

ADHD may have a surprising creative advantage

The same wandering attention that can make ADHD difficult may also be a hidden engine for creativity.

The scattered attention associated with ADHD may have an unexpected upside: it can also encourage creative thinking. Credit: Shutterstock

Published in *iScience*, the research explores the neurological overlap between attention and creativity. It suggests that some mental processes linked to ADHD, including defocused attention, may also support creative thinking when they are directed in productive ways. The findings point to the possibility that creative activities such as art, music, and dance could eventually serve as non-pharmacological interventions for the nearly 8% of children worldwide affected by ADHD.

Rethinking ADHD Beyond Deficits

The study, co-authored by researchers from several prestigious French research institutions, reflects a broader effort to reconsider how ADHD is understood.

"There's a tendency to view attention-related conditions like ADHD purely through the lens of deficit: what is wrong, what is missing, or what needs to be fixed?" said Dr. Khalil.

Although ADHD is commonly approached as a disorder defined by difficulties, Khalil said emerging research shows that attention and creativity rely on some of the same neural networks.

"Neurodivergent attention patterns, then, are not merely problems. They can open pathways to powerful creative thinking when directed appropriately," she said.

The work, titled *Attention Unleashed: creative therapy for thoughtful transformation*, brings together findings from multiple research fields to show how the brain systems involved in attention also overlap with those involved in

creativity.

The researchers highlight free-associative thought as one example of this connection. The ability to let ideas move in unexpected directions can contribute to creative insights, but similar patterns are also associated with distractibility, mind-wandering, and other behaviors frequently seen in ADHD.

ADHD and the Brain's Wider Spotlight

Khalil described the relationship using the image of a spotlight.

"Think of attention like a spotlight. Most people are able to focus their beam on one thing. ADHD brains have a wider spotlight, taking in more information at once. This condition can make routine tasks that require focus challenging. However, this broader view, or 'defocused attention', also encourages exploratory thinking and new idea combinations, which fuel creativity."

In other words, a broader attentional field can create difficulties when a task demands concentration on a single goal. But that same tendency to absorb more information and move among different ideas may encourage exploration and make it easier to form unexpected connections.

The Healing Power of Creativity

Khalil and her colleagues believe this connection could have practical implications for ADHD and related disorders.

Creative activities including art, music, dance, writing, gaming, and others may give people with ADHD structured ways to direct and explore defocused attention. The researchers also suggest that engaging in creative work could help strengthen neural networks involved in controlling attention, potentially reshaping patterns associated with impulsivity and hyperactivity.

"Authentic creative expression is so much more than a pleasant distraction," continued Dr. Khalil. "It is engaging the same neural circuits involved in attention control, essentially providing a workout for the brain. For a child with ADHD, the experience of getting 'lost in the moment' when creating art or playing music may actually be strengthening their ability to focus by working with their natural cognitive style instead of against it."

More Research Is Still Needed

Despite the potential, the researchers emphasize that scientists still do not fully

understand the relationship between creativity and attention.

To help close those gaps, the study proposes a framework for future research. Its recommendations include greater interdisciplinary collaboration, new methodological approaches, and longitudinal studies that can track changes over time.

Khalil argues that any major shift in how ADHD is treated will require a broad research effort bringing together neuroscientists, art therapists, clinicians, and other specialists. Building that interdisciplinary foundation could help researchers determine when creative approaches are most useful and how they might eventually complement existing ADHD interventions.

