Reviewer's report

**Title:** Measuring walking within and outside the neighborhood in Chinese elders: reliability and validity

**Version:** 1  **Date:** 5 July 2011

**Reviewer:** Patricia Sharpe

**Reviewer's report:**

This study among Chinese elders in Hong Kong has the multiple aims of adapting the walking section of a Neighborhood Walking questionnaire, assessing reliability and validity, and examining the potential impact of neighborhood SES and walking purpose on reliability and validity.

Overall the paper is well-written and the methods are rigorous.

A few areas would benefit from clarification.

**Minor essential revisions**

1. An area of confusion to the reader appears on page 5 in the last sentence of the sentence:

   All participants were asked if they would consent to wearing an accelerometer for a week, keeping a log of walks and being re-assessed on the questionnaire two weeks after the first assessment. From the pool of consenting participants (73% of the original sample), three per street block (n=96) were randomly selected for this component of the study.

   It is not clear to what research activities "this component" is referring. Do you mean the "main" study as opposed to the pilot study?

2. On page 6:

   On day 8 of the study, the accelerometer and log were collected, the data were checked for validity and the NWQ-CS was interviewer-administered to those with at least five valid days of data, including a weekend day.

   By stating "the data were checked for validity," do you mean that the accelerometer wear data were downloaded and checked to see if the wear time was adequate for inclusion in the subsequent analyses? Better precision in what you are saying here would aid the reader.

3. On page 7:

   Please put a published citation or website to the WHO guidelines for translation.

   **Discussion**

   4. It is confusing and distracting in the Discussion to compare findings of this
study to those of another study by Cerin et al. that is not yet published, which employed the IPAQ. As the reader does not have access to that study's results, they should not be discussed in this manuscript.

5. Additionally, the Discussion states as a limitation the following: Limitations of this study include the use of accelerometer cut-points developed for a younger population (adults) in absence of established cut-points for older adults.

However, the Measures section states the following:

Previously published cut-points, that were employed in earlier studies with older adults [23-24], were used to classify activity counts into light (100-1951 counts/min), moderate (1952-5724 counts/min) and vigorous (>5724 counts/min) [25-26].

Which statement is correct? Were the cutpoints previously used with older adults or not? Is there evidence of their validity among older adults?

6. There are a few omitted words and other minor errors throughout.

Discretionary Revisions

7. On page 8:

It is unclear what the use of % agreement for reliability of the categorical variables adds to the study beyond the use of the kappa statistic. Percent agreement has the limitation of not taking into account the agreement that may occur by chance - the kappa statistic corrects for this. (Szklo and Nieto (2000). Epidemiology, Beyond the basics. Aspen Publishers). I suggest omitting % agreement.

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.