Reviewer's report

Title: Evaluating housing quality, health and safety using an Internet based data collection and response system (Altti)

Version: 1 Date: 22 July 2010

Reviewer: David E Jacobs

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Major Compulsory Revisions:

Review of “Evaluating housing quality, health and safety using an internet-based data collection and response system”

General comments

This is essentially a methods paper, but it is unclear how generalizable the results are. The results seem to suggest that in fact an internet based system is not workable, given the low response rate and the lack of certainty about the accuracy of respondent input. The English in the paper is also substandard and requires extensive copy editing. The idea that “feedback” is an incentive to participate is novel, but it is not known if the respondents actually acted on the feedback provided. The survey results also do not appear to have been validated by comparison to other housing or health surveys. The paper can be published after revisions.

Specific comments

The word “Altti” in the title does not make sense and should be deleted

p. 2. The first sentence is an overstatement. In fact, there are a significant number of housing variables that have been linked to health. See for example WHO 2005 (Report on the WHO Technical Meeting On Quantifying Disease From Inadequate Housing, Bonn Germany, November 28-30, 2005, World Health Organization Regional Office for Europe, published April 2006) and Jacobs et al. 2009 (Jacobs DE and Baeder A. 2009. Housing interventions and health: A review of the evidence. National Center for Healthy Housing, Washington DC. http://www.nchh.org/LinkClick.aspx?fileticket=2lvaEDNBIIdU%3d&tabid=229

It would be better to state that housing and health surveys are typically not integrated and therefore not representative of population health or national housing stocks.

p. 2. The abstract presents no housing or health results at all, although much of the article itself is devoted to that. The important housing and health results should be summarized in the abstract. The use of the term “feedback” is not clear. Do the authors mean to say “expert advice on reported health deficiencies”? Also, the abstract should state if respondents were somehow
compensated for their time in completing the survey.

p. 3. The conclusions need to make it clearer that all health results are self-reported.

p. 4. Should “institute employers” be “institute employees”?

p. 5 the method used for the power calculation is not clear

p. 8 The housing data that are not shown should be, because that is the only way the reader can determine if there is a bias in either demographic, health or housing characteristics in the final sample.

p. 8. The first section under “Background Information” seems to be mostly about commuting distances and time, but the connection with health is not apparent.

p. 9 Bottom. The term “district heating” needs to be defined.

p. 15 The discussion section does not discuss strengths and weaknesses, bias, and how we can know if respondents accurately entered their own data on the internet system

p. 16. It is not clear why size of home is necessarily related to health. Are the writers referring to crowding and communicable disease or some other endpoint?

p. 17. There is a statement that only a fraction of homes have an adequate ventilation system, but no reference supporting this assertion is provided. How does one know if this is actually true?

p. 17. It appears the authors seem to think that electric heat is “not renewable”, but of course it could be (e.g. hydropower, solar power, etc.).

p. 19 Why is it noticeable that half of the respondents do not know their radon system. What does this mean, is that positive or negative? What is the basis for this?

p. 19 Did respondents actually act on the feedback. How does the reader know that the feedback was accurate and produced a positive health outcome?

END

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'