Reviewer's report

Title: Gender differences in a sample of Greek centenarians. A cross-sectional nation-wide study, examining multiple socio-demographic and personality factors and health locus of control.

Version: 1 Date: 6 August 2011

Reviewer: Mary Gilhooly

Reviewer's report:

Minor essential revision

1. Is the question posed by the authors well defined?
Yes, on the whole the research question is clear.

2. Are the methods appropriate and well described?
The methods are reasonably well described. However, information is needed on response rate. For example, the sample appears to consist of 400 centenarians, but it is unclear how many were approached and how many refused to take part, or how many could not take part because they had dementia or some other illness that prevented study participation. What were the inclusion and exclusion criteria?

Information is also needed on translation of the scales used in the study. I am assuming that scales developed in the US were used and translated into Greek. Were both forward and backward translation done? This information is needed and it is important that the authors assure the reader that translation did not affect reliability and validity. Or, if there are doubts this should be raised when discussing the limitations of the study.

The authors note that females were more likely to be illiterate. I was uncertain if they really were illiterate or merely less well educated. It would surprise me somewhat to find that a significant proportion of the women in the sample could not read or write at all. Illiteracy is not the same as a low level of formal education.

3. Are the data sound?
Probably.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
I cannot remember anything in the manuscript about data deposition.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
On the whole, yes. However, I think more information is needed on the range and
standard deviations of the variables.

6. Are limitations of the work clearly stated?
Yes, there is a good section on the limitations of the study. The only problem I have though is that more could have been said about whether or not the gender differences represent changes with age. To do so would require comparison with other age groups (this issue is briefly mentioned) so as to attempt to separate any confounding of variables. I am aware that the question cannot be answered with the data, but more discussion of the issue would have been nice.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
I cannot now remember if they noted other work that they are doing on this topic.

8. Do the title and abstract accurately convey what has been found?
Yes

9. Is the writing acceptable?
There are a few places where the grammar needs correcting

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

**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