Reviewer’s report

Title: The effect of Baduanjin exercise for physical and psychological well-being of college students: study protocol for a randomized controlled trial

Version: 2 Date: 25 October 2013

Reviewer: Wai Tong Chien

Reviewer’s report:

It is a well-written protocol and the main content has been clearly laid out. Some comments are given ast below for improvements:

Major compulsory revisions

1. Background: there are missing information or literature about the recent educational and behavrioral training programmes on exercise in adolescents and students and their comparable effects.

2. Again, by the end of the background, it is important to have some explanation of the rationale for Baduanjin to be appropriate or potentially effective for adolescents, e.g., how to enhance their motivation for this exercise regularly and how this mode of exercise address the existing knowledge gaps on exercise training in adolescents.

3. Clarifying the sampling and sample size estimation: (1) more details about the preliminary study done for estimation of sample size in this proposed trial; (2) what is the population size and rationale for only recruiting grades 1 and 2 students and actually what is meant by 'grades 1 and 2'.

Minor Essential Revisions

1. Rewrite the statements "12 and 24 weeks post intervention" in a few parts of your proposal; it seems that the post-tests are not 12 and 14 weeks after intervention completed but after starting the intervention; it is better to clearly specify the post-test to be immediately and 12 weeks after completion of the intervention.

2. By the end of the background, it is better not to use 'etc.' but completing the list of outcomes used.

3. It is better to re-consider the use of 'blank' controls and it appears better to use usual exercise training.

4. Only 10% drop outs expected may be too optimistic in comparison with most exercise training programs; if you would like to use and confirm this rate, please cite references to support this expectation.

5. Clarify whether 12 weeks duration of Baduanjin is the standardized practice or not.

6. Briefly describe the reliability and validity of all outcome measures used and a
bit more details of the scales used, e.g., items and rating method.
7. state the level of statistical significance used, and with or without any adjustment due to multiple comparison tests performed; and state whether any planned or post-hoc comparisons, as well as any subgroup analysis made.
8. Lastly, some typo. and grammatical errors noted in text, please check again and correct them

Discretionary Revisions
Nil

**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 do not have any of the above conflict of interests being listed.