Author's response to reviews

Title: Cognitive Training Can Reduce the Rate of Cognitive Aging - Evidence from Cohort Neuroimaging Data

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Author's response to reviews: see over
November 15th, 2015
Dr. Pieter Jelle Visser
Manuscript ID: 2044029001539979
Manuscript title: Cognitive Training Can Reduce the Rate of Cognitive Aging—Evidence from Cohort Neuroimaging Data
Authors: Ting Li, Ye Yao, Yan Cheng, Bing Xu, Xinyi Cao, David Waxman, Wei Feng, Yuan Shen, Qingwei Li, Jijun Wang, Wenyuan Wu, Chunbo Li and Jianfeng Feng

Dear Dr. Pieter Jelle Visser,
Thank you for your letter dated 27th Oct. 2015. We were pleased to know that our manuscript was rated as potentially acceptable for publication in BMC Geriatrics.

We have now revised our manuscript in line with the comments. Appended to this letter was our point-by-point response to the issues raised by the reviewers. We would like to take this opportunity to express our sincere thanks to the reviewers whose suggestions, we believe, have greatly improved the paper. We would also like to thank you for your editorial efforts.

We hope that the revised manuscript meets your approval for publication in the nearest issue of BMC Geriatrics.

Sincerely Yours,

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Response to reviewers

The authors would like to thank the reviewers for their valuable comments that help to improve the manuscript. For details, please refer to the responses as follows.

- **Indicate use of rs-fMRI in the abstract methods section**

Thanks for your advice. We have modified this as you suggested.

- **The recruitment of subjects should be better described (abstract and methods manuscript).**

The authors mention:

“Sixty participants were from three randomized groups [10], who finished the MRI scanning at baseline, 22 people from Multi-domain training group, 21 from Single-domain training group and 17 from control group?. In the original publication (Chen 2012) 270 subjects were enrolled

1. The flow should be described: number of subjects responded to advertisements and screened and included in the MRI part providing differences in demographics between the

2. Number of subjects enrolled at baseline

3. Drop out rates during the study

In addition, the randomisation procedure should be described.

As a guide for reporting, please complete and report according to the CONSORT guidelines

Thanks for your advice. We have modified this one by one in the related parts as you suggested and revised a new Figure 1 as attached.

Two reviewers commented on the use of Pearson correlations. The reply of the authors is not sufficient. The authors should use functional connectivity analysis. This should also work with the current sample size.

Thanks for your advice. We have done functional connectivity analysis as you
suggested and found similar results as entropy study. We have shown this in
detail in Section 8 of Supplementary Material and added it in the Discussion part.