Reviewer's report

Title: Toward a new computer-based and easy-to-use tool for the objective measurement of motivational states in humans: A pilot study

Version: 3
Date: 8 July 2014
Reviewer: Mary Chong

Reviewer's report:

This paper is much improved and describes data more clearly. A couple more suggestions before it is ready for publication.

Minor Essential revisions
1. Under Abstract
   ‘functional neuroimaging techniques whose use…’ . ‘Whose’ does not appear appropriate as it is normally used for persons.

2. In results
   The PSE and PSD for the two satiety sessions were combined. Nothing was mentioned about the second fasting session. What happened to those results?

3. In Discussion
   ‘Third, the PSD is a particularly appropriate measurement when obtained from the responses to a large number of trials where both stimuli…..lose its accuracy…when calculated individually for each participant on a smaller number of trials,…’
   It is not clear from the methods how many trials were used for this study and the appropriate power calculation. Providing information on number of trials which is considered large and small will be useful for readers.

4 In Conclusion
   a) The authors have done well in laying out the limitations of the study. However, as this is recognised as a pilot study, it will be useful to mention to readers how the authors feel the study design can be improved should the study be repeated to fully develop this computer-based test for use on subjects affected by mood, addictive disorders and obesity (e.g. increase number of trials, gender specific testing, will the VAS still be useful, use no colour food and geometric pictures?).

   b) Conclusion – ‘this novel computer-based test in particularly relevant…’. Can't conclude this as it is currently not tested in people with diseased states. More appropriate to use ‘potentially useful’.

5. Key words – ‘hedonic sensation’. This does not appear to be a key word for this paper.
**Level of interest:** An article whose findings are important to those with closely related research interests

**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.