Reviewer’s report

Title: Health status in a transitional society: urban-rural comparisons from a dynamic perspective in China

Version: 0 Date: 05 Mar 2018

Reviewer: Bin Yu

Reviewer’s report:

Comments: This study used the HAPC-CCREM method to explore the self-reported health with the age, period and cohort effects, then compared the urban-rural difference, and influential factors. The method is valid and innovative, and the findings in the study provide evidence for historical influence on health.

Abstract:

1. Page 2 line 26: the sentence "Urban-rural disparities of health amplified with age, and cumulative effect and age-as-leveler effect were not contrary substantially, they would come across in distinct conditions" was not very clear.

2. Page 2 line 17: "but compared xxx" I think it should not be "but".

Introduction:

3. Page 3 line 26: Please explain the concept of "Universal health", and the sentence "no universal health, no overall well-off".

4. Page 3 line 32: Was the medical reform conducted and finished in 2009, or it was conducted since 2009?

5. Page 4 paragraph 1: This paragraph was about the longitudinal analysis, and cohort effect, but it also include health disparities, which was introduced in the following paragraph. I suggest if author could only discuss the longitudinal analysis and cohort effect in this part, and discuss the disparity together with the following paragraph.

6. Some paragraphs had subheadings, but some did not. Please keep consistent.

7. Page 4 line 51: maybe "have gained much attention" instead of "attracted most focuses".

8. Page 5 line 15: I think social status, income were not resources that unfair distributed? Some public resources, like healthcare, were unfairly distributed.
9. Page 5 line 18: The statement "the urban-rural disparities in health was the most important one" do not have enough support evidence. Please add more clarification.

10. Page 6 last paragraph: This paragraph talked about the longitudinal study, age, period and cohort effect. So it may be better to combine the information introduced in page 4 paragraph 1 and the current paragraph together.

11. Page 7 last paragraph: since authors did not use the HAPC-GCM in the current study, why introduced it here which might cause confusion for readers.

12. Authors may re-consider the structure of the introduction which was not organized very well.

Method:

13. Page 11 last paragraph: Were the surveys multi cross-sectional or longitudinal? Because authors have discussed a lot about longitudinal analysis. Please clarify.

14. Page 13 first paragraph: It is better to briefly introduce each cohort authors have proposed. So readers could understand what happened in the specific cohort.

15. Page 14: In the equation, authors included party and work as predictors, but in the following part (Line 57) there were no party and work variable. Please keep consistent.

Results:

16. Page 15 second paragraph: Most of the first paragraph of the results was about method. So it may be moved to the method part.

17. Table 1: It may better to present the frequency for some variables, like gender, Hukou. What did authors mean by primary, junior and senior in education?

18. Table 2: Page 16 line 9: the ICC was 9.66% in the text, but 0.1004 in the Table 2. Please keep consistent.

19. Page 17 line 46: Did the health level increase after 1977 cohort instead of 1984 as described in the text? Authors may check the statements in the text and the results in the Tables and Figures again to keep consistent.

20. Figure 2: It is better to combine a-d into one figure.

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