Author’s response to reviews

Title: The influences of childlessness on the psychological well-being and social network of the oldest old

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Author’s response to reviews:

Linköping 15 June, 2011
The Editor-in Chief, BMC geriatrics

Dear Sir/Madam,

Please find enclosed the manuscript: “The influences of childlessness on the psychological well-being and social network of the oldest old” by Josefin Vikström, Marie Bladh, Mats Hammar, Jan Marcusson, Ewa Wressle and Gunilla Sydsjö which we believe would be of interest to Your readers.

The study is meant to contribute to the knowledge of how childlessness influences the psychological well-being of men and women as they grow old. The study is based on data from the ELSA85 population study on 496 Swedish 85-yearold individuals.

Many of the previous studies on this topic have excluded those who are “elderly elderly” and those who live in institutions. The aim of our study is to investigate if these individuals, who are older and frailer than the individuals included in previous studies, suffer more from not having had children since they generally are more dependent on their close relatives for support and care.

We have received the reviewer’s comments and have adjusted the manuscript accordingly. Please view the list of changes made and the responses to the reviewer’s comments below.

Looking forward to Your decision concerning publication of the above mentioned manuscript,

Regards,

Ms Josefin Vikström

Reviewer nr 1:
• Question: What is new from these results?
  
  o Response: Previous studies on the topic have not focused on individuals as old as 85 years and most studies have excluded individuals living in nursing homes. This is the first study that focuses on the influences of childlessness on the very old including those who live in nursing homes.

• Question: Was there any information about cognitive function and was a cut off used to go for questioning relatives?
  
  o Response: The participants could decide for themselves whether or not they needed help in filling out the questionnaire. This was clarified in the method section under the subheading “Ethics”.

• Question: Which relatives were involved in those who were childless?
  
  o Response: Table 4 originally only showed if the help received came from a relative, a friend or if no help was received. Additional cross-tabs were performed. Table 4 now shows which relatives were involved in helping the 85-yearold parents and childless individuals.

• Question: Is there any information about childlessness for nonparticipants?
  
  o Response: Unfortunately, the authors do not have access to this information.

• Question: How did the authors deal with parents who lost their children, recently or long ago?
  
  o Response: Unfortunately, the authors do not have access to this information. This was clarified in the discussion section, paragraph 10.

• Question: The tables could all be combined so there is space for more indepth analyses.
  
  o Response: In our opinion such a table would be confusing for the reader since it would involve several different types of analyses.

• Question: There are mistakes in the tables.
  
  o Response: The mistakes in table 1, 2 and 4 have been corrected.

• Question: Are there any indepth analyses with the number of children?
  
  o Response: We have tested using children as a continous variable (0-4) in our logistic regression analyses. However, the analyses were impossible to conduct due to a limited number of individuals per cell.

• Question: Flow chart is missing.
  
  o Response: A flow chart has been added to the article (figure 1).

Reviewer nr 2:

• Question: The introduction starts with negative relationships between involuntary childlessness and psychological well-being. However, the remainder of the introduction does not specify whether findings refer to voluntary or involuntary childless older adults. This omission needs to be addressed considering empirical support for the differential outcomes between voluntary and involuntary childlessness.
• Response: This has been clarified in the introduction section, paragraph 2 line 2-4, paragraph 5 line 2-3.

• Question: In addition, the introduction currently leads the reader to believe that the study will focus on involuntarily childless adults. This is not the case. As such, the introduction needs to weave together the different types of studies on childlessness and the purpose of the current study (e.g., why “all” types of childless adults are included in the study).

• Response: Please see the above mentioned changes as well as paragraph 8, line 5-6 and paragraph 9, line 1-2. We do not feel that expanding the introduction section further with a more indepth analyses of the influences of voluntary vs involuntary childlessness would improve the article further as we do not have the possibility of analysing these differences.

• Question: Considering the cross-sectional design of the study, the term “influences” of childlessness on psychological well-being is not quite correct (including the title of the manuscript). Longitudinal designs can examine influences whereas cross-sectional designs are limited to examining relationships among variables.

• Response: We do not feel that this change in title is necessary.

• Question: Please explain why the goal of the study was to understand the oldest old but the sample was limited to 85 year-olds only rather than all adults 85 and over.

• Response: The purpose was to learn more about “the elderly elderly” and as the use of health care is largest in the ages 80-90, this cohort of 85-year olds were selected. A new citation for an article explaining the objective of the ELSA 85 in the method section, paragraph 1, line 5-6 has been added.

• Question: The authors acknowledge that their assessment of childless status has limitations. One way to address this limitation is to at least look at how many of the childless adults have grandchildren.

• Response: Unfortunately the authors do not have access to this information. The discussion regarding this limitation has been added in the discussion section, paragraph 10.

• Question: Please add citations to all measures that are standardized.

• Response: A citation for the visual analogue scale has been added in the methods section under the subheading “procedure”.

• Question: Please note possible limitations in the discussion of using single-item scales.

• Response: This has been added in the discussion section, paragraph 10.

• Question: Please explain why you decided to dichotomize continuous variables, considering the statistical limitations of this practice, rather than using analyses specifically designed for use with continuous dependent variables.

• Response: Since the number of childless individuals is so small, not dichotomizing continuous variables would result in very small sample sizes.
• Question: The sample sizes for chi-square sometimes fall below the required n = 5 per cell. You should consider using a chi-square adjustment such as Fisher’s exact test to overcome this issue.

  o Response: In the cases that the sample sizes fell below 5 and the p-value was significant, Fisher’s exact test have been performed to overcome this issue.

• Question: A greater concern, however, is the use of logistic regression with many variables in light of the very small sample size for childless adults (n = 57) and by marital status. Conventional methods suggest n = 10 per variable in the analysis (e.g., if you have 5 variables you need at least 50 participants in the study).

  o Response: We have not found another solution to this problem as for example ANOVA requires a countinous dependent variable.

• Question: Can you please better explain the sample size? 650 oldest old were contacted and 496 agreed to participate (76% response rate). Of the 496, only 377 actually participated. That would mean that the sample size is 377 instead of 496 as mentioned in the abstract and table?

  o Response: Clarifications have been made in the results section, paragraph 1 and through adding a flow chart (figure 1).

• Question: I suspect that the small sample size for childless adults, and thus lack of power, accounts for the lack of significant findings. This should be discussed as a limitation of the study.

  o Response: This has been added to the discussion section paragraph 10.

• Question: Some sections of the discussion should provide better explanations of or speculations regarding the findings.

  o Response: Attempts at improving these explanations and speculations have been made in the discussion section.

• Question: Paragraph 8, line 5: “…would suffer more from never having had children.” This statement is not supported by the data, because it is possible that some childless adults had children who died. As noted earlier, looking at the number of childless who have grandchildren will help provide some insights on this issue.

  o Response: This statement has been changed.

• Question: In addition to listing the limitations, the authors need to provide an explanation of what these limitations mean regarding the study and findings.

  o Response: Attempts have been made in improving these explanations in the discussion section, paragraph 10.