Reviewer’s report

Title: Broad autism phenotype status of parents of children with autism in China and its correlation with severity of social impairment in probands

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Reviewer: Laurence, Inès, Martine Robel

Reviewer’s report:

This paper is an article whose findings are important to those with closely related research interests.

It confirms previous data concerning the presence of broad autism phenotype in the parents of siblings with autism, in a Chinese sample. The authors have used validated instruments, the BAPQ and the SRS, in large groups of families with an autistic child and typically developing children. They show that parents with autism are significantly more likely to have features of BAP than parents of typically developing children. Moreover, they show that the scores of the mothers are higher than the scores of the fathers in both groups. The BAP scores of the mothers correlate to their children’ SRS scores, with different patterns in the two groups.

Discretionary revisions should be done concerning the discussion. The higher scores described in the mothers for BAPQ in the Chinese population may be discussed and compared to previous works of Baron-Cohen and Robel obtained with different questionnaires. The authors suggest that the correlation observed between scores in mothers and children is related to the fact that mothers are more involved in the education of their children. Could these correlations be related to the fact that the mothers are in fact answering the SRS scale for their children? It would be nice to have the fathers answering the SRS scales as well, for a comparison. Is the BAPQ questionnaire appropriate to capture autistic features in the Chinese culture? As a comparison, it would be nice to see if the same differences between mothers and fathers are seen with the AQ developed by S. Baron-Cohen. What about cultural bias? Could the authors discuss the implications of these results in terms of the respective roles of genetic and environmental factors in the vulnerability to autism?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.