Reviewer's report

Title: Rating Neighborhoods for Older Adult Health: Results from the African American Health Study

Version: Date: 17 April 2007

Reviewer: Ming Wen

Reviewer's report:

General
This paper addresses important issues regarding neighborhood effects on health. The research produces several important messages that should be informative, interesting, and useful for researchers who are interested in social disparities in health in general and how residential areas affect individual health in specific. However, while the paper has good potential, I think the paper has not reached a publishable standard in its current form. It can benefit from re-arranging the structure, adding discussions on some of the key findings, doing additional analysis, justifying the analytical strategies employed, and additional editing.

Specific comments follow.

1. Page 5, first paragraph. You mention age variation in neighborhood effects on health. You note that “studies have indicated that the effect of neighborhood-level SES and social circumstances of neighborhoods on self-reported health increases with age.” In fact, quite a few studies have found the opposite. You could get additional information on how neighborhood effects on mortality decrease at older ages from the first chapter, “Introduction,” of Kawachi and Berkman’s book “Neighborhood and Health” (2000).

2. The background section would be strengthened if you could add a couple of sentences to talk about why neighborhood SES might matter for health—for example, through individual characteristics or aggregate processes. See the following paper that discusses and examines some of the mechanisms:

3. What is the age range of the respondents in this survey?

4. Why did you choose just to focus on African Americans? Adding a note commenting on this approach is helpful. Like, this approach is employed to eliminate confounding effects of race/ethnicity by design?

5. Page 5, the last paragraph. This paragraph should appear under the Method section. Toward the end of this Background section, the reader should get a clear message regarding the key purposes of this study. I suggest you use this space to summarize the main aims of the study.

6. What are the years of the 2nd, third, and fourth waves?

7. Why did you use “fear for falling” as an outcome variable? After all, this is not a direct health measure. If you want to use it, it would be helpful if you could add some discussions on how this variable is significant in itself and relevant to the study.

8. Page 13, first paragraph. Factor loadings below 0.5 are pretty low. How many items have loadings this low? Will the alpha values go up if those items with low factor loadings are excluded from the scale? I do notice though that the alpha values are reasonably good already.

9. Page 15, second paragraph. Have you tested the interaction effect of neighborhood variables with urban/suburban location? Very little work has been done to examine this interaction effect. If you find a significant interaction effect, you should report it, and it would make the study definitely more interesting.

10. Modeling strategy: you did not use the conventional method like random effects models to analyze the data, nor used robust standard errors to adjust inter-correlations with each block; from what I read you only used one-level logistic regression models in the data analysis. Why?

11. Did you use weight to get city-wide representative results?

12. Census-based neighborhood SES measures should be easily available and can be linked to your data. It would be interesting to test how these different sources of measurement of neighborhood contexts are correlated and which one(s) have more discriminate power predicting health. Wen, Hawkley & Cacioppo (2006) partially addressed this question. Your data, linked to Census, should be well equipped to test if their study findings can be replicated.

Wen M, Hawkley L & Cacioppo J. 2006. “Objective and perceived neighborhood environment, individual
13. Is the neighborhood scale that appears in the tables based on the interviewers’ ratings or the respondents’ ratings or both? Their correlations with health should be looked at separately.

14. The finding that neighborhood ratings are not significantly associated with health outcomes after controlling for individual income should be commented in more depth. A large amount of research has shown neighborhood contexts matter independently of individual SES, which is not consistent with your finding. This finding perhaps suggests that neighborhood is empirically linked to individual health mainly because it is who you are that matters not where you live. More comments are necessary to clarify the implications of your study findings for the compositional versus the contextual explanations for neighborhood effects on health (also see Kawachi & Berkman’s first chapter).

----------------------------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

----------------------------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

----------------------------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)