Reviewer's report

Title: White Matter Abnormalities in Adolescents with Generalized Anxiety Disorder: a Diffusion Tensor Imaging Study

Version: 2 Date: 13 June 2013

Reviewer: Do Tromp

Reviewer's report:

This well put together manuscript provides new data that suggest an involvement of bilateral frontal white matter and right occipital white matter in the etiology of generalized anxiety disorder in a sample of adolescents.

Major Compulsory Revisions

1) The focus in the results section should really be put on the one effect in the left frontal white matter, as this is the only area that survives multiple comparison. The other results can be mentioned, but to a lesser extend and stating clearly that they do not survive multiple comparison, and as defined in the methods, should not be considered significant.

2) Related to that, the paragraph in the discussion section should clearly state that the finding in the occipital lobe is not significant, and should not be over-interpreted.

3) It is noted that with respect to amygdala volume in GAD patients the results are different in a pediatric sample compared to adults, to prove this the authors supply reference 17 (De Bellis et al, 2000), but that study actually shows the same effect as studies with an adult sample. The authors should double check that the references they supply concur with their arguments.

Minor Essential Revisions

4) The authors should consider naming the white matter regions in addition to the nearby grey matter regions.

5) A small number of language errors should be addressed. Consider having a native English speaker proofread the manuscript.

Discretionary Revisions

6) Please include a table or graph with means and effect sizes. Even though these effects are subtle they should be reported. This table should also include the MNI coordinates and significance levels for clarity.

7) In the methods section also report the mean age of the sample within the text, not only in the table.
Level of interest: An article whose findings are important to those with closely related research interests

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: I declare that I have no competing interests