Reviewer's report

Title: Education-related differences in physical performance after age 60: a cross-sectional study assessing variation by age, gender and occupation

Version: 3 Date: 25 April 2013

Reviewer: Rachel Cooper

Reviewer's report:

The authors have satisfactorily addressed the majority of my previous comments.

Major compulsory revisions
The one main concern I still have about the paper is that prior to reporting the results from stratified analyses the authors report the results from models with age, gender and occupational class adjustment (in the first main paragraph on page 12). Firstly, it would be informative to present results prior to adjustment for occupational class. Secondly, this is confusing for the reader given that both adjusted and then stratified results are presented and it remains unclear which should be the focus (if there is evidence of interaction results need only be presented stratified by the relevant factor and not also adjusted for this factor).

I appreciate that it is quite difficult to find a succinct way of presenting these results when testing 3 different interactions (i.e. by age group, gender and occupational class) and using four different outcomes but the previous revisions only partially address my comment on this and the results remain quite difficult to follow.

Minor essential revisions
1) In the first sentence of the results section of the abstract please report who the people with university education were compared with i.e. persons with university education had better grip strength… than people with x.

2) The sentence in the results section of the abstract ‘However, the differences were no longer statistically significant in advanced age’ is unexpected given no prior mention of stratification by age group is made.

3) In the first sentence of the conclusions section of the abstract it should read ‘in people aged 60 to 80’ rather than ‘after age 60’ given the authors then go on to describe a different finding in those aged 80+.

4) The description of sample selection is now much clearer but the statement ‘and of these remaining 3363 participated’ does not read correctly. Perhaps this could be corrected by ending one sentence after ‘…had moved).’ And then starting the next sentence ‘Of those eligible, 3363 participated…”

5) When describing the measurement of grip strength – would it be more appropriate to report that the participant squeezes a handle?
6) When describing the BMI categories on page 9 please replace obesity with obese to match the descriptions for the other categories.

7) At the bottom of page 11, ‘in people with low level of physical exercise’ could be amended to ‘in people who exercise less’ or ‘in people with lower levels of physical exercise’

8) At the end of the sentence on page 12 starting ‘We found education-related differences in both the younger…. (p<0.05)’ – what does this p-value relate to as a number of different comparisons are described.

**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.