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# Broadening the Scope: Neurodivergence in Binge-Type Eating Disorders

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### Why broaden the scope?



WILEY

#### REVIEW OPEN ACCESS

#### Autism, ADHD, and Their Traits in Adults With Bulimia Nervosa and Binge Eating Disorder: A Scoping Review

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#### ABSTRACT

**Objective:** This review maps existing literature on the prevalence of autism and ADHD in adult patients with Bulimia Nervosa (BN) and Binge Eating Disorder (BED); patient and stakeholder perspectives on this comorbidity; clinical differences in this population; and potential treatment adaptations or adjunct therapies. This is with the aim to inform future research priorities to improve clinical practice.

Method: As pre-registered, and following PRISMA guidelines, six databases (Embase, MEDLINE via Ovid, PsycINFO, Web of Science, CENTRAL, and Scopus) were searched for studies regarding autism and/or ADHD (diagnosed, probable, or traits) in adult patients with BN or BED. Screening and data extraction were conducted twice independently for each record. Results: Twenty-nine studies were included, with 25,416 participants, mostly women (69.3%). Thirteen prevalence studies suggested autism and ADHD are more common in BN or BED than non-ED populations. One study explored the expert perspectives on autism and ADHD in BED, while 15 studies considered treatment options, mainly medications. Conclusion: This review highlights a need for more research on the experiences, clinical differences, and non-medical treatment options for Autistic/ADHD patients with BN or BED. Findings suggest these conditions commonly co-occur but remain under-explored in terms of patient-centred interventions and clinical outcomes.

#### 1 | Introduction

Neurodevelopmental conditions, such as autism spectrum disorder (autism) and attention-deficit/hyperactivity disorder (ADHD), may be more prevalent among individuals with eating disorders (EDs) than in the general population (Nickel et al. 2019; Parsons 2023). This comorbidity presents unique challenges in the clinical presentation, diagnosis, and treatment of EDs in these individuals (Tchanturia 2022). However, research has predominantly focused on autism and anorexia nervosa (AN), with limited



#### Prevalence

Autism

- Not many large, good quality studies
- But in most studies, people with BN & BED had higher levels of autistic traits than those without EDs

#### ADHD

- 15% of people with BN & 10% of people with BED have ADHD, compared to 6% in the general population
- ADHD traits are more common in people with BN & BED than in AN-R
- ADHD traits may slightly decrease in people with BN or BED who recover

## **Clinical differences**

Autism

 No studies on the differences between Autistic and non-autistic patients with BN/ BED

ADHD

- No studies in BN/ BED, but can turn to the Obesity literature...
- ADHD patients: 

   alexithymia, anxiety, binge eating, bulimia, depression, emotional dysregulation, food addiction, food cravings, problematic alcohol use
- Treatment responses: 

   protocol adherence, treatment outcomes (eating and weight changes)

Makin et al. (2025) Eur Eating Disorder Rev, Nutrients

## Interventions

Autism

No interventions or adaptions developed specifically for BN/ BED patients

ADHD

- Stimulant medications (e.g. MPH, LDX) have been successful in treating ADHD patients with BN & BED
- Brain wave entrainment techniques have also been piloted, showing preliminary, partial success
- No psychotherapies or other adaptions have been assessed

Makin et al. (2025) Eur Eating Disorder Rev

## Lived experience perspectives



#### We're aiming to rectify this...

Makin et al. (2025) Eur Eating Disorder Rev

#### Lived experience perspectives



#### Lived experience perspectives



Uncertainty & ambivalence around neurodivergence

*"actually, it's nice to know that I'm not just a weird <i>person, you know"* -011

*"I don't know because I don't have ADHD. I don't know. Well, I do have ADHD, but I don't know."-*009

*"I know that it might be like a chicken & egg situation,* [...] as in like it might just be the eating disorder"-003

BN as a coping response to neurodivergence-related difficulties

*"Sometimes* **my brain is so chaotic** that the **only thing that stops it** for even a little while is **eating**" – 006

*"I usually try to binge foods that are like big chunks that I can swallow big, like large chunks, so that they kind of fill my throat when they go down so that is the sensation that I do enjoy, which is why, probably part of the vomiting as well then kind of that it feels good." – 005* 

"It comes when I'm **bored** or when I have to do something that **I don't want to do** because obviously then after vomiting, **it usually gives me like an adrenaline spike**. So then **I'm able to do the things** that I didn't want to do because I go into kind of like an active mode afterwards." -005

BN as a coping response to neurodivergence-related difficulties

*"I think for* **ADHD** *people there's a very huge connection to* **addictive behaviours** and **food** has that kind of quality or role in their lives because sometimes **when my cravings take over**, there's literally nothing, **nothing I wouldn't try, that would have changed it**." – 005

*"I suddenly encountered a world where it wasn't OK to be me with my differences.* So then that's kind of when all my mental health problems and stuff started, and **my eating disorder started**" – 001

Importance of **neuro-informed**, **personalized**, & structured care

"just having an **awareness** of, I think especially with ADHD, because [...] it's so **different** in so many **people**" -007

*"being responsive towards the person in front of you & like adapting things & communicating in a way that the person can receive"-001* 

*"I think there's definitely, at least for me, like a need for structure"* -003

# Summary of findings so far



# What's the long-term goal?

Develop an intervention which:

- Supports positive neurodivergent identity development
- Educates on autism & ADHD links to binge-type EDs
- Targets emotional overwhelm, sensory-seeking, obsessions, impulsivity, rigidity, and social disconnect
- Is structured & routine-based but with optional adaptions





01

Improve early identification of Autism & ADHD 02

Increase treatment efficacy & adherence 03

Increase satisfaction & engagement from patients & carers 04

Increase clinician confidence

### What next?

• Assess Autism prevalence & clinical associations in BN

- & ADHD prevalence & clinical associations in BN
  - Interview Autistic & ADHD patients with BED
- & ADHD adults from the community about their eating

• Interview Clinicians working with patients with BN or BED

• Develop resources from interviews & consult stakeholders

## **Research Participants Wanted!**

#### Are you Autistic or ADHD?

Have you experienced Binge Eating Disorder?



- 🔽 Must be 18+
- Diagnosed or self-identified Autism or ADHD
- Previously or currently diagnosed with Binge Eating Disorder
- 1-hour confidential interview (online or messaging)
- £25 thank you voucher

Help shape better support and treatment!

Interested? Contact lauren.makin@kcl.ac.uk

## Conclusion

Expanding the PEACE Pathway is crucial to meet the needs of Autistic & ADHD individuals with BN & BED

Comprehensive care & tailored interventions can bridge gaps & improve outcomes Collaboration with clinicians & patients will be key to driving this project forward







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#### Main collaborators





Prof Valeria Mondelli





Elisa Zesch

Adia Meyer

Prof Kate Tchanturia

### References

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