Reviewer’s report

Title: Association between social capital and health-related quality of life among left behind and not left behind older people in rural China

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Reviewer: Kriti Vikram

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This is an interesting paper that studies the impact of social capital on left behind elderly in rural China. It utilizes a rich dataset that has a variety of questions pertaining to social capital. The authors find that having "low" social capital is particularly deleterious to the health-related quality of life among left behind elderly in China. The findings are interesting but the paper needs to be revised significantly before it can be published. Firstly, even though the paper has rich social capital data and the authors show how only certain aspects of social capital are significantly associated with health-related quality of life, they still create a composite indicator of social capital. I am unable to understand the logic behind this? I would recommend that they include all the distinct components of social capital in the analysis and describe exactly which type of social capital is associated with health-related quality of life. Secondly, I understand the logic to carry out sub-sample analysis but it is important to also show this analysis for the whole sample by including interaction effects (left behind=1/not left behind=0 or vice versa with social capital indicators). Thirdly, I find the step-wise inclusion of variables quite unnecessary in this case. I would recommend that all controls be included in the first model and then all the distinct social capital constructs be included as a second step. The third step should include interactions pertaining to their left-behind status. Fourthly, the writing could be improved upon. The heading, social capital and health-related quality of life, is misleading because it discusses differences between those that are left behind with those that are not. Similarly, the title - the difference of social capital and HRQoL between being left behind or not needs to be more clear. Lastly, the section, being left behind and health-related quality of life, is not making a strong argument about the importance of social capital for this group. The front end of the paper has to be strengthened so that the linkage between being left behind and social capital is articulated in sufficient detail. The authors do so quite convincingly in the end but it would be worthwhile to be make this link right from the beginning.

I would also recommend that the authors try to include interaction effects by gender and marital status for the whole sample. There is emerging evidence on the importance of gender and marital status in influencing the well-being of left-behind spouses in China (Chen et al. 2015). Even though, Chen et al. are studying marriage migration, it would be interesting to see if the impact of social capital on health of left behind elderly is moderated by these factors as well. However, I would leave it to the authors to decide if this is a worthwhile endeavor for this paper.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
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