Diminished Motivation Is Improved by Amphetamine Treatment

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(see pages 6898–6908)

Research suggests that a main symptom of attention-deficit/hyperactivity disorder (ADHD) is a disinclination to exert effort, even in the pursuit of a reward. However, the extent to which those with ADHD endure this impairment is not well known. Furthermore, whether the primary treatment for ADHD, amphetamine-based pharmaceuticals, improves diminished motivation is unknown. Chong et al. measured the amount of cognitive and physical effort that 20 individuals with ADHD on and off medication were willing to exert in pursuit of a reward and compared it with that of 24 people in a control group. They found that untreated individuals with ADHD had diminished motivation compared to control subjects, but amphetamine-based treatment increased the amount of cognitive and physical effort those with ADHD were willing to exert. Notably, treatment was so effective that most individuals with ADHD were motivated to a similar extent as those in the control group. These findings confirm that motivational deficit is a core trait of ADHD and demonstrate that it may be effectively targeted by the primary approved treatment for ADHD. Furthermore, this work may inform future investigations into whether amphetamine-based treatments are effective for other disorders in which diminished motivation is a symptom.

This Week in The Journal was written by Paige McKeon

https://doi.org/10.1523/JNEUROSCI.twij.43.41.2023