repetitive or restricted behaviors, sensory interests or aversions, and cognitive rigidity. Not all children with ASD will display all of these characteristics or display them to the same extent (APA, 2013; Carotenuto, et al., 2019; Alexandropoulou, 2021). These difficulties in social-emotional reciprocity and social communication are often seen as stemming from problems with emotion recognition and perspective taking, executive skills associated with "mentalizing" or Theory of Mind (Frith & Frith, 2003). Theory of Mind (ToM) is the ability to attribute mental states (intention, motivation, desire, beliefs, etc.) to oneself and others and to understand that others' perspectives, desires, intentions may be different than one's own.

Hancock, et al.(2017) note that these core social communication difficulties encountered by individuals with ASD can be a hinderance to social engagement that limit their social experiences and their broader social development. This, in turn, not only creates obstacles to learning and integrating social norms into their behavioral decision-making, but it also promotes confusion, social isolation, and frustration that can lead to emotional and behavioral dysregulation. Research indicates that nearly half of children diagnosed with ASD have engaged in aggressive behavior towards family members, peers, or teachers (Brown, et al., 2019; Kanne & Mazurek, 2011). Additionally, this struggle to successfully negotiate family relationships, social interactions and peer relationships leaves the ASD child more vulnerable to harsh parenting, neglect, bullying, and other forms of child maltreatment (Hall-Lande, et al., 2015; Brenner, et al., 2017). As noted in the 2<sup>nd</sup> edition of the ATSA Task Force paper on Children with Sexual Behavior Problems experiences of maltreatment and social isolation, along with emotional and behavioral dysregulation can be contributing factors to children developing problematic sexual behavior.

We see some similar executive functioning difficulties that are evidenced in children with ASD demonstrated by children identified as having an Intellectual Disability (ID), in fact a significant number of children (35%) diagnosed with ASD also carry a diagnosis of ID. While ID children are not specifically characterized by difficulties with social-emotional reciprocity, they are defined by difficulties in adaptive problem-solving, judgment, abstract thinking, planning, and learning from experience. As with ASD youth, children with ID can also struggle with communication and social participation frequently resulting in the kinds of isolation, confusion, frustration, and dysregulation that we see in youth with autism. Studies have linked deficits in executive functioning with lower IQ (Brydges, Reid, Fox, Anderson, 2012) and lower IQ with significant behavioral problems (Pinsonneault, Parent, Castellanos-Ryan, Seguin, 2015).

Research indicates that neurodiverse children are more at risk for maltreatment than neurotypical youth. In a large U.S. based study examining over 2,000 child maltreatment investigations Helton, et al. (2018), found that children with a learning disability were 2.5 times more likely to experience sexual abuse and 3 times more likely to have that abuse involve digital or oral penetration. Abuse for any child can have long lasting effects depending on the developmental timing of the abuse and the disclosure, the response to the disclosure, the child's own coping skills, and perhaps most importantly, how the child's caretakers respond to the child and what steps they take to intervene for the child's safety and care. Children with ASD and ID may have greater difficulties processing these experiences, disclosing the abuse to a parent or supportive adult, or coping effectively with the emotional and psychological effects of being abused. This sometimes leads to maladaptive behavioral responses, including aggressive, self-harming, and problematic sexual behaviors (Blasingame, Creeden, & Rich, 2022).

An overlooked contributing factor for children engaging in problematic sexual behavior is the lack of information regarding sexual development and healthy sexuality that is provided for children. This can be true throughout childhood and adolescence but is especially pertinent in late childhood as children enter puberty and early adolescence. This lack of information is exacerbated when children have ID and/or ASD given that these children are often viewed by adults as asexual or are actively discouraged by parents (and other adults in their environment) from discussing sexual behavior or pursuing information about sexual development. This response appears to stem from concerns that the child will become hyper-aroused, fixated, or overwhelmed if provided information about sexual development and sexual behavior.

Additionally, there are concerns that children who may already display difficulties with behavioral judgment and regulation will extend this poor behavior management to include sexual behaviors that precipitate serious consequences for themselves and others. While these concerns are understandable, it is difficult to imagine how children and adolescents can make “good” decisions regarding their sexual behavior or effectively manage the emotional and physiological changes that occur during puberty and adolescence without clear information and direction from their parents, caretakers, and teachers.

## **Neurodevelopment and Child Maltreatment**

There is a growing amount of research demonstrating that early experiences of child maltreatment can alter brain development in a variety of ways (Samson, et al., 2024; Tomada, et al., 2024; Young-Southwood, et al., 2020). A range of learning and behavioral difficulties emerge from these alterations including executive functioning problems, emotional dysregulation, behavioral difficulties, altered threat detection and response, sensory processing problems, reward processing, memory related issues, and specific learning deficits in language processing and math (Samson, et al., 2024; Tomada, et al., 2024; Wade, et al., 2022; DeBellis, et al., 2013). One can readily see that the neurodevelopmental impact that may emerge from the experience of maltreatment mirrors many of the learning and behavioral challenges faced by ID and ASD children. This is especially true when neurodiverse children also have experiences of maltreatment. It is important to note that children who experience maltreatment can display an array of cognitive, emotional, and behavioral difficulties *or none at all* and that these differences can be influenced by features of the maltreatment including the developmental timing, type of maltreatment, duration, intensity, and adult response as well as heritable factors and environmental conditions (Smith & Pollak, 2020; Pechtel & Pizzagalli, 2011).

## ***Implications for Assessment and Treatment***

Because the presentations and needs of each child and family can be so varied there is no single treatment modality and no specific group of interventions that will meet the treatment needs of every child who presents with neurodevelopmental issues, problematic sexual behavior and/or a history of maltreatment. Clinicians will first and foremost need to be aware that there may be a neurodevelopmental aspect of the child’s processing and behavior that shape this individual’s perspective, decision-making, and experiences in idiosyncratic or challenging ways.

As with all good assessments, the assessments for these children need to be holistic and comprehensive but the clinician’s typical assessment process may need to be adapted to account for the child’s attentional limits, reading level, sensory processing, and other responsivity issues. Integrating or recommending a good neuropsychological evaluation as part of the child’s clinical assessment addressing problematic sexual behavior can be especially important in these cases.

Prominent treatment issues that have been identified through neurodevelopmental research include: the need to modify an overactive threat response (hyper or hypo-arousal); the need to identify and manage environmental triggers; the need to accurately perceive and interpret social and environmental cues promoting mutual attunement/attachment; the need to modulate emotional responses and engage in adaptive problem-solving; the need to restructure cognitive biases and enhance cognitive flexibility so they can learn from experience (Samson, et al., 2024). Depending on the child and family’s presentation, treatment issues will need to be identified,

prioritized, and addressed most likely in a multi-modal manner that considers the child and family's particular learning abilities, learning style, and developmental level. Along with more typical trauma-focused CBT and DBT approaches additional interventions might include a more parent centered treatment, body-based interventions, biofeedback and neurofeedback, occupational therapy, and other interventions that rely less on language processing and executive functioning capacities.

Additionally, these children need the adults in their environments (parents, caretakers, teachers, social service agencies, etc.) to provide the necessary support and resources that promote healthy development for all children. To enhance a positive developmental trajectory and diminish risk for emotional and behavioral problems that are outside of the capacity for children to provide for themselves, these children need a safe, predictable, and stable living environment; adequate adult supervision and guidance; basic needs like a healthy diet, a regular sleep schedule, good hygiene, and physical exercise; an educational program that identifies and meets their learning needs; access to pro-social peer groups through activities and environments; teaching social skills which includes a consistent and positive response to behavior management; providing age-appropriate sex education that includes discussion of healthy sexual behavior. When these needs are not being met in a child's life, they should become either a target for treatment intervention or a focus for system-based attention and resources.

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