Associations of attention-deficit hyperactivity disorder symptom dimensions with smoking deprivation effects in adult smokers.

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Abstract
Identifying relations of attention deficit hyperactivity disorder (ADHD) symptom dimensions to individual facets of the tobacco withdrawal syndrome could elucidate the mechanisms linking ADHD and regular smoking. This study examined the unique relations of inattention (IN) and hyperactivity-impulsivity (HI) symptom dimensions of ADHD to a variety of tobacco withdrawal symptoms. One hundred thirty-two community-dwelling adult smokers recruited without regard to ADHD status completed a self-report measure of ADHD symptoms experienced over the past 6 months at a baseline visit. At two subsequent experimental sessions (one following overnight tobacco deprivation and one nondeprived; order counterbalanced), participants completed measures of tobacco withdrawal symptoms, mood, and desire to smoke. Preliminary analyses showed that higher levels of IN and HI symptoms were both associated with higher levels of negative affect and concentration difficulties during nondeprived ("baseline") states (ps < .01). Over and above nondeprived ratings, higher levels of HI symptoms were associated with larger deprivation-induced increases in negative affect, concentration problems, and desire to smoke, particularly for negative affect relief, during deprived states (ps < .01). ADHD symptoms, particularly HI symptoms, are associated with more severe exacerbations in abstinence-induced withdrawal symptoms, which could be an important mechanism of ADHD-smoking comorbidity. These findings suggest the need for clinical studies examining the role of these unique and potentially more severe withdrawal profiles experienced by smokers with high-levels of ADHD symptoms in smoking reinstatement and cessation outcomes.