Author's response to reviews

Title: The effect of cognitive-motor dual-task training on cognitive function and plasma amyloid beta peptide 42/40 ratio in healthy elderly persons: a randomized controlled trial

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Author's response to reviews: see over
Dear Dr. Ruth Hubbard

Thank you very much for your e-mail dated on Apr 2, 2015 concerning our above-titled manuscript. We have sincerely addressed and re-revised our manuscript according to the comments by Referee 1. Each specific response to the reviewer is given in the following page. We hope that our manuscript is acceptable this time for publication in BMC Geriatrics. Your consideration of this re-revised manuscript will be greatly appreciated. The authors declare again that they have no competing interests.

I look forward to hearing good news from you at your earliest convenience.

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Response to Dr. Flicker

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1. According to the comment by Dr. Flicker, we revised the description regarding our randomization procedure using the random (sampling) number generation program on computer in more detail again. The revision is as follows:

p7 line 19
A disinterested third person performed the randomization by computer processing with the random number generation program. In brief, the person gave the different random number to each participant on the computer software, and ranked them due to the random number. The participants who had the ranking of even number were assigned to the DT group, and odd number to the ST group. The above operation was repeated until the person achieved balance on gender, age, years of education, and the total scores of 3MS exam.

2. In regard to the comment about the study design, we believe that the present study was conducted as single-blinded design. All participants in both groups underwent the cognitive task, but the instructor skillfully mixed the concurrent cognitive task during resistance and aerobic training only in the session for the DT group. Furthermore, the participant in each group could never come across each other or know about the session for the other group, because the session for each group was carried out completely separately. Therefore, the participants were unaware of the group identity. However, since it cannot be totally excluded that some participants had an idea of which training they were undergoing, we re-revised the paragraph concerning limitations in the Discussion section of the revised manuscript according to the suggestion by Dr. Flicker as follows:

p23 line 10
Second, the present study was conducted as single-blinded design, in which only the exercise instructor was aware of the character of each exercise program. However, it cannot be totally excluded that some participants had an idea of which training they were undergoing and that the issue influenced the greater improvement in cognitive function in the DT group.