Reviewer’s report

**Title:** Environmental barriers, person-environment fit and mortality among community-dwelling very old people

**Version:** 1  **Date:** 27 April 2013

**Reviewer:** Eleanor Simonsick

**Reviewer’s report:**

Reviewer comments on Environmental Barriers …

This paper examines the association between indoor, outdoor and entrance way barriers to mortality risk over approximately 10 years in nearly 400 persons living alone in ordinary housing aged 80 to 89 at study baseline. A major merit of this work is the attempt to identify tangible obstacles in the immediate and surrounding residential environment that may contribute to increased mortality risk.

My major methodological concern relates to the length of follow-up used in the analyses in a group at such an advanced age. It may be instructive to examine mortality risk more proximate to the environmental assessment – after 5 years of follow-up for instance. Even though barriers were examined as time-dependent covariates, the interval between the second and third assessments is quite long and thus for deaths that occurred just prior to the third assessment changes in environmental barriers would not have been taken into account.

After reviewing Table 4, it occurred to me that there could be a potential interaction between barriers. Specifically, it would seem that the absence of handrails would be particularly problematic for those for whom stairs constitute the only exit route.

The writing is generally very good, but it is clear from some awkward constructions and atypical terminology that English is not the first language of the primary writer. Thus, it would be useful to engage the services of a native English speaker (who is also a good writer) to review and edit the final version before re-submission.