Reviewer's report

Title: Clinical outcomes of an early intervention program for preschool children with Autism Spectrum Disorder in a group setting

Version: 1 Date: 3 July 2012

Reviewer: Guillermo Montes

Reviewer's report:

Review of “Clinical outcomes of an early intervention program for preschool children with Autism Spectrum Disorder in a group setting”.

This is a well written manuscript that evaluates the ESDM for ASD treatment in group settings. I enjoyed the article but I found three major issues.

The methods were well described in the manuscript, however, the abstract was incomplete because it did not clearly state that this was an uncontrolled study. Without this information a reader may get the erroneous impression that the results reported in the abstract were against some control or comparison group.

The main weakness of the study is its pre-post design. A well-known flaw of the pre-post design is that it is unable to control for maturation. The authors should clearly explain if the DQ is an attempt to control for maturation, and if so why they think it works with an ASD population that may grow following a different pattern than the normative sample of the MSEL. Similarly, why should the pre-post change in the SCQ and the VABS be interpreted as a program effect rather than either maturation or fluctuation?

In table 2 and in the discussion it is unclear how the Dawson et al.’s Cohen’s d’s were calculated. In particular are these d effects a comparison between experimental and control groups calculated from table 1 in Dawson’s article? If so they cannot be compared with the d’s obtained in this article because in one case they represent change over time and in the other they compare with a separate group of individuals, which would make the discussion on effect sizes simply incorrect. A major compulsory revision would be to clearly explain that both sets of d effects are indeed pre-post changes over relatively the same interval of time.

Overall, this is a worthwhile attempt to study an important approach to ASD treatment. We certainly need more cost-effective approaches to treat ASD.

Unfortunately the pre-post methodology weakens the study. At the end of the paper I asked myself whether I am convinced that children with ASD benefit from this program, as the abstract states, and I was not persuaded by the evidence. A major compulsory revision would have to explain very carefully why we would not expect this type of increase in pre-post scores from maturation alone.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

No conflicts.