Reviewer’s report

Title: The functional magnetic resonance imaging (fMRI) procedure as experienced by healthy participants and stroke patients

Version: 1 Date: 14 October 2008

Reviewer: Frank MacMaster

Reviewer's report:

This is a report on the subjective experience of participating in an fMRI research study. This is a novel and compelling idea for a research report that is of importance to those conducting neuroimaging research. That said, there are some concerns that need to be addressed.

Major Compulsory Revisions

1. Not knowing if this is a first experience or not is a large limitation. If 1/3 of subjects had experienced an fMRI Study before, you have a larger selection bias (willing to comeback) that may obscure what the experience is like for a first time participant in research. You need to determine exactly who participated in a scan before and use that in a sub-analysis of ‘experienced’ vs. ‘first-time’. That is extremely compelling information to have.

2. For the results section, please start with the answer to the main question first, rather than a point-by-point overview of the questionnaire. A small summary paragraph would be most helpful to the reader. Then a more in depth exploration of the responses.

3. In addition, a direct group statistical comparison between the control and clinical group would be of interest.

4. “uncomfortabilities” is not a real word. Please rephrase.

5. Why were some items not asked of some subjects? Please clarify in the text.

6. Depending on sample size and data available, an fMRI vs. DTI comparison would be compelling as well (is there a type of imaging effect?).

Minor Essential Revisions

7. A pre vs. post questionnaire would have been more telling (expectations vs. experience). This should be acknowledged as a limitation.

8. When discussing how a research scan differs from a clinical scan (“In addition to the selection bias...” paragraph) you need to mention time. Most clinical scan times are short (less than 1 hour) while most research scans are longer (1 hour plus).


Discretionary Revisions
11. The opening sentence is a bit clumsy. Booking scanner time or buying one is totally off point. A simple statement of “There has been a boom in human neuroscience studies using magnetic resonance imaging (MRI) techniques” is more on point and sets up the paper in a clear manner.

Other Comments
A large unexplored question is motivation. The authors touch upon this briefly, but it is a key for a next step study of this type. Indeed, a more telling comparison would be between a research group and a clinical scan group. The author should consider this as a compelling next step.

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.