Reviewer's report

Title: Effect of questionnaire length, personalisation and reminder type on response rate to a complex postal survey: a randomised controlled trial

Version: 1 Date: 15 February 2011

Reviewer: Phil Edwards

Reviewer's report:

This paper presents results of a 2x2 factorial randomised controlled trial among 1000 adults living in the UK, of the effect on unit and item response of alternative lengths of questionnaire and use of personalisation. It also reports results of a randomised controlled trial in non-respondents of a reminder letter with questionnaire compared to a postcard reminder only. There is a good background to the approaches that are known to influence questionnaire response. The authors give a good account of the rationale to the study and the methods used. The paper provides results that will be of interest to other researchers collecting data by postal questionnaire.

Major compulsory revisions

1) Methods, page 7: As per CONSORT guidelines the authors should describe their methods of randomisation, and explain how allocation was concealed from the researchers conducting the study.

2) Discussion: the description of the two questionnaires (given on page 8) suggests that the short questionnaire is not a subset of the longer questionnaire, but in fact comprises different questions. If so, we cannot attribute the increased odds of response to the shortness of the questionnaire alone, and some of the effect may be due to asking different questions. Some comment about potential confounding should be included.

Minor essential revisions

3) Abstract: the p-value for the comparison of item non-response should be included (9.8% vs 5.8%) or alternatively a confidence interval for the difference.

4) Methods, page 8: the power calculation should include the baseline response from which a 10% difference can be detected (e.g. from 17% to 27%).

5) Figure 1: something may be wrong with my printer, but one number appears to be wrong (NR to non personalised long questionnaire N=22 but should be N=226) and some numbers seem to be missing (the numbers of non-respondents allocated to postcard or pack should be included).

6) Figure 2: this figure presents numbers responding over time for the four conditions but as the lines overlap the patterns are not at all clear.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.