# Nonmedical prescription stimulant users experience subjective but not objective impairments in attention and impulsivity.

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# BACKGROUND AND OBJECTIVES:

Nonmedical prescription stimulant use is frequently reported by college students to improve academic performance, yet it is unknown whether users truly experience cognitive impairments that may drive use. This research compared students with at least one report of nonmedical prescription stimulant use and nonusers on both self-report and objective measures of inattention and impulsivity.

### METHODS:

Two studies examined inattention (N = 155) and impulsivity (N = 115) among college students. Participants completed self-report questionnaires and cognitive tests, including Digit Span, the Paced Auditory Serial Addition Test, and a Continuous Performance Test to assess inattention, and the Balloon Analogue Risk Task and the Stop Signal Task to assess risk-taking and impulsivity.

## **RESULTS:**

Self-reports of inattention and impulsive symptoms were significantly higher among users, controlling for gender, GPA, self-reported ADHD, alcohol use, and drug use; however, no objective differences were found.

### DISCUSSION AND CONCLUSIONS:

Nonmedical prescription stimulant users may engage in use to overcome perceived deficits in cognitive abilities despite lack of objective evidence.

# SCIENTIFIC SIGNIFICANCE:

Understanding discrepancies in objective performance and subjective reports may aid in the development of effective interventions for nonmedical prescription stimulant use.