# RELATIONSHIP BETWEEN REPETITIVE BEHAVIORS AND EXECUTIVE FUNCTION IN HIGH FUNCTIONING CHILDREN WITH AUTISM

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## ABSTRACT

It has been theorized that impairments in executive function may contribute to the repetitive behavior symptomatology associated with ASD. This study further elucidates the nature of the relationship between ASD-related impairments in executive function and the manifestation of repetitive behavior. Specifically, we evaluated the hypothesis that the relationship between repetitive behaviors and task performance would be more evident in the presence of multiple executive demands (i.e., inhibitory control & task switching).

22 children (mean age: 14.4 years) with high functioning (IQ > 70) ASD performed an antisaccade task which assessed inhibitory control and cognitive flexibility concurrently and individually. The Repetitive Behavior Scale (RBS), a parent questionnaire that addresses the occurrence of a wide range of repetitive behaviors within the past month, was used to assess repetitive behavior symptomotology for this study.

Hierarchical regression revealed significant relationships between repetitive behaviors and performance on conditions of the eye movement task which placed demands on multiple executive abilities. Conditions that required only a single executive ability were not significantly related to the RBS. The relationship between repetitive behavior and executive dysfunction appears to depend critically upon the introduction of multiple executive demands. Within this context however, increased task difficulty may also play a role in strengthening this relationship. Investigating this relationship is one future direction of this line of research.