Reviewer's report

Title: Group involvement and health status among the Japanese elderly: an examination of bonding and bridging social capital

Version: 1 Date: 25 August 2013

Reviewer: Hiroshi Murayama

Reviewer's report:

Thank you for the opportunity to review "Group involvement and health status among the Japanese elderly: an examination of bonding and bridging social capital" Few studies have examined the relationship between bonding/bridging social capital and health. Therefore, this study stands to make an important contribution to research on social capital and health. There are a number of comments and suggestions that I have for the authors.

Major Compulsory Revisions

Introduction

1. I agree that this study has an important contribution to the field of public health. Authors can review previous studies regarding bonding/bridging social capital and health, but you should clearly state the reason why this study is necessary (What is the problem of previous studies? What kind of study is needed?).

Methods

2. Regarding bonding/bridging social capital items, I have some questions. (i) Did you consider the frequency of participation in group activity? If not, why didn’t you consider it? (ii) Did the respondents answer “diverse” or “similar” for every group they belonged to (a-f)? So, at individual level, can the number of total group involvement be expressed as the sum of the number of bonding group involvement and the number of bridging group involvement? (iii) When the respondents belonged to two organizations or more in the particular group (among a-f), how did they answer the question? For example, some people may participate in more than two groups of sports/hobby/culture circle. Moreover, regarding alumni association, people may belong to some links of alumni associations (e.g., junior high school, high school and university). In this case, one group may have similar composition, while another may have diverse composition. (iv) Authors classified the number of groups into four categories (0/1/2/3+). However, regarding bridging social capital, more than 1,200 respondents have “high level” of bridging social capital. Do you think this classification was valid? (Please explain why you set “3+” as high level.)

Results

3. page 9, lines 12-14…Difference of the threshold for the beneficial effect of bonding/bridging social capital between men and women is very interesting, I
think. Please discuss this point.

Discussion
4. page 10 line 3 to page 11, line 3…These discussions about the relationship between bonding/bridging social capital and self-rated health seem little bit lame. Authors must quote some appropriate references.

5. Authors mentioned that high bridging social capital was associated with self-rated health after adjusting for bonding social capital (OR=0.62). And any substantial change of the association was not observed (page 9, lines 14-17)… My understanding is that, in this model, both bonding and bridging social capital was negatively associated with self-rated health both in men and women. Is this correct? I think this result is interesting. The study by Iwase et al. (2012) showed that bridging social capital was inversely associated with self-rated health both men and women, but the association between bonding social capital and self-rated health was not statistically significant in their final model (Model 2). That is, the association between bonding social capital and self-rated health could be observed among the elderly, while this association could be found among the general population (20-80y). Please present this not-shown model as “Model 4” on Table 4, and discuss this result.

6. page 11, lines 12-17…If it is one of the advantages of this study to include personality (type-D personality) as covariates, please add the description about the importance to adjust for this when examining the relationship between social capital and health in the Introduction.

Overall
7. In this paper, authors used self-rated health as outcome. However, you often used the term of “health status” or “health” in the title, abstract and the text. Please clearly mention “self-rated health”.

Minor Essential Revisions
Title
8. As I mentioned above, please change “health status” to “self-rated health”.

Abstract
9. Please change “health” and “better health” to “self-rated health” or “better self-rated health”.

10. Authors put “type-D personality” as a keyword. However, this term has not showed up in the title and abstract. If you make “type-D personality” a keyword, please mention about this in the abstract.

Methods
11. page 5, lines 22-23, “Also excluded were those….than 5 years”…Why did you exclude these participants? Please describe the reason.
12. page 7, line 13…I think you had better to add “height”.
13. page 7, lines 19-24…More explanation about type-D personality is necessary
(number of items, reliability [Cronbach’s alpha] in this study, etc.). Did you use the scale of the Japanese version which examined the reliability and validity of the scale? If so, please explain that.

14. page 8, line 5…Did you adjust for weight? or BMI?

Results

15. page 8, line 15 and 16, “30.0%” and “29.4%”…On tables, you showed the values to two places of decimals.

16. page 8, line 23, “Most of the group…lower odds for poor health”…Did you indicate overall trend of the association, regardless of the statistical significance. If so, please explain exactly.

17. page 9, lines 1-4…Did you argue about this result in the Discussion? If not, I think this can be removed.

Tables

18. Table 2…Authors showed two kinds of percentage (in the columns of “total” and “poor health”). However, these values had different meaning (One indicated the prevalence in total sample, and the other indicated the proportion of poor self-rated health in each group of “number of group involvement”). Therefore, any explanation on footnote would be helpful.

19. Table 3…Please show the prevalence (%) of “poor self-rated health” in each category (no involvement/bonding social capital/bridging social capital) in men and women.

20. Table 3 and 4…Some values are integer number (e.g., 1) or number with first decimal place (e.g., 0.6).

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:

None declared.