# NEURODIVERGENCE & EATING DISORDERS

**RECOVERY SESSION**

APRIL 18, 2024

12-1PM EST

**Free, virtual support session open to all.**

BODY BRAVE

POWERED BY Future Launch

Studies show that Autism and ADHD are potential risk factors for the development and maintenance of eating disorders.

In this session, we will explore the unique challenges neurodivergent individuals living with eating disorders/disordered eating face, increase awareness and understanding of their impact on eating behaviours, promote early detection and support, and discuss neurodivergent-affirming treatments practices.

Note: we encourage you to contact your doctor/primary care provider regarding your health needs and concerns

If you require a new family doctor, please access Health Care Connects
www.ontario.ca/healthcareconnect
Register by phone at 1-800-445-1822, Monday to Friday, 9am to 5pm.
OR find a Community Health Centre in your area: https://www.ontario.ca/page/community-health-centres

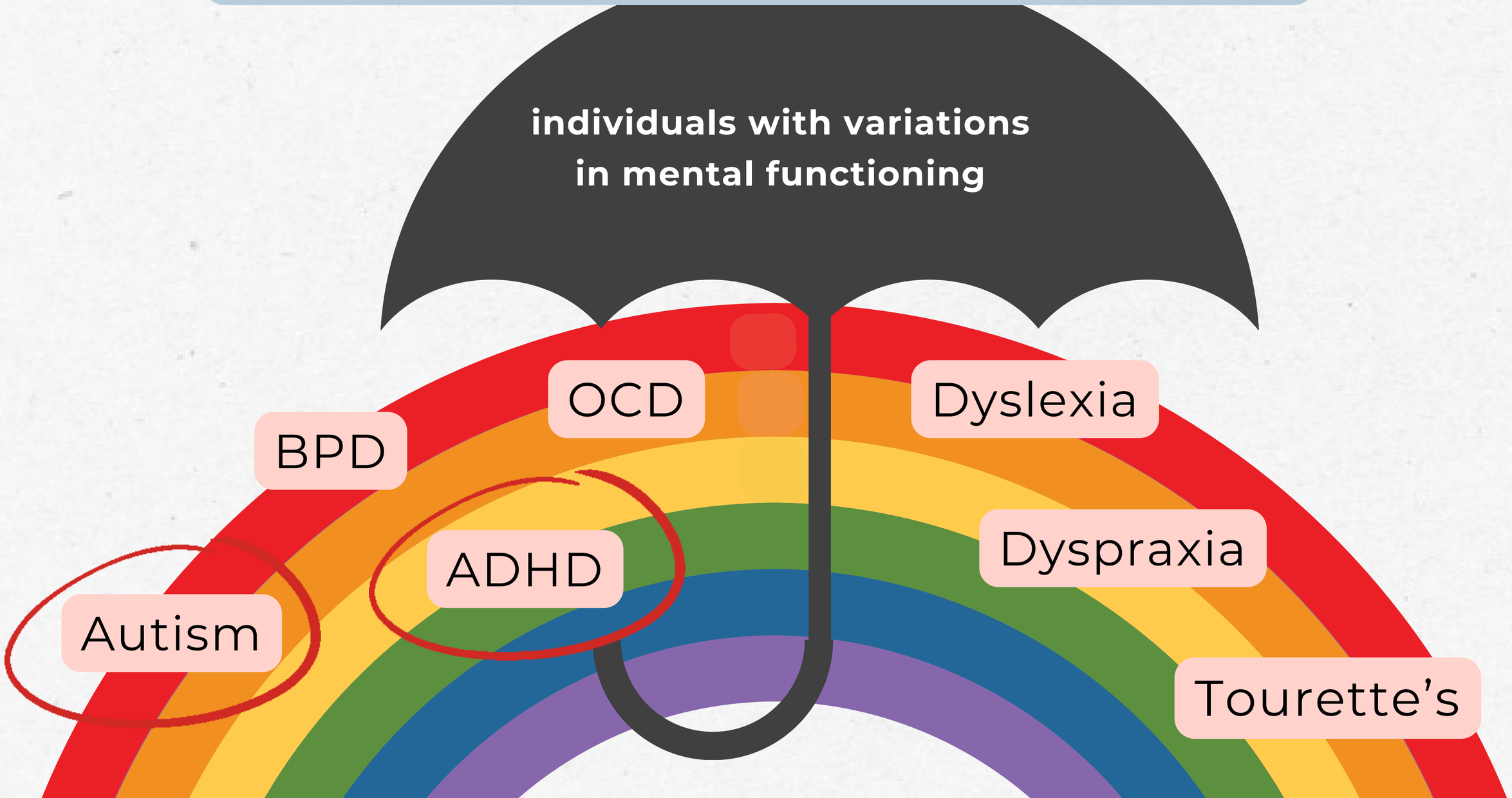
Presented by Adair Shaw and Maddy Say

THE LINK BETWEEN

# AUTISM & EATING DISORDERS

**Maddy Say** (MSW, in progress)

# Neurodivergence is an umbrella term



THE LINK BETWEEN

# AUTISM & EATING DISORDERS

Eating disorders have the highest mortality rates of any mental illness [21]

**Eating disorders do not discriminate: they affect people of all ethnicities, sexualities, gender identities, ages and backgrounds**

However, one group may be disproportionately affected by these disorders: *people on the autism spectrum* [22, 24, 28]

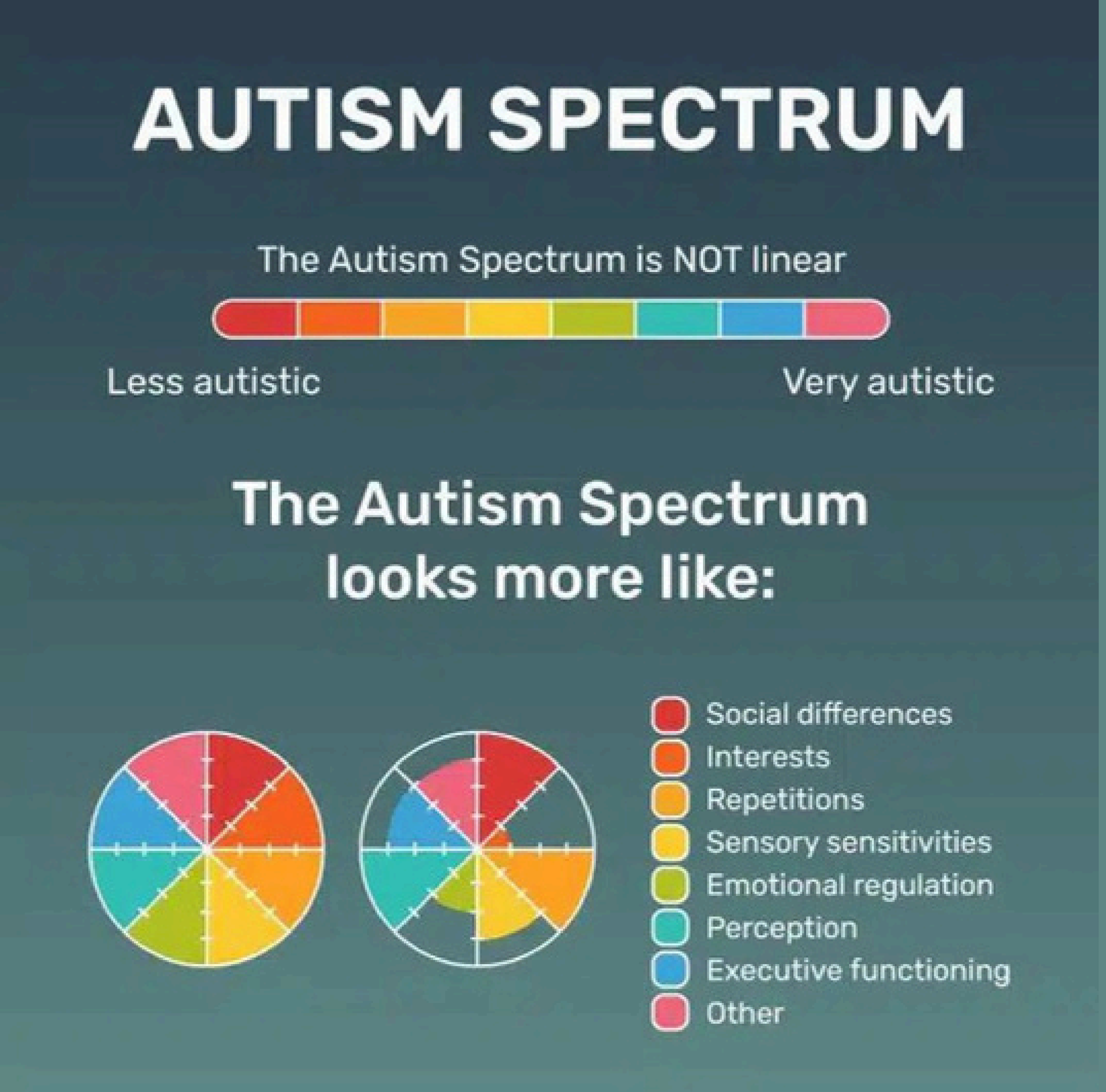
PREVALENCE OF

# AUTISM & EATING DISORDERS

- **Estimated comorbidity of Autism: 8 - 37% in those with EDs** [28]
  - rates are difficult to ascertain as many Autistic people do not receive a timely diagnosis or are misdiagnosed (particularly AFAB folks: assigned female at birth) [29]

- **Up to 70% of Autistic youth/adolescents experience feeding and eating difficulties** [16]
  - challenges may arise due to allergies, food-related sensory aversions, difficulty with movement (ie. swallowing, chewing, sitting straight, using utensils etc.)

- **Autism is connected to all eating disorder subtypes** [11, 18b]
  - *not just restrictive:* ie. avoidant restrictive food intake disorder (ARFID) or anorexia nervosa (AN)
  - increased prevalence in binge eating disorder (BED) and bulimia nervosa (BN)




**Autism is a lifelong neurodevelopmental condition characterized by difficulties with social interaction and communication, presence of restricted and repetitive behaviours and interests, and differences in sensory processing** [6]

# AUTISM SPECTRUM

Challenges and differences may arise in the following areas:

**EMOTIONAL REGULATION**

**SOCIAL DIFFICULTIES**

**SENSORY PROCESSING**

**EXECUTIVE FUNCTIONING**

Let’s explore how these challenges overlap with eating disorder behaviour...

# EMOTIONAL REGULATION

“Involving one’s neurobiology, cognition, behaviour, affect, and context...

ER is the ability to ***monitor and modify arousal and reactivity*** to engage in adaptive behaviour” [25]

## “ALEXITHYMIA”

Roughly half of Autistic people experience alexithymia, which translates to **‘no words for emotions’** and is characterized by difficulties with identifying and describing one’s own feelings [8]

Difficulty describing feelings was most predictive of self-reported **social-communication problems**, as well as anxiety and depression in Autistic people [18]

# EMOTIONAL REGULATION

Alexithymia contributes to **greater difficulties with emotion regulation**:

- reduced emotional awareness
- reduced inhibition of impulses, especially when distressed
- reduced ability to accept and tolerate ones own emotions

Alexithymia is also suggested to exacerbate the social difficulties which some theorists place central to anorexia and other EDs

[27]

# SOCIAL DIFFICULTIES

Social functioning...
“an individual’s ability to successfully interact with their environment”

This is facilitated by the development of a range of social skills including

- **verbal and non-verbal gestures**
- **social cognition**
- **interpersonal functioning**

Although not a diagnostic criteria, data suggest that EDs are associated with **atypical social and emotional functioning**

[19]

# SOCIAL DIFFICULTIES

Despite the assumptions of social difficulties, or lack of interest in social interaction, many individuals with autism describe a **strong craving for social connection** [7]

Research suggests that **loneliness can be a driving factor behind eating disorders**, where food becomes a coping mechanism used to numb or deal with pain [15]

“The other girls just seemed to know how to talk to people. And I didn’t. But I found if I stopped eating or made myself sick, I could at least be thin like them”
~ Autistic ED survivor [1]

**EMOTIONAL REGULATION**

**SOCIAL DIFFICULTIES**

Because Autistic people often experience stigma, bullying and social isolation, eating disorder behaviour may provide...

- **a sense of control**
- **predictability**
- **reward**
- **a sense of self-worth and identity**
- **numbing feelings of anxiety and depression**

[6]

# SENSORY PROCESSING

## "EXTEROCEPTION"

an estimated 90% of Autistic people have **markedly different ways of perceiving stimuli from their environment** [2]

- sound
- lights
- touch
- texture
- smell
- taste

Hypersensitivity to stimuli can lead to:

- **overwhelm and anxiety at mealtime** [14]
  - difficulties with aspects such as cooking and eating in communal environments
- **avoidance of certain foods and environments** [6, 14, 30]

# SENSORY PROCESSING

## "INTEROCEPTION"

Broadly speaking, interoception **provides information about two different states**:

- **Body states =** thirst, hunger, pain, fatigue, toilet needs
- **Emotion states =** anxiety, anger, fear, irritability, sadness, excitement, joy

**Up to 74% of Autistic people experience interoceptive confusion**... [11]

### Interoceptive Confusion =

challenges with perceiving and/or understanding...

**bodily sensations and needs:**

- difficulty recognizing hunger/thirst cues
- high pain threshold

**emotional needs:**

- emotional regulation
- *alexythemia*

[4]

# SENSORY PROCESSING

# "ARFID"

**ARFID = Avoidant Restrictive Food Intake Disorder**

## 1 Limited variety

limit the types of foods (often avoiding meats, vegetables, and/or fruits) due to aversions to specific tastes, textures, or smells

## 2 Limited intake

restrict the amount they eat due to lack of interest in eating or low appetite

## 3 Avoidant

avoid specific foods or stop eating entirely following a traumatic experience with eating, such as choking, vomiting, or other forms of gastroenterological distress

# SENSORY PROCESSING

# “ARFID”

**Based on a systematic review:**

- Non-clinical samples: 0.3% to 15.5%
- Specialized eating disorder services: 5%–22.5%
- Specialist feeding clinics: 32% to 64%
- Psychiatric comorbidity was common, especially anxiety disorders (9.1%–72%) and autism spectrum disorder (8.2%–54.75%)

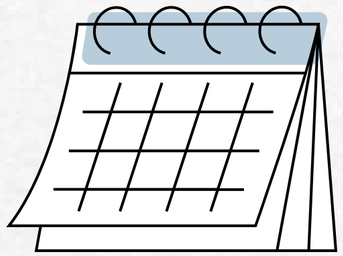
[20]

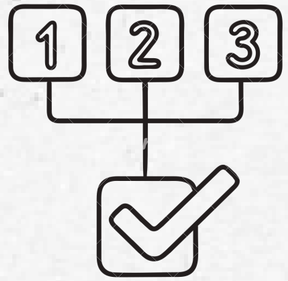
# EXECUTIVE FUNCTIONING

'Executive function' (EF) is traditionally used as an umbrella term for functions such as **planning, working memory, impulse control, inhibition, and shifting set, as well as the initiation and monitoring of action** [13]

Autistic individuals often experience:

- **rigidity and perseveration**
  - difficulty initiating new non-routine actions and the tendency to be stuck in a given task [5, 13]
- strong liking for **repetitive behaviour, routine, and/or rituals** [6, 13]
- *can make planning around food, shopping, cooking etc. challenging* [14]





# EXECUTIVE FUNCTIONING

Several studies have shown that obsessive-compulsive disorder (OCD), eating disorders (ED), Autism, and body dysmorphic disorder (BDD) share obsessive-compulsive (OC) symptoms and often co-occur.

In addition, they also appear to have similarities in executive functioning [9]

# OBSESSIVE COMPULSIVE SPECTRUM DISORDERS

**Difficulty with cognitive flexibility and social factors** could be perpetuating factors in OC spectrum disorders and therefore an important consideration for treatment [9]

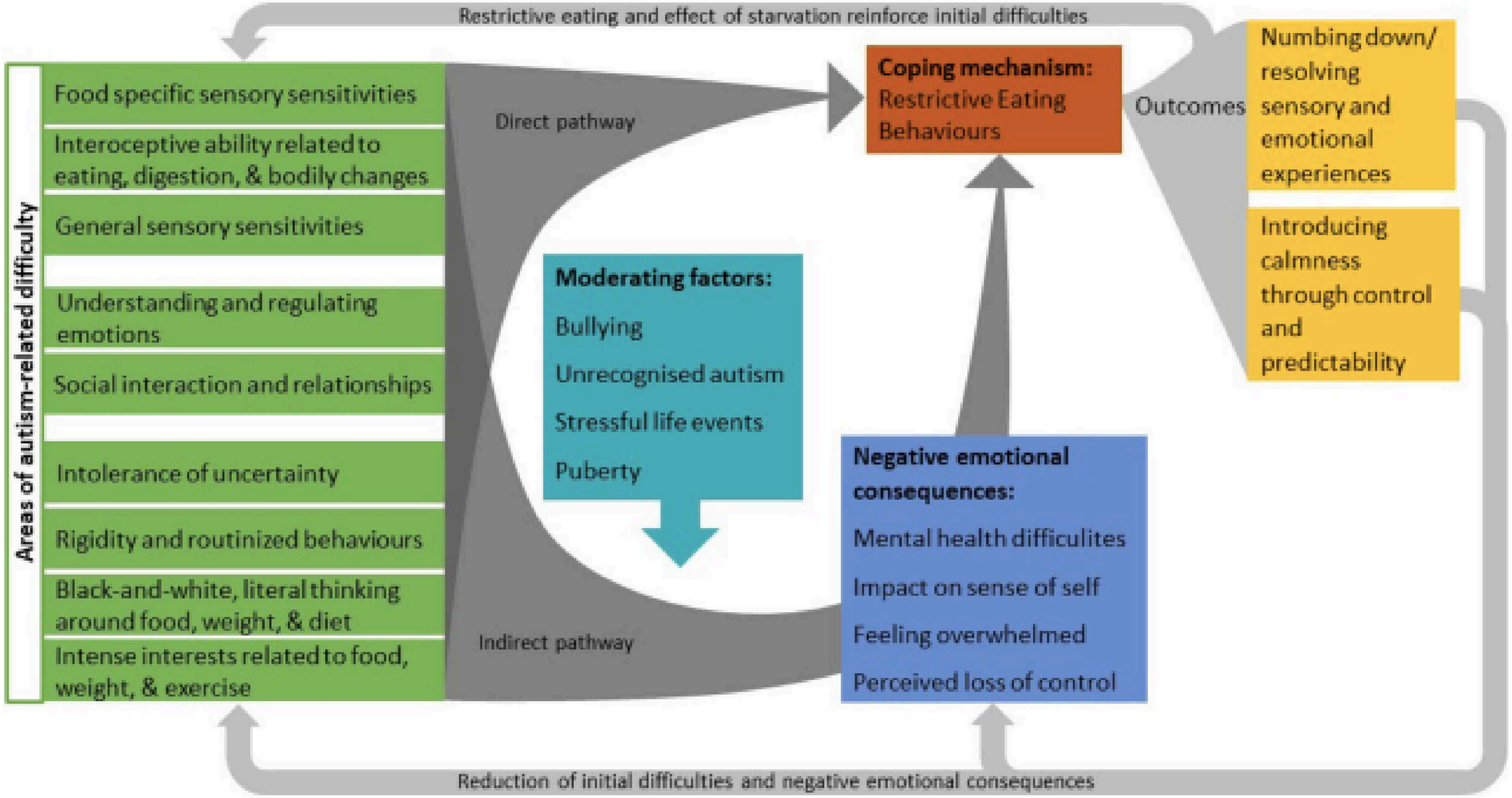



**Fig. 1** Proposed model of autism-specific mechanism underlying restrictive eating difficulties [6]

WHAT THIS MEANS...

# TREATMENT RECOMMENDATIONS

Gathering evidence suggests that it is helpful for Autistic people to know that they are Autistic, to increase their own **self-understanding, self-acceptance, and recovery from mental health disorders** [5, 14]

> **“If we can ‘see it,’ we can ‘say it’…. and we can ‘sort it,’ to support people with both conditions** [25] **”**

## WHAT THIS MEANS...

# TREATMENT RECOMMENDATIONS

Despite evidence of poor outcomes and treatment experiences for those with the comorbidity, there is little research into how treatment can be improved for this population.

One set of guidelines on treatment for Autistic people with AN has emerged from a clinical team in the UK:

The **P**athway for **E**ating Disorders and **A**utism developed from **C**linical **E**xperience **(PEACE)** pathway

PEACE

WHAT THIS MEANS...

# TREATMENT RECOMMENDATIONS

A brief Introduction to the PEACE Pathway: [24]

- **Autism training and awareness** amongst clinical/treatment professionals
- Physical spaces that are **sensory informed**
- Menus/meal plans that are **individually tailored** to sensory needs, aversions and preferences
- Individually tailored therapeutic interventions/sessions

WHAT THIS MEANS...

# TREATMENT RECOMMENDATIONS

Other neurodivergent-affirming support options:

- **Animal-assisted therapy**
- **Music therapy**
- **Neurodivergent-led peer support**

https://nedc.com.au/assets/NEDC-Publications/Eating-Disorders-and-Neurodivergence-A-Stepped-Care-Approach.pdf

# ADDITIONAL RESOURCES

**Eating Disorders Neurodiversity Australia:**
https://www.edneuroaus.com/nd-ed

**Eating Disorders Victoria:**
https://www.eatingdisorders.org.au/eating-disorders-a-z/eating-disorders-and-autism/

**Neurodivergence Stepped Care:**
https://nedc.com.au/assets/NEDC-Publications/Eating-Disorders-and-Neurodivergence-A-Stepped-Care-Approach.pdf

**RD's for Neurodiversity:**
https://www.rdsforneurodiversity.com/

**Therapist Neurodiversity Collective:**
https://therapistndc.org/

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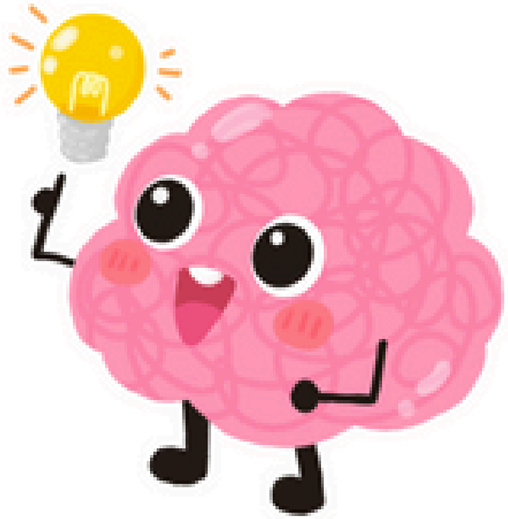
# Attention Deficit Hyper Activity Disorder (ADHD)
# and
# Eating Disorders (EDs)



Adair Shaw

(MSW, in progress)

# AGENDA

- What is Attention Deficit Hyperactivity Disorder?
- Eating Disorders and ADHD
- Considerations for Care

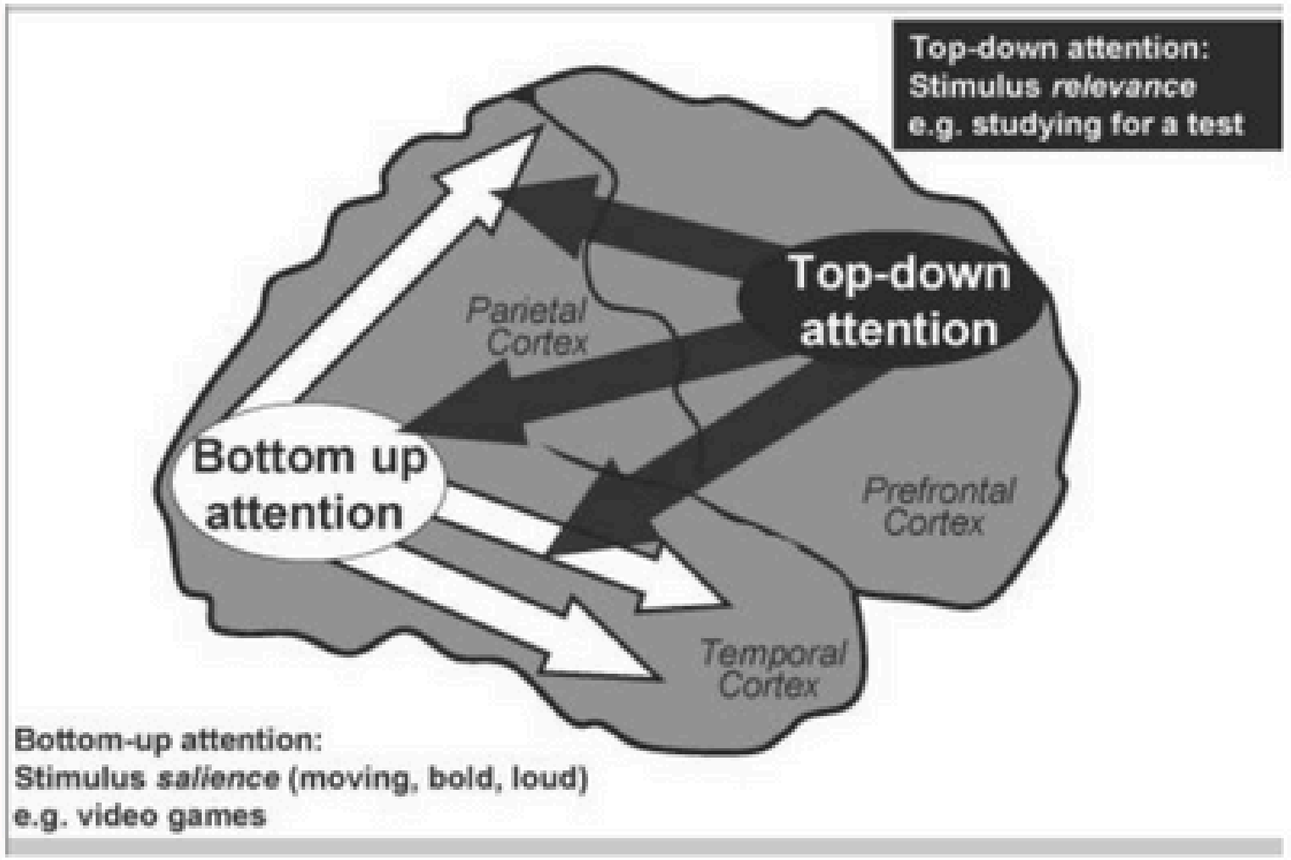
# Attention Deficit Hyperactivity Disorder (ADHD)

Neurodevelopmental disorder

DSM-5 criteria for diagnosis in adults ≥5, children ≥6 symptoms persisting at least 6 months; present prior to age 12; several symptoms are present in ≥2 settings

- Inattentive - difficulty regulating attention
- Hyperactivity-impulsivity - speaking or acting without thinking
- Combined

Symptoms interfere with or reduce the quality of social, academic, or occupational functioning




Prefrontal cortex: regulating attention, behaviour, and emotion, planning and executing tasks (Arnsten, 2009, Figure 1)

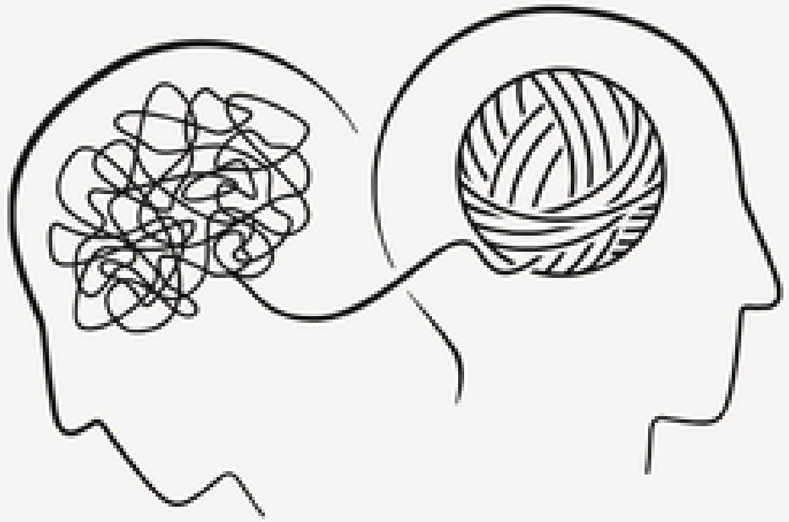
# Prevalence

- Worldwide prevalence 5% (12)
- Large Canadian sample of adults (20-65 years of age), 2.9% reported ADHD Dx (9)
- Up to 8.6% of children & youth across provinces (3)

- Male to female ratio 1.4 to 1, in children 3 to 1 (5; 9)
- Stereotype of what ADHD looks like, women possibly better at masking symptoms, gender differences (2; 5)
- In Canada, women with ADHD more likely to live in low income brackets (9)

# Comorbidities

**Most children and adults with ADHD meet the criteria for at least one comorbid condition**



- Adults with ADHD significantly higher rates of MDD, GAD, BP I & II, SUD compared to general population (9)
- High cooccurrence of SAD with ADHD (10)
- Women with ADHD, highest rates of co-occurring MDD and GAD (9)
- Men with ADHD, highest rates of co-occurring SUD (9)

**Eating disorders and disordered eating...**

# Eating Disorders and ADHD

- Children and youth with ADHD 3 x more likely to develop any ED than those without, highest likelihood BN, BED, slightly higher in girls (8; 18)
- Adults with ADHD have co-occurring EDs at 4 x the rate of those without (11b)
- Eating Disorders → ADHD symptoms, ADHD diagnoses → Disordered Eating & EDs
- Binge Eating Disorder, Bulimia Nervosa, Anorexia Nervosa Binge-Purge subtype associated with ADHD (9; 11b; 16; 18)
- Hyperactivity/impulsivity correlated with restrictive eating and binge eating independent of mood disorders (9)
- BN in ADHD population 1-12%, general population 0-2% (11a)
- Low and high BMI in children is associated with ADHD, and high BMI in adults associated with ADHD, even when controlling for gender, SES, and mental disorders (4; 18)

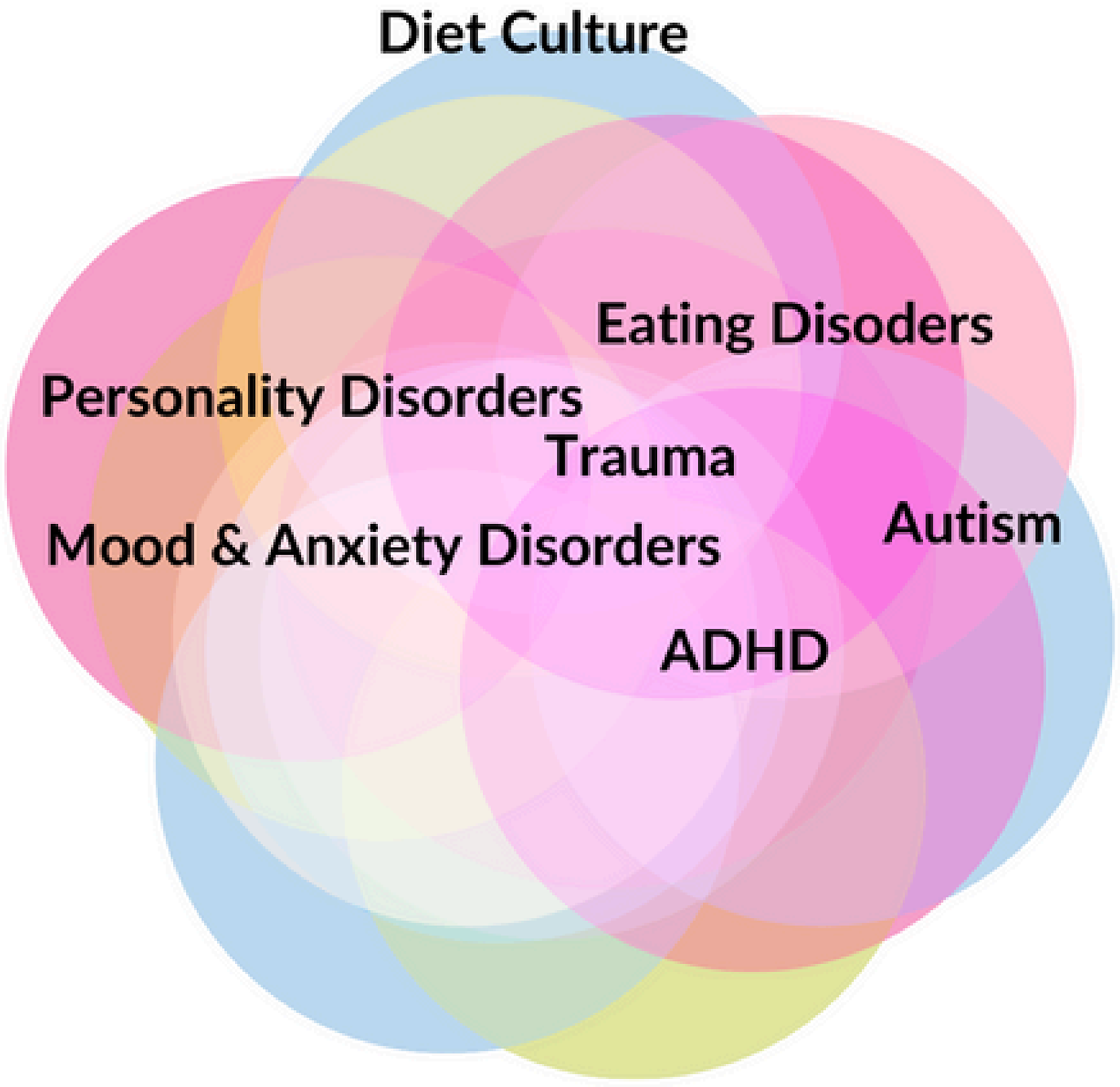
# Impacts of ADHD on Brain, Body, Behaviour—>Food Intake

**Executive function:** hyperfocus/inattentiveness, losing track of time, forgetfulness, difficulty organizing and executing tasks, EF points, self-esteem points (Lavoie) → forgetting to eat and subsequent binging, difficulty planning meals, shopping, preparing food, cooking, cleaning

**Emotion regulation:** less ability to regulate emotions, hypersensitivity, rejection sensitivity → food/restriction to self-soothe, purging as an immediate relief, food/exercise fixation, poor self esteem, vulnerable to diet culture (17; 2)

**Impulsivity:** sensation seeking, urgency, less inhibition → "Seefood" diet (Oliveira), automatic/ritualistic binge-purge behaviours

**Sensation seeking:** low dopamine, reward-seeking system → **Interoceptive Awareness:** less attuned to hunger/fullness cues (12)
proclivity for high fat/sugary foods/drinks that spike dopamine




Moralizing food, thin ideals, commenting on each other's bodies, diet behaviour as discipline

Eating/purging/exercise fixation to cope with dysregulation and "do something right"

Overlapping symptoms, differential diagnosis, co-occurring conditions

Screening for ADHD in patients w EDs
Screening for EDs in patients w ADHD

Undiagnosed/untreated ADHD might contribute to unsuccessful ED treatment

# Considerations for Care

- Each individual with ADHD and an eating disorder is unique
- Extra support with meal planning —tips and tools to simplify processes such as lists, easy recipes, timers, calendars, body doubling
- More likely to be overwhelmed by information such as lengthy resources/workbooks/worksheets
- For those treated with stimulant medications, appetite suppressant effects may require more of a focus on structured eating and snacks/meals that are easy to digest such as high-calorie shakes, smoothies, or stews
- Spontaneity and flexibility may be less helpful
- Emotion dysregulation and poor self-esteem characteristic of EDs may be compounded with ADHD, may need extra reassurance and compassion, CBT, DBT
- People with ADHD are often resilient and creative and with the right treatment and support can thrive in all areas of life

# Thank you!

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**Recovery Support Session: Neurodivergence and Eating Disorders- Question & Answer (Q & A)**

Q: Given the high incidence and alarming statistics of comorbidity and cooccurrence of ED + neurodivergence, ED treatment seems one dimensional and exclusive of neurodivergent factors.
In your professional opinions, how can current treatments for ED recovery be improved (in the short-term and long-term) to incorporate inclusivity of neurodivergent factors?

A: First and foremost, it starts with education and awareness. The more understanding clinical teams have of neurodivergence and how differences in executive functioning, emotional regulation, social difficulties, and sensory issues may create additional barriers and challenges in treatment, the more equipped they will be to meet the needs of neurodivergent service users. Further, it is important to take a person-centred approach – co-creating a plan of care with a neurodivergent service user, and what works for one person may not work for another.

Thank you for your question. Simply acknowledging neurodiversity by including aspects of executive function challenges in discussions about eating disorder recovery, for instance, can be validating and enlightening for individuals and groups.

Q: As someone formally diagnosed with Autism from a young age, and given that research regarding the comorbity between Autism and ED's is in early stages, how might I encourage professionals in my circle of care to explore the differe nt needs I require to support my recovery?

A: Thanks so much for your question – Autistic people often experience health inequalities because treatment is tailored toward neurotypical people, and professionals may struggle to be flexible in how they work. If the professionals in your current circle of care do not have Autism training and awareness, this creates a significant challenge in understanding and supporting your needs. It would be most beneficial to connect with an individual or clinical team with formal training in Autism, however, this can be challenging to access. As more and more individuals (particularly AFAB/assigned female at birth) are gaining awareness of their neurodivergence, it would be of great value that all clinical and treatment professionals have education and awareness surrounding diagnoses such as Autism and ADHD and how best to support these individuals. There are lots of resources out there for

professionals to begin learning about neurodivergence – in terms of Autism education and awareness specifically, you could recommend that your team utilize resources such as ACT (Autism Community Training) – where they can use the toolbar to locate resources on eating disorders and Autism: www.actcommunity.ca

Q: I have been struggling with symptoms of ADHD and dyslexia, but because I would be considered "high functioning" have never been diagnosed. How could a formal diagnosis positively impact me in recovering from AN?

A: Thank you for your question. This is challenging because it depends! Diagnoses are helpful in providing an understanding of where we are and what supports are most helpful. Perhaps we need extra support with meal planning related to executive functioning challenges. Accessing clinicians who specialize in both eating disorders and ADHD could be particularly helpful. That said, each situation is unique and best addressed by a physician, psychiatrist, or psychologist.

Q: Where did you finally find help that worked for you? And How?

A: The path to recovery is highly personalized, and finding what works best is often a unique process for each individual. My own experience was no exception. There was not a singular treatment program or healthcare provider that served as a definitive solution for me. Rather, it was a journey of trial and error across various programs and with different providers that allowed me to develop a personalized set of recovery tools and skills. I can't offer a one-size-fits-all answer, as the approach to recovery should be tailored to individual needs. However, I can share some insights from my journey and invite you to take what resonates and leave what doesn't.

Here are some of my thoughts: Recovery, as I've come to understand it, is not a singular destination but an ongoing process that involves many small, daily actions. It's an unravelling of conscious and unconscious beliefs around food and our bodies. It's learning new ways and unlearning old ways of how to cope and navigate uncomfortable thoughts and emotions that affect our daily life. It involves openness to experiment with different techniques and coping strategies to discover what is effective—and what isn't, for YOU. It's about practicing self-compassion and giving ourselves grace when things don't unfold as expected. Most importantly, it's about recognizing the value in

trying again when faced with setbacks—seeing this adaptability as a sign of strength, rather than as a failure for encountering difficulties in the first place.

Q: In both presentations, there was a suggestion that diagnosis of neurodivergence is important for treatment of mental health disorders and eating disorders, however pricing is a barrier as it's not covered by OHIP, even if a doctor is prescribing diagnosis. Do you know if this is being looked into?

A: A comprehensive diagnosis is costly and can be a barrier for many people. However, a general practitioner can diagnose ADHD and Autism and refer to specialists for consultation that OHIP would cover. If the individual has an insurance plan, most insurance plans cover some of the costs of a psychological assessment. Some psychologists provide sliding scale services, an option to explore if someone is interested in a comprehensive diagnostic assessment.

You are likely already aware of the challenges of finding a family physician, but here is a resource for individuals seeking a family doctor in Ontario: **Health Care Connect**. Also, here is a resource for **Community Health Centre services** across Ontario.

Q: Curious about how to navigate exec function challenges, RSD, and hypersensitivity when doing CBT/DBT… 'thought correcting' approaches.

A: Great question. Addressing such challenges is certainly not one-size-fits-all. No matter our mental status, working through CBT and DBT can feel invalidating. I think it's important to validate each person's unique experience and gauge what resonates for them as far as tools and techniques from CBT and DBT. Acknowledging that humans are somewhat wired for cognitive biases is an important piece, which could, in the case of neurodivergent individuals, be reinforced by the challenges you mentioned. "Thought correcting" exercises could potentially boost the confidence of individuals who have internalized messages about their worth or competence that are inaccurate and insensitive.

Q: Not sure if this will be discussed, or if this is the place to ask this questions.
How can one manage the difficulties of taking ADHD medication that causes appetite suppression

when they are already underweight and struggling with AN?

> A: We appreciate your question. Managing medications as an individual with ADHD and AN is indeed challenging and best addressed on a case-by-case basis with a physician or psychiatrist. A dietitian who specializes in eating disorders is also a valuable resource in finding a meal plan that addresses these challenges.

Q: Any thoughts on what to do when someone requires residential/inpatient level care
to support their needs but are not eligible for these servcies becuase they are so structured/medical-model
based treatments that are not neurodirvergent affirming? It feels like such a gap

> A: There is absolutely a gap in neurodivergent-affirming residential/inpatient treatment. It helps if the individual is aware of their needs, such as sensory sensitivities, and how these needs may clash with or be exacerbated in such settings. With planning and multidisciplinary support, it may be possible to co-create a care plan for intensive treatment to meet the needs of a neurodivergent person with an eating disorder.