

ATTENTION-DEFICIT HYPERACTIVITY DISORDER AND EXPOSURE TO NATURE IN COLLEGE STUDENTS

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ABSTRACT

Attention-deficit hyperactivity disorder (ADHD) is one of the most prevalent behavioral disorders in the U.S., and has significant cognitive and behavioral symptoms (e.g., challenges in focus, memory, and sustained attention). Although ADHD is traditionally associated with childhood, symptoms can persist into young adulthood and cause profound academic and professional difficulties. A growing body of research explores the connection between nature exposure and cognitive functioning as an alternative to traditional, largely pharmaceutical treatment of ADHD. According to Kaplan's Attention Restoration Theory, because natural environments are inherently stimulating and therefore restorative, they are key to the recovery of cognitive mechanisms that enable sustained attention. As no major study to date has tested this theory in young adults diagnosed with ADHD specifically, this study explored the ability of natural environments to restore attentional capacity of college students with ADHD, as measured by cognitive performance, self-reported symptoms, and perceptions of restoration before and after a 20-minute walk in either a natural or urban area. Both the cognitive performance and perceived symptoms of the nature group improved following the walk, although only one of three measures of cognition showed significant improvement over the urban group. In addition, the nature group perceived their walk environment to be significantly more restorative than the urban group. These findings support previous research which suggests the importance of natural environments as sources of cognitive restoration for a population with existing attentional deficits.