

ADHD May Stop Thoughts in Their Tracks

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People with ADHD are known to have trouble staying on task, their attention drifting elsewhere. [Research](#) published in *Psychological Science*, however, suggests that their minds may not be wandering at all, but instead going...blank.

A wandering mind maintains a continuous train of thought, such as a daydream, that is simply unrelated to the task at hand. While any child can become distracted in this way, the study found that the minds of children with untreated ADHD were more likely to simply go blank, leaving them with no reportable mental content. The findings also showed that these children experienced similar levels of environmental distraction as their peers.

While these findings conflict with previous studies that have documented increased mind-wandering among individuals with ADHD, the authors of the new study note that participants in previous studies typically did not have the option to report instances of mind blanking. This has led the authors to suggest that ADHD may in fact lead to mind blanking at the expense of on-task focus and self-generated thoughts.

Study co-author Charlotte Van den Driessche, Paris Sciences et Lettres Research University, said that

this research is, to her knowledge, the first to use experience sampling rather than external behavioral cues to study the mental state of young ADHD patients. Van den Driessche cautioned that while these findings do not yet have direct implications for the treatment or diagnosis of ADHD, they could lead to better outcomes for children with the disorder.

“What I would say, as a child psychiatrist, is that our empirical demonstration of the stream of thought of children with ADHD enriches our understanding of the disorder beyond its well-known behavioral and cognitive components. And a better understanding of a disorder always improves empathy in the caregivers and therefore the global support of the patient,” she said.

The study consisted of 80 children ages 6 to 12 years old – 20 were untreated for ADHD, 20 were treated with methylphenidate for ADHD, 20 were diagnosed with other psychiatric conditions, and 20 showed neurotypical development. Van den Driessche and colleagues recruited the children through École Normale Supérieure University and the pediatric psychiatry unit of Hôpital Robert-Debré in France. Participants completed a series of intentionally unengaging tasks that were randomly interrupted by eight thought probes prompting them to orally describe their thoughts, select a drawing that represented their mental state, and categorize their thoughts into one of five options: on-task focus, mind wandering, distraction, task-related interference, and mind blanking.

Children treated with methylphenidate reported the same level of mind blanking as did those without ADHD, but only their rate of mind wandering fell levels. This doesn’t mean that methylphenidate is unnecessary or ineffective for these patients, said Van den Driessche – rather, it suggests that mind wandering and on-task focus stem from common mechanisms that share executive resources.

“A deficit in executive functions entails shorter episodes of thoughts resulting in a chaotic flow of consciousness that is either more difficult to report verbally, or that contains empty, non-reportable ‘gaps,” she explained. “Our interpretation of the paradoxical finding that, in the context of our dull task, methylphenidate increases mind wandering is that methylphenidate fosters sustained train of thoughts whatever their origin.”

A second study of nonclinical adults, 15 out of 40 of whom were assigned to the ADHD group based on self-reported symptoms, found a similar decrease in mind-wandering and on-task focus in favor of mind-blanking, suggesting that the pattern extends across age groups.

A [recent study](#) on temporal expectation deficits also found that while neurotypical adults generally pause their eye movements in anticipation of a pattern, adults with ADHD don’t show this kind of pause. The finding supports the current understanding of ADHD as impairing attention and anticipation processes, but the researchers also found that individual level of focus was a better predictor of the temporal expectation pause than whether or not someone was diagnosed with ADHD was.

Together, these studies illuminate the range of neuropsychological function among people with ADHD.

Further study is still needed on whether mind-blanking in children and adults with ADHD is a result of an executive function deficit leading to a truly blank state or a metacognition deficit that leads to the perception of blankness after a thought has occurred, according to the study authors. The cognitive consequences of mind blanking verses mind wandering also warrants additional research, Van de

Driessche added.

References

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