Reviewer's report

Title: Word Processing differences between dyslexic and control children

Version: Date: 16 August 2005

Reviewer: Alice Mado Proverbio

Reviewer's report:

General

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Major Compulsory Revisions

The authors have undertaken some of the revisions to the article suggested by the referees (particularly in the discussion section), but unfortunately the question of whether dyslexics were able to read at a presentation rate of 1/350 ms remains problematic. The more emblematic piece of data concerns the lack of any difference in the EEG pattern as a function of word-type for dyslexics. In their letter of response the authors state that even if dyslexic children were 2 or 3 times slower than control children in reading, the fast presentation rate would still be adequate. But which evidence have they in support of this statement? The only direct proof that dyslexics could actually manage to (automatically) read at those rates would have been the systematic collection of data on word recognition. These data would reveal whether dyslexics were actually able to read at all, and frankly I do not understand why these precious data were deliberately not considered. The authors agreed that this is a flaw and changed for subsequent studies (testing ADHD and schizophrenic patients) but this circumstance does not help to solve the present problem.

In sum, while the topic of this study remains of great interest, this referee still has considerable concerns that undermine the value of the conclusions drawn by the authors, particularly that “dyslexics are selectively impaired in reading words that required sub-lexical processing”, while no word-type effect was found in the EEG amplitude or frequency for dyslexic children. Hence, the study in its present form does not warrant publication.

P.S. I could not find a discussion of Mechelli’s data on page 34 (!).

What next?: Reject because scientifically unsound

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

'I declare that I have no competing interests'