Planning to make economic decisions in the future, but choosing impulsively now: are preference reversals related to symptoms of ADHD and depression?

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Abstract

A preference for smaller immediate rewards over larger delayed rewards (delay discounting, DD) is common in attention deficit hyperactivity disorder (ADHD), but rarely investigated in depression. Whether this preference is due to sensitivity to reward immediacy or delay aversion remains unclear. To investigate this, we examined whether ADHD and depressive symptoms are associated with preference reversals: a switch from smaller immediate rewards to larger delayed rewards when smaller rewards are also delayed. We also examined whether these symptoms differentially affect DD of losses. In Study 1 undergraduates completed a questionnaire about ADHD symptoms, and performed a hypothetical DD task. In the NOW condition, participants were presented with choices between a small reward available today and a large reward available after one year. In the FUTURE condition both rewards were delayed with +1 year. In Study 2 undergraduates completed questionnaires about ADHD and depressive symptoms and performed a DD task with gains and losses. Participants showed preference reversals in both studies and tasks. Losses were less steeply discounted than gains. ADHD and depressive symptoms did not influence these effects. Depressive symptoms, but not ADHD symptoms, were associated with less economic choices in general. These findings suggest that impulsive choice in depression is not explained by sensitivity to reward immediacy.