Reviewer’s report

Title: Exploring Social Cognition in Patients with Apathy Following Acquired Brain Damage.

Version: 3 Date: 24 March 2013

Reviewer: Ann Faerden

Reviewer’s report:

Major Compulsory Revisions
The paper reports from a study on the important association between apathy and social cognition following acquired brain damage. The paper has many good qualities, but is recommended for major revision in order to reach good quality.

I recommend the following

1) The introduction should be more specific when using general terms such as "brain areas" or "neural mechanisms" and "see also". See p 4 section 2, line 1 and p3 last line; p4, section 2, line 12.

2) Under methods
The authors should report when patients were assessed: In the hospital or as outpatients when the situation was in remission? How long after the injury?
They used the AES Informant version? What instructions were given to the informant? Any validity reliability testing?

3) Tables
Table 3
The order of the tests in Table 3 should be in accordance with the the order they are mentioned in the Methods chapter. Also what they represent : e.g Executive control, Social cognitive tests... could be included in the table.
Page 9: last sentence. "For a variety of reasons": the authors need to be specific for reasons.

4) Results
This chapter needs to be rewritten in order for the reader to follow the results.
Again the subdivision under methods should be followed when the results section has subdivisions. Also the same order of presentation should follow throughout the paper.
The authors should make more tables to display the results as this will make the results presented in a better way
The authors should state what effect size measure they use and give reference. r is unknown to this reviewer and can easily be mistaken for pearson correlation.
They should describe abbreviations such as H(2) p 15 (next to last sentence), Mdn p 16 first sentence. I also prefer the significance written out despite it beeing
n.s (e.g. =0.1239) in order for the reader to see the difference in the results.

* in table 6. What does it refer to?

4) The paper needs a section writing the strengths and weakness of the study. Especially should there be a paragraph about the low number of participants to some tests and how this may influence the results. Also what do they know about the Informant scoring of the AES and its correlation the clinician scoring of the AES. Do they score apathy or depression?

5) Conclusion
The authors should elaborate more about how they think the results can be used.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I have no competing interest considering this study.