
Is inhibition impaired in ADHD adults?

Isabel Suarez^{*†1}, Boris Burle¹, Thierry Hasbroucq¹, Francisco Lopera , David Pineda ,
and Laurence Casini^{‡1}

¹Laboratoire de neurobiologie de la cognition (LNC) – CNRS : UMR6155, Université de Provence -
Aix-Marseille I – Pole 3 C Case C 3 Place Victor Hugo 13331 Marseille Cedex 3, France

Abstract

Several theoretical models suggest that the core deficit in children with attention deficit hyperactivity disorder (ADHD) relies in response inhibition. However, research about the persistence of this deficit in adulthood is lacking.

This has been studied by comparing performances obtained by ADHD adults and control subjects in a Simon reaction time (RT) task. The inhibition of inappropriate responses elicited by irrelevant information was evaluated through 1/the analysis of RT distribution (particularly the slope of the delta plots) and 2/ the analysis of partial EMG (electromyographic) errors.

The analysis of mean RT indicated a larger Simon effect in adults with ADHD suggesting a higher sensitivity of these patients to the automatic activation produced by the non relevant stimulus. But the analysis of the RT distribution as well as the one of the partial EMG errors revealed that the ability to suppress the automatic response remains intact in these patients.

^{*}Speaker

[†]Corresponding author: miss.suarez@gmail.com

[‡]Corresponding author: laurence.casini@univ-provence.fr