Reviewer’s report

Title: Enhanced cognitive processing by viewing snakes in children with autism spectrum disorder. A preliminary study

Version: 2 Date: 19 Sep 2019

Reviewer: Lai-Sang Iao

Reviewer's report:

Most of my comments have been addressed except that the rationale of the study, explanation of unexpected finding and how the limitations of the study may have affected the findings are still not clear.

Now that it is clear individuals with ASD are more likely to experience anxiety or fear than individuals without ASD but why is it important to know whether more extreme fear responses in ASD would enhance cognitive processing?

Regarding the explanation of unexpected finding, why would using "snake images and flower images as biologically-relevant threatening stimuli and biologically-attracting stimuli" lead to "results in ASD children equivalent to those in TD children"? What is "the question of survival advantage"?

The fact that children with and without ASD were not matched on neither verbal nor non-verbal IQ may suggest that children without ASD have higher verbal IQ or better cognitive processing. Assuming fear response enhanced 1 unit of cognitive processing in children without ASD, fear response may have enhanced 2 units of cognitive processing in children with ASD hence the equivalent findings in the current study. In this sense, fear may have had a higher effect on cognitive processing in ASD - i.e., the original hypothesis of the study. This may be a better explanation of the unexpected finding and a clear speculation on how the limitation might have affected the findings.

I think all of these need to be spelled out clearly so that readers can understand without difficulties. Also, careful proofreading and language corrections are needed.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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