







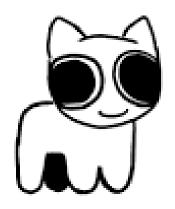


Broadening the Scope: Neurodivergence in Binge-Type Eating Disorders

Lauren Makin, NIHR Maudsley BRC PhD Student
King's College London
Supervised by Prof's Kate Tchanturia & Valeria Mondelli



Why broaden the scope?







PEACE pathway currently does not cater to ADHD

Autism is underresearched in Binge-type EDs

Aiming to plug this gap





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

Lauren Makin^{1,2,3} [5] | Elisa Zesch⁴ | Adia Meyer⁴ | Valeria Mondelli^{1,2} | Kate Tchanturia^{1,3,4,5} [6]

¹Department of Psychological Medicine, Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK | ²National Institute for Health and Care Research (NIHR) Maudsley Biomedical Research Centre at South London and Maudsley NHS Foundation Trust, King's College London, London, UK | ³Department of Psychological Medicine, Centre for Research in Eating and Weight Disorders (CREW), King's College London, London, UK | ⁴Department of Eating Disorders, South London and Maudsley NHS Foundation Trust, London, UK | ⁵Clinical Psychology, Ilia State University, Tbilisi, Georgia

Correspondence: Lauren Makin (Lauren.makin@kcl.ac.uk)

Received: 8 November 2024 | Revised: 15 January 2025 | Accepted: 16 January 2025

Handling Editor: Alessio Maria Monteleone

Funding: This research is funded by the National Institute for Health and Care Research (NIHR) Maudsley Biomedical Research Center (BRC). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care. LM also received funding from the Psychiatrist Research Trust.

Keywords: binge-eating | comorbidity | eating disorders | neurodiversity | prevalence

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

Clinical differences

Interventions

Lived experiences

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)

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

Lived experience perspectives

Autism

 No studies looking at the experiences & perspectives of patients with BN or BED, their carers, or their clinicians

ADHD

No studies

We're aiming to rectify this...

Lived experience perspectives

We interviewed 12 SLaM patients

& 1 volunteer participant



Adults (18+)

Autism/ADHD (self-identified or ASRS>3/AQ-10>5)

Lived experience of BN & treatment



Lived experience perspectives

n=13

Ave age = 29 years

85% women, 77% white, 69% heterosexual

100% ADHD, 46% autism

Uncertainty & ambivalence around neurodivergence

"actually, it's nice to know that I'm not just a weird 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

Prevalence

Autism & ADHD are overrepresented

Lived experience

Ambivalence & uncertainty about their neurodivergence & link to ED

Causal mechanisms

• Emotional overwhelm, irregular eating, sensory-seeking, obsessive thinking, impulsivity, social disconnect, & minority stress

Treatment

- Poorer adherence and outcomes
- Neuro-informed, personalised, & structured ED care
- Stimulants or brain wave entrainment

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

Why?

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





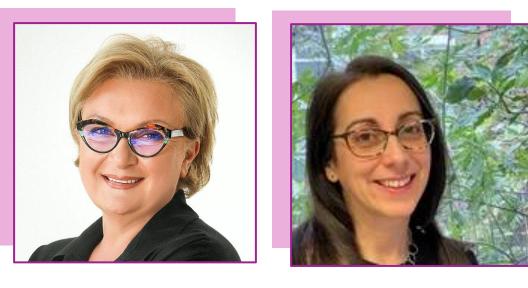








Supervisors



Prof Kate Tchanturia

Prof Valeria Mondelli

Main collaborators







Adia Meyer

References

Makin, L., Zesch, E., Meyer, A., Mondelli, V., & Tchanturia, K. (2025a). Autism, ADHD, and Their Traits in Adults With Bulimia Nervosa and Binge Eating Disorder: A Scoping Review. *European Eating Disorders Review*.

Makin, L., Meyer, A., Zesch, E., Mondelli, V., & Tchanturia, K. (2025b). Autism, ADHD, and Their Traits in Adults with Obesity: A Scoping Review. *Nutrients*, 17(5), 787.

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

