Reviewer's report

Title: Environmental mobility barriers and walking for errands among older people who live alone vs. with others

Version: 1 Date: 27 September 2013

Reviewer: Eleanor Simonsick

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This study examines the association between perceived environmental barriers and walking outside the home in over 600 community-resident adults aged 75 to 81 stratified by living arrangement (alone or with others). The findings are intriguing and add to the limited literature on relationships among environmental characteristics, social factors and walking behavior in older adults. The potential contribution of this work would be enhanced by attention to the following:

1. In the background section, you review some of the published findings on living arrangement and walking activity. It may be useful to add (in support of your argument) findings from Simonsick et al JAGS 47:672-680, 1999 that found living alone associated with a higher likelihood of walking outside the home which was even more pronounced in older women reporting no walking difficulty.

2. Although you comment on the exclusive focus on errand related walking in the discussion, it is not clear if engagement in other types of walking was assessed or not. Whether “pure” exercise-related walking serves to enhance or facilitate errand-related walking or replaces it remains to be determined and likely varies across individuals.

3. Since this is a cross-sectional observational study, you need to take care to avoid terms that imply causality. For instance, the first sentence of the last paragraph of results uses the word “influence” as does the title of Table 4. Similarly, the first paragraph of the discussion should be revised to read something like: We observed that the association between self-reported environmental barriers and walking for errands differed by living arrangement such that living alone in old age was associated with a lower probability of low walking activity but higher reporting of environmental barriers; whereas living with others was associated with a lower probability of reporting environmental barriers, but a higher likelihood of low walking activity.

4. Although most of your speculative explanations for the findings in the discussion seem reasonable, the discussion would benefit from the addition of a few more references to support some of your non-referenced statements. I recognize that the literature in this field is somewhat sparse; nevertheless, all strong statements should be referenced to the extent possible.