



The Attention “Deficit” Myth

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NO DOUBT YOU’VE HEARD SOMEONE SAY, “My son can’t possibly have ADHD—he can play video games for hours straight!” The myth that having ADHD means a child cannot focus on anything remains one of the most persistent.

In fact, children with ADHD are often able to focus on activities that are of interest to them for long periods of time, sometimes even becoming overly focused on, and having difficulty disengaging from, these sorts of activities.

What is the best response to this myth?

The term *attention deficit hyperactivity disorder* can be a bit misleading. It implies that children with ADHD have a deficit in their ability to pay attention, when the deficit associated with the condition appears, instead, to be in *regulating* and *allocating* attention. In fact, children with ADHD often have trouble regulating themselves in a few different domains, including attention, behavior, and emotion.

Children with ADHD often have particular difficulty with at-

tention and focus when completing non-preferred activities, such as classroom instruction. Of course, many people, both children and adults, have more difficulty with focus when they are doing something that they don’t enjoy (for example, listening to a classroom lecture, cleaning, paying bills), but have less difficulty when they’re engaged in a task that they do enjoy (such as watching a movie, playing a game with friends, doing a hobby). Children with ADHD, though, seem to have much greater difficulty allocating their attention to less preferred activities, as compared with children who do not have ADHD. When engaged in preferred activities, on the other hand, children with ADHD often demonstrate much better attention and engagement.

A study published in 2018 used an experimental manipulation to demonstrate the difference in attention allocation between preferred and non-preferred activities for children with ADHD (see SA Orban and colleagues, listed below). In this study of boys ages 8-12, researchers asked the participants to watch two ten-



minute videos on separate days. Thirty-two of the boys had ADHD, and thirty did not.

Everything was the same about the way the videos were administered—same audio volume, same display size. The participants even watched them in the same room. One video contained classroom instruction in age-appropriate math content; the other video showed an action scene from *Star Wars Episode I*. The children were videotaped while they watched each video, and these tapes were viewed and coded by two trained observers, neither of whom knew whether a given child was or was not diagnosed with ADHD. The observers coded each child's behavior as either on-task or off-task continuously for the ten-minute duration of the videos they watched; their codes agreed 96% of the time. From these codes, the researchers derived the proportion of time that each child was on-task, paying attention to the video that they were supposed to be watching.

In comparing the children with ADHD to those who did not, the researchers found that both groups paid close attention to the *Star Wars* video. The boys paid attention 99% of the time, on average; no differences between the two groups were found. On the instructional video, however, boys with ADHD paid attention only 84% of the time, while boys without ADHD paid attention 93% of the time—a statistically significant difference. This study offers a clear indication of the extent to which interest and engagement

influences attention differentially for children with ADHD. **A**



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REFERENCES AND ADDITIONAL READING

- Graziano PA, & Garcia A. (2016). Attention-deficit hyperactivity disorder and children's emotion dysregulation: A meta-analysis. *Clinical Psychology Review*, 46, 106-123.
- Kofler MJ, Rapport MD, Bolden J, Sarver DE, & Raiker JS. (2010). ADHD and working memory: The impact of central executive deficits and exceeding storage/rehearsal capacity on observed inattentive behavior. *Journal of Abnormal Child Psychology*, 38(2), 149-161.
- Musser ED, Backs RW, Schmitt CF, Ablow JC, Measelle JR, & Nigg JT. (2011). Emotion regulation via the autonomic nervous system in children with attention-deficit/hyperactivity disorder (ADHD). *Journal of Abnormal Child Psychology*, 39(6), 841-852.
- Nigg JT. (2017). Annual research review: On the relations between self-regulation, executive function, cognitive control, effortful control, impulsivity, risk taking, and response inhibition in developmental psychopathology. *Journal of Child Psychology & Psychiatry*, 58(4), 361-383.
- Orban SA, Rapport MD, Friedman LM, Eckrich SJ, & Kofler MJ. (2018). Inattentive behavior in boys with ADHD during classroom instruction: The mediating role of working memory processes. *Journal of Abnormal Child Psychology*, 46(4), 713-727.
- Rapport MD, Bolden J, Kofler MJ, Sarver DE, Raiker JS, & Alderson RM. (2009). Hyperactivity in boys with attention-deficit/hyperactivity disorder (ADHD): A ubiquitous core symptom or manifestation of working memory deficit. *Journal of Abnormal Child Psychology*, 37, 521-534.
- Shaw P, Stringaris A, Nigg J, & Leibenluft E. (2014). Emotion dysregulation in attention deficit hyperactivity disorder. *American Journal of Psychiatry*, 171(3), 276-293.
- Shiels K, & Hawk LW. (2010). Self-regulation in ADHD: The role of error processing. *Clinical Psychology Review*, 30(8), 951-961.