

15 January 2014

RE: Manuscript #2013:10:912:1:0:Review
“Reduced Object Related Negativity Response Indicates Impaired Auditory Scene
Analysis in Adults with Autistic Spectrum Disorder”

Dear Professor Rojas

Thank you for considering our manuscript for publication in PeerJ. Your editorial comments were valuable in helping us to improve the manuscript. The details of the changes we made are below. In addition, we have uploaded a version of the manuscript with all changes highlighted. We hope these changes are sufficient for publication in PeerJ.

Your sincerely



Michael Hautus

Rebuttal:

Editor's comments

1. While I agree that there are problems with the two instruments mentioned in particular (ADOS and ADI) for adult participants, the reviewer's comment is larger than the instrument specifics. The article does not address the qualifications of the professional used for diagnosis, which the rebuttal claims is their gold standard. Please be clear in your revised manuscript whether a single individual did the diagnoses and what his/her qualifications were (e.g., clinical psychologist, pediatrician, etc.). Also, if more than one individual did the diagnosis, please add this as a limitation to the discussion, as reliability of diagnosis would be questionable in this case. One advantage to the ADI and ADOS is the reliability of the spectrum diagnosis, although it is conceded that the specific DSM-IV category is not reliably obtained even with those so-called gold standards. In addition, please state who the informant(s) was for the SCQ. As stated by the authors in the rebuttal, the SCQ is derived from the ADI, which typically asks questions about remote events from an adult's childhood. So, it stands to reason that it suffers the same limitations as the ADI.

a. We have added Footnote 1 in the participants section that deals with the problem of “objective” verification of autism diagnosis. Footnote 1 is supported with two new references.

b. We have added, in the same section, that diagnoses were made either by a clinical psychologist or a paediatrician. It should now be clear that diagnoses were not made by a single individual.

c. A sentence has been added to the discussion to draw attention to these issues.

d. We have stated, in the same section, that a parent or guardian completed the SCQ at the first study meeting.

2. Providing effect sizes is a reasonable request that I am inclined to agree with. The nuances of effect size interpretation can certainly be discussed in the article from your perspective as the authors. I agree that with the many differences between the two studies, it is not a simple matter to compare the two for sample size limitations. But it seems better to have the data so that readers can then form their own informed opinion. Please provide estimates from the MEG study and the current study in the revision.

We reanalysed the MEG data from the previous study so that the analysis was more comparable with that used in the current manuscript. The reanalysis confirmed what we reported previously, and now, in addition, we report effect sizes for the most important comparison. This information has been placed in Footnote 2. We have also added effect sizes for the current experiment.