Author's response to reviews

Title: A gender perspective on factors that influence outdoor recreational physical activity among the elderly

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Author's response to reviews: see over
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Title: A gender perspective on factors that influence outdoor recreational physical activity among the elderly

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Author's response to reviews:

Dear Editor,

Please find attached the revised version of our MS 4987050132352029. We agree with the reviewer’s conclusions of the study and are very grateful for their helpful comments. The manuscript has been revised according to the reviewer’s suggestions or we have tried to be more precise in our expressions. Below follows an account of the responses made and changes done to the manuscript. We have coloured and underlined all changes done. We hope that this revised manuscript will meet approval. Please, do not hesitate to contact me if you have any questions.

Kind regards,
Katarina Sjögren

Reviewer #1 (T.Kostka)

Major Compulsory Revisions

Results

1. Presentation of results still might be improved. In Statistical analysis section it has been stated that “several different models were tested” and that “in the first model, all independent variables…were included”. It is not clear what were other models used. Response: We re-wrote in more descriptive manner. We changed “Several models” to “Two models”, page 7, line 3. We also re-wrote on page 7, line 4-8: The next model included variables for which a significant impact on the probability of performing outdoor recreational PA existed between the independent variables that included more than 5 participants in each combined group, and also evaluated association for interaction between these variables, with a p-value < 0.005.
2. There are still doubts concerning interaction interpretation, especially for men aged 90-96: the number of smokers/non-smokers and participants/not participants was very low in some sub-categories within the whole 19 subjects group.

**Response:** In the discussion, page 14, line 5-8 we have added: We included participants 90 years of age and older. Even though this group comprised a small fraction of the participants (51/999; 5%), they are an important group since the numbers of the oldest old will continue to increase due to the size of the aging population and increasing longevity.

On page 11, line 24-25 (to be continued on page 12, line 1-2) we also added: The number of smoking participants in this study was low, which reflects the smoking habits among Swedish adults. In fact, Sweden has Europe’s smallest proportion of daily smokers among men. In 2003, 17% of men and 18% of women aged 16-84 years were daily smokers.

Repetition of results from pages 8 and 9 in Table V is redundant. One presentation of the results of logistic regression (either with all the independent variables included or stepwise) would be sufficient.

**Response:** From the old version of the manuscript we have deleted the following from page 8, line 13-16: The final model for men and women contained all independent variables from the first model for which a significant impact on the probability of performing outdoor recreational PA existed between the independent variables that included more than 5 participants in each combined group and a p < 0.005.

However, we choose still to present the variables on page 8 and 9 since they are not results but show the five respectively seven variables (for men and women) that were included in the final model. In table V we present the results, i.e., independent factors significantly associated with the probability of performing outdoor recreational PA.

3. Table III: percentages refer to the whole population. It would be also useful to present percentages of participation in outdoor activities within each age category.

**Response:** We have added percentages of participation within each age category.

4. To substantiate the conclusion of more rapid decline of participation with advancing age among women the significant age x gender interaction should be presented in results. Phrase on page 9, line 15-16 is not enough.

**Response:** We made the analysis for men and women separately and because of that we can’t see that we can add this variable.

Minor Essential Revisions

5. Page 4, line 10: phrase “… there is no internationally agreed definition or measure of PA” is disputable. Definition of PA that is widely accepted has been given by authors. There are many agreed measures of PA, ranging from PA questionnaires to doubly labeled water method. The same for page 13, line 9.
Response: We agree and have changed this. From the old version of the manuscript, we have deleted following from page 4, line 10: “and as yet, there is no internationally agreed definition or measure of PA”, and from page 13, line 9, we have deleted: The lack of a universal definition of PA limits inter-study comparisons.

6. Repeating in the discussion “…both from the fourfold table and the logistic regression…” is redundant.
Response: We agree and have deleted this. From the old version of the manuscript, we have deleted this from page 10, line 20: page 11, line 1 and page 11, line 14.

Reviewer #1 (S Y Pan)

Majory Compulsory Revisions:

1. Abstract
   a. It should be indicated that the study population is Swedish.
   b. “more factors were associated with….among women”: please specify what factors.
Response: a. We have added following to the abstract, page 2, line 8-9: This study included 999 individuals 60-96 years of age living in the south eastern part of Sweden. 
b. We have added following to the abstract, page 2, line 17-19: i.e., living alone, being unable to cover an unexpected cost, fear of being violated, and fear of falling.

2. Page 5, 2nd paragraph: “…all surviving members of the 81-, 84-, 87-, 90-, 93-, and 96-year age cohorts”. This sentence is not clear. If all surviving members aged 81 years or old were selected, no stratification by age group is necessary for this age group.
Response: We re-wrote in more descriptive manner, page 5, line 16-21: This study included individuals 60-96 years of age. The purpose of the data collection design was to receive a randomly selected sample, representing the old population in a broad variation of ages. Thus, those invited to participate were randomly selected members of the 60-, 66-, 72-, and 78-year age cohorts, however, since the number of elderly decrease with increasing age, all surviving members of the 81-, 84-, 87-, 90-, 93-, and 96-year age cohorts were invited.

3. Page 5, 2nd paragraph: “… the participants were divided into the following 4 age groups: 60-66, 72-78, 81-87, and 90-96 years”. Why people aged 67-71, 79-80 and 88-89 years were not included? Were there no people at these ages?
Response: Those invited to participate were randomly selected members from the 60-, 66-, 72-, and 78 year age cohorts. Thus, people aged 61-71, 79-80 and 88-89 years were not included.

4. Page 6, 2nd paragraph: If the 2 survey questions in the original questionnaire about outdoor recreational PA contained gymnastics, the word “gymnastics” can not be deleted from the text.
Response: We agree and have put the word “gymnastics” back to the text.
5. Page 6: “stepwise multiple binary logistic regression was used to evaluate differences in variables with significantly…..”. The logistic regression was used to evaluate the associations between various independent variables and the performance of outdoor recreational PA, not to evaluate differences.

Response: We agree and have changed the sentence, page 6, line 20-21: Stepwise multiple binary logistic regression was used to evaluate the associations between various independent variables and the performance of outdoor recreational PA.

6. Results, page 7-8: It is better to be more conservative to say factors that were significantly associated with outdoor PA than “factors that significantly enhanced the performance of outdoor recreational PA” because the significant associations are necessarily casual relationships.

Response: We agree and have changed this. We have also changed this in the title for Table IV.

7. For table IV, please add a footnote or specify in the title that the analysis was done by four-fold table, rather than univariate logistic regression.

Response: We have specified this in the title of the table.

8. Table V presents the results from multivariate logistic regressions; therefore, please add a footnote that what covariates were adjusted to each odds ratio.

Response: We have added a footnote as suggested.

9. Page 13, line 16: it is better to use the word “assess” rather than “check”.

Response: We agree and have changed this.