

# Details

**Session title:** Poster session 1 – all topics

**Track:** In-person

**Presentation number:** PS01-0168

## Title:

Mind wandering as a mediator in the link between ADHD and creativity: evidence from two independent samples

## Biography

I am doing a PhD in the Radboud University now. My research focus on the correlations between ADHD and creativity.

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**Introduction:** Creativity has been identified as a strength in adults with ADHD, particularly regarding divergent thinking and creative achievement. Mind wandering, associated with both ADHD and creativity, may mediate this link. However, its role, particularly the distinct contributions of deliberate and spontaneous mind wandering, remains unexplored. Additionally, as both ADHD and mind wandering have been linked to functional impairments, mind wandering may also mediate the association between ADHD and functional impairments, which is another under-researched area. This study examined whether mind wandering mediates the relationship between ADHD trait dimensions (inattentiveness and hyperactivity–impulsivity) and creativity (divergent thinking and creative achievement) across two independent samples.

It also explored whether mind wandering mediates the relationship between ADHD trait dimensions and functional impairments in one of the samples.

**Methods:** Study 1 involved 347 participants ( $n_{\text{case}} = 275$ ,  $n_{\text{control}} = 72$ ) from the test battery of the ECNP network *ADHD across the lifespan working group*. ADHD traits, mind wandering, and creative achievement were self-reported through the Adult ADHD Self-Report Scale-V1.1 (ASRS), Mind Excessively Wandering Scale, and Creative Achievement Questionnaire (CAQ). Study 2 involved 403 UK participants recruited via Prolific. Measures included ADHD traits (ASRS), mind wandering (Deliberate and Spontaneous Mind Wandering scales), divergent thinking (Alternate Uses Task: fluency, flexibility, originality), creative achievement (CAQ), and functional impairments (Criterion C of the Diagnostic Interview for ADHD in Adults). Correlation and regression analyses were conducted to examine the associations between ADHD traits, mind wandering, creativity, and functional impairments. Mediation analyses were conducted to explore the role of mind wandering in the link between ADHD traits and creativity and the link between ADHD traits and functional impairments.

**Results:** Both inattentiveness and hyperactivity-impulsivity positively correlated with creative achievement and mind wandering (both studies), but showed no significant correlations with divergent thinking (Study 2). Mind wandering, particularly deliberate mind wandering, positively correlated with divergent thinking (Study 2) and creative achievement (both studies). Functional impairments positively correlated with inattentiveness and spontaneous mind wandering (Study 2). Mediation analyses showed that mind wandering (both datasets), particularly deliberate mind wandering (Study 2), mediated the relationship between both inattentiveness and hyperactivity-impulsivity and both divergent thinking and creative achievement. Mediation analyses also showed that spontaneous mind wandering mediated the relationship between both inattentiveness and hyperactivity-impulsivity and functional impairments.

**Conclusion:** Our results confirm that ADHD traits are associated with creativity, with mind wandering—particularly deliberate mind wandering—emerging as a mediating factor. The consistency of these findings across two relatively large, independent samples and across different mind wandering measures demonstrates the robustness of our results and highlights the potential of mind wandering to explain the ADHD-creativity link. We also found that ADHD traits are associated with functional impairments, mediated only by spontaneous mind wandering. It indicates that different subtypes of mind wandering may influence individuals with ADHD in different ways. By exploring factors linking ADHD with both creativity and functional impairments, our study may open new avenues for fostering strengths and mitigating functional impairments in ADHD.

**References**  
Conflict of interest:

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**Topics:**

Neurodevelopmental conditions

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