Reviewer's report

Title: An explorative study of metabolic responses to stress and yoga in yoga practitioners, non-yoga practitioners and individuals with metabolic syndrome

Version: 5 Date: 17 July 2014

Reviewer: Patricia L Gerbarg

Reviewer's report:

The authors have done an excellent job in revising their manuscript which is now suitable for publication with a few minor essential revisions.

ABSTRACT:

Methods - spelling Kapalabhati

Conclusions: greater post-stress recovery Greater in what way?

Introduction Last paragraph: specify compared the metabolic response to mental stress task in yoga....

CONCLUSION: specify: ..metabolic burden due to mental arithmetic stress,........

4) Results The authors wrote the following in their reply:

4.1 We are reluctant to comment on the kapalbhati breathing as it is uncertain whether the NY and MS groups performed this correctly and the NY and MS groups performed KB breathing at a different rate.

The fact that you are uncertain as to whether the NY and MS groups performed kapalbhati correctly and the fact that they breathed a different rates are important to include in the discussion section for 2 reasons.

1. This is a limitation of the study: lack of uniformity in some aspects of the intervention. What did the researchers learn from this?

2. What would be required in order to avoid this problem in future studies? Would it be desirable to instruction the yoga teachers to pace the breath practices in a uniform and reproducible manner? Is Kapalbhati to difficult or too advanced to expect novices to be able to learn and perform it this quickly. If so, then protocols would have to change for novices in studies of this breath practice.

Much improved, but there are still a few typos and grammatical corrections needed.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published
**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.