Reviewer's report

Title: Designing assisted living technologies 'in the wild': preliminary experiences with cultural probe methodology

Version: 1 Date: 4 September 2012

Reviewer: Mark Hawley

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Minor essential revisions

There are a number of typographical errors in the manuscript (eg authors' names in references in the text do not quite match those in the reference list, use of 'assistive living' instead of 'assisted living'). These should be corrected.

The word 'affordance' is well understood in design circles but probably needs some explanation/definition for the readers of this journal.

Major compulsory revisions

The stated aim of the paper is to 'report the development and initial piloting of a cultural probe tool....'. The question of how best to inform development of Assisted Living Technologies (ALTs), so that they better meet the needs (and aspirations) of users, is an important one. This report of a pilot makes a small contribution to this question and, as such, is of interest to those who are involved in closely related fields. The paper has a number of areas where it should be improved.

The development of the cultural probes is not well explained. There is a comprehensive review of how cultural probes have been used in other research. I feel this is too long for this paper and the reporting of the results of this previous research by others is rather unnecessary. The paper does not set out how this previous research has informed the development of the probe tools described in the paper. This may be inferred but it should be made explicit. The choice of elements of the probe tool is described but not well justified.

Methods section. The inclusion criteria are not well defined and include anyone 'with an assisted living need'. Does this mean that they are deemed to require ALTs? The paper should set out how this was assessed - was it just inferred from the fact that they had one of a list of problems? There is no statement of how the sample for the pilot was arrived at – was it a convenience sample?

There is no section in the paper for results. Some results are reported in the methods section and some in the discussion. I would have liked to see a results section and this may help readers follow what exactly was found in the research.

In the discussion section, the first names of participants are used. Hopefully these are not the real names of participants since they could potentially be
identified and some of the information linked with the names (eg literacy problems) is sensitive. If real, names should be changed.

In the 'responses to probe activities' sub-section (p13), it is reported that 40% of participants did not use the probes at all and 50% did not use the written elements. Only 1 out of 10 used the home plan drawing. These are very important results (perhaps the most important results in the paper) but very little text is devoted to discussing them. The paper would be much more useful for the reader if it reported the subsequent development of more accessible probe tools and the rationale for this (rather than simply stating that the authors are currently considering how to develop them).

The section ‘using the home and life scrapbook’ is informative. The authors discuss each element of the probe and give examples of how it is useful in eliciting information. I would like to see more concrete examples of how they extracted ALT design implications from this information.

The ‘cultural probes in use’ section is good and very useful for others considering using cultural probes.

All the example figures are data taken from one person. The text should explain why this is.

On the whole, I found this paper a little frustrating. The research reported represents, as it stands, only a small increment in knowledge in the field. The ATHENE project, as stated in the paper, will go on to carry out ethnographic study of 30-50 individual cases. The results from this will be very interesting, as will phase two of the project. I feel this paper may have been written too early in the research. At the very least, the paper should report how the probe tools were changed as a result of this pilot phase – and the rationale for this. It would be even more interesting if the results of the full data collection were reported.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**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