Reviewer's report

Title: The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: A cross sectional study

Version: 3 Date: 16 January 2012

Reviewer: Erika Kobayashi

Reviewer's report:

Many of the points I suggested in the previous reviewer’s report are revised properly. Still I could not be convinced that appropriate data analyses were performed to examine the models or hypotheses, which is an important requirement for a scientific paper.

<Major Compulsory Revisions>

1. In Figure 1 a bidirectional path exists between social support and Psychological distress and a path comes from Psychological distress to Somatic health problems. Although the added last paragraph in page 4 describes this new figure very well, it seems to me that the literature review (p.3-4) and the data analyses suggest that the location of Psychological distress and Somatic health problems should be reverse (i.e. Psychological distress is the final outcome) because table 3 shows the partial correlations between health problems and social support, and the dependent variable in Table 4 is psychological distress.

2. I am not sure if the analyses in Table 4 could examine the hypothesized relationship of socioeconomic factors with other variables in Figure 1, or can think of a way to analyze that the model can be proved. Please clarify why you think the analyses test the hypothesized model, and whether the hypothesis was supported or not.

<Minor Essential Revisions>

3. The titles of the article and tables 3-4 should be more accurate and simpler so that readers can understand the focus of this study or the tables correctly. For example, the title of Table 3 is “Partial correlations between the categories of social support and physical impairments and diagnoses adjusted for gender and age”. It is also described as “Partial correlations adjusted for the effect of gender and age between physical impairments and diagnoses were performed” in the text (line 3-4, page 8). But if I am correct, this table shows partial correlations between somatic health problems (measured by physical impairments and diagnoses) and social support. The problem with the title for Table 4 is that we cannot understand which variable is the dependent variable for the logistic regression analyses.
4. [Line 1, Page 9] “One or more physical impairments were reported by 29-41%.”

According to Table 2, the percentage of physical impairments in each of the 5 indices was 29-41%.

5. [ in the middle paragraph in page 9] If CI actually stands for the confidence “interval” as you wrote here, both upper limit and lower limit must be shown as in Table 4.

6. [ Table 2] Please add sample size by gender and “n (%)” in the upper columns (in the same way as Table 1), not in the title. Also, upper and bottom lines of this table are missing.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests.