Reviewer’s report

Title: Clinical symptoms and performance on the continuous performance test in children with attention deficit hyperactivity disorder between subtypes: a natural follow-up study for 6 months

Version: 1 Date: 5 January 2011

Reviewer: Maggie Toplak

Reviewer’s report:

Reviewer’s report on “Clinical symptoms and performance on the Continuous Performance Test in children with ADHD between subtypes: A natural follow-up study for 6 months.

This is an interesting and relevant study to the field of ADHD. The authors examined

Major Compulsory Revisions

1. A major concern is with respect to what is being concluded in this study. The improvement reported in the children with ADHD seems to be attributed to time on medication, as opposed to just medication. Time and medication are conflated in the analyses. Time 1 (baseline) has no medication, whereas the subsequent times have medication. Are the significant effects only from Time 1 to Time 2, or from Times 2, 3, and 4? This is currently unclear in the analyses. Are the effects attributable to time or medication?

2. The fact that NOT a double-blind methodology was used brings into question the meaning of the parent report measures. There was also significant attrition across timepoints. These are major limitations of this study. This may not be revisable, but are noted here.

3. Given that medication was the main treatment in this study, more precise and accurate information should be provided regarding the nature of the medication treatment. Did these children use medication all of the time, what was the adherence to the treatment, and what was the average dose/child based on their weight? Also, how much contact did families have with their psychiatrist? Did that influence the analyses?

4. As inattention is a part of the Combined subtype, it would be useful to split the Combined group and Hyperactivity/Impulsivity groups. There were 11 children who met criteria for the Hyperactivity/Impulsivity group.

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'