Author’s response to reviews

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

Authors:

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Author’s response to reviews: see over
Dear Dr Anderson,
Dear Dr Krestin,

Please find attached a revised version of the above manuscript submitted to BMC Medical Imaging.

We would like to thank the reviewers who helped to improve the manuscript at its final stage. We addressed all issues raised by the reviewers. Please find attached a detailed point-by-point reply to each issue raised. In addition, the manuscript was once more proofread for proper use of English.

Yours Sincerely,

Andre Szameitat
Reviewer: Iris Eshed

The manuscript is considerably improved. Still - both the result section and the discussion could be shorten to be more concise without losing important information.
We revised results and discussion and shortened it.

**Minor essential revisions:**
1. **Background:** Paragraph: "As elaborated in the discussion section...or scan duration" Take this sentence out.
Although this sentence is indeed not essential for the understanding of the manuscript, we would like to keep this sentence because it justifies the present study. For some readers, it may not obvious in which aspects clinical and research fMRI scans may differ. For them, a brief enumeration of the key differences may be helpful to understand why we conducted this study.

2. **Methods:** Sample should be before questionnaire.
Indeed we had a rather unusual order. We moved “Sample” before “Questionnaire”.

3. **Methods:** Sample: Last paragraph: "on average, each person....and 65 min” Add mean and SD.
Mean, range, and SD for the exact scanning times are given the paragraph before. In this last paragraph, we are unable to provide these parameters. In the last paragraph, we say that in addition to the pure scanning times (i.e., sum of all scans) described in the paragraph before (which are detailed with mean, range, and SD), we spent approximately further 5-10 min per participant for setting up the scanner, performing the localiser scan, etc. However, the 5-10 min are an estimate – we do not have exact durations for each participant. Therefore, we cannot recalculate the exact numbers given in the paragraph before taking this additional time into account. Instead, we added this information to inform the reader that the actual scan duration was slightly longer than specified in the paragraph before. We clarified this by adding “estimated” to the sentence: “...resulting in estimated total durations between 24 min and 65 min.”

4. **Statistics:** “however, one may...where appropriate” Can be moved to discussion or taken out altogether - Methods and results are not a place for discussion.
We removed “However, one may argue that a 7-point scale is only ordinal...”

5. **Results:** The effect of study and study duration: 2nd paragraph: “although within...how comfortable the scanning session “was” did not ..” take extra word out.
We think that this word was grammatically correct in the original sentence. However, indeed the sentence was hard to read, so we rephrased it.
6. Discussion: how convenient is a basic research scan: "Our data shows that healthy ... and 2 (4/3%) as 6" no need to repeat the whole result section. enough to give mean.

We rephrased this sentence and provide only one information.

7. Discussion: Side effects: "As surprisingly high number of .... I was too tense" This section should either integrated into the results or be taken altogether out.

This section was originally in the results section, but the reviewer asked in an earlier revision to move it to the discussion section. Accordingly, we the presented only the main findings in the result section. In the discussion, we discussed these findings and present some additional comments of the participants. As we provide a brief interpretation to each comment, we have to present the comments in the discussion as well (otherwise, we the reader probably does not know to which comment we refer). Therefore, the only option would be to present the comments which are now presented only in the discussion section in the results section as well. However, besides being somewhat space consuming, we do not see any advantage in this. Please note that the reader is informed in the results section that some additional specific comments will be discussed in the discussion section. Because of these reasons, we would like to keep these sentences only in the discussion section.

8. Discussion: claustrophobia: The questionnaire did not dealt directly with claustrophobia. Thus the subsection of claustrophobia is inappropriate. Authors should deal with it in the "how convenient section or the side effects.

We would like to keep this paragraph for two reasons. First, in previous revisions other reviewers asked us to discuss claustrophobia more extensively, so that we dedicated a whole paragraph to this topic. Second, although claustrophobia was not part of the questionnaire, we nevertheless have information about cancelled scans due to claustrophobia. For researchers it is tempting to speculate that claustrophobia is less problematic in basic research due to a self-selection bias. Therefore, we think that our information that the incidence of claustrophobia may actually be no different to clinical scans is of relevance.

9. Table 1: the last row: patients
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   1 22 (5) 54.1..
   is not clear.
   The table header at the top of the table referred to the patients as well. To clarify this, we repeated the header for the patients.

10. Table 2. table is not clear

Indeed the table may have been hard to understand without further clarification. Accordingly, we extended the caption of Table 1 to explain the meaning of previously unexplained parts of the table.
Reviewer's report
Title: The functional magnetic resonance imaging (fMRI) procedure as experienced by healthy participants and stroke patients - A pilot study
Version: 4 Date: 2 June 2009
Reviewer: Marc Dewey
Reviewer's report:
All comments have been nicely addressed.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.