Exploring gender and age differences in the relationship between ADHD domains and disordered eating in a normative adult population.

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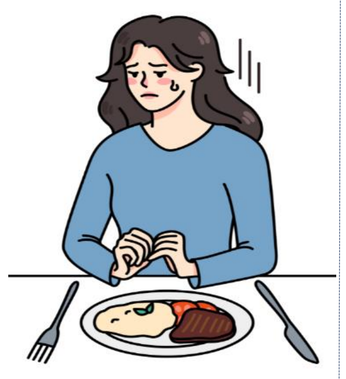
1. Background and aims



- ADHD affects 2-7% of adults globally, with males being diagnosed up to five times more often than females (NICE, 2023).
- Recent evidence suggests a link between ADHD and eating disorders (EDs), with lifetime prevalence rates of approximately 8.4% for women and 2.2% for men (Galmiche, 2019).
- Additionally approximately 20% of children with ADHD later develop EDs, with binge eating disorder (BED) and bulimia nervosa (BN) being the most common (Achermann et al., 2022; Ravi & Khan, 2020).
- Individuals with ADHD are also more likely to exhibit a range of unhealthy eating behaviours, such as overeating to improve mood, potentially leading to other health related problems such as obesity (Kaisari et al., 2017). These behaviours are thought to stem from the attentional and organisational difficulties associated with ADHD, particularly in women (Young et al., 2020).
- Despite these links, research on ADHD and EDs in undiagnosed adults is limited. This study aims to address this gap by examining adults at risk of disordered eating due to ADHD, potentially improving the diagnosis process and therapeutic interventions.

This study aims (1) to investigate the relationship between symptoms of ADHD and disordered eating behaviours among non-diagnosed individuals, and (2) to explore potential gender and age differences in these relationships.

2. Methods

Participants

- Number of recruited participants = 82 (46 females, 36 males
- Mean age = 33 years (S.D. 8.99)

Procedure

Participants first answered demographic questions about their gender, age, weight, and height (for BMI calculations) and completed the following questionnaires:

- ADHD Self-Report Scale (ASRS) (Kessler et al., 2005),
- Eating Disorder Inventory-2 (EDI) (Garner, 1991),
- Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983),
- Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965).

Participants also completed the Stroop Task, which was embedded into Qualtrics to measure their sustained attention in addition to the ADHD scale.

This is an ongoing research study, so if you would like to take part, please scan this QR code.

3. Analysis and Results

- Due to some missing data, analysis was conducted for 75 participants (45 females, 30 males). Overall scores for all scales and subscales were calculated.
- A two-way ANCOVA was conducted with ADHD symptomatology, age and gender serving as the IVs; EDI as the DV. IV grouping:

  - 2 (high ADHD symptoms vs low ADHD symptoms) x (young adult vs older adult)

  - 2 (high ADHD symptoms vs low ADHD symptoms) x (male vs females).

  HADS and RSES served as potential confounds and so were controlled for.

- **Aim (1)** - Pearson's correlations examined the relationship between Total ASRS and Total EDI scores. A significant positive correlation was revealed $r(75)= 0.57$, $p<.001$. Indicating the higher the ADHD the higher the disordered eating.
- **Aim (2)** – There was a statistically significant main effect of ADHD on EDI $F(1, 75) =6.109$, $p=0.016$ indicating that 'high ADHD' scored significantly higher than 'low ADHD'. No main effect of age or gender was revealed. However, HADS was found to be a significant confound, $F(1, 75) =4.496$, $p=0.038$ on EDI. Sixty-seven per cent of the participants scored 'abnormal' on anxiety and depression.

4. Discussion

The original hypothesis was supported, showing that 'high ADHD' was linked with higher tendencies towards disordered eating. Our study did not show differences in age or gender, however, the study is on-going and aiming to recruit a larger sample. There will be a need to screen for co-morbid anxiety and depression since this was highlighted as a confound. It was also found that the older the participants had higher ASRS scores, which will need to be further examined.

Scan this QR code for references