Author’s response to reviews

Title: Headache symptoms from migraine patients with and without aura through structure-validated self-reports

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Prof. Dr. Marina De Tommaso
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Dear Prof. De Tommaso:

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Title: Headache symptoms from migraine patients with and without aura through structure-validated self-reports

By Jiawei WANG et al.

Thank you very much for your email feedback about our paper submitted to your BMC Neurology. We are very grateful to our Reviewer’s comments to the paper, and feel very lucky to have a great reviewer in this field like Prof. Dr. Prudenzano. We enjoy very much from these comments. Now, we have revised our manuscript according to them. Here we outline in detail about the changes (in red in the manuscript). Our answers are in these big brackets ‘{}’.
To Reviewer #1 (Prof. Dr. Maria Pia Prudenzano):

1. I think that the classification system of Headache Symptom Questionnaire should be revised. For example the item “My headache was aggravated by physical activity” should not be classified as a “SOMATIC/AURA SYMPTOM”.

Answer: {Thank Prof. Prudenzano for the very insightful comment. Indeed, the item “My headache was aggravated by physical activity” should not be classified as a “Somatic/Aura Symptoms”, and we apologize for that. Following Prof. Prudenzano, we have selected a substitute item for it, “I felt abdominal pains when headache attacked” from the original MATRIX pool (which is in order close to the deleted item), which is more consistent with this factor. Accordingly, our results are changed. For instance, for the Headache Symptom Questionnaire, (a) the item loadings on the target factors and the item cross-loadings on other factors all have been changed (please see Table 1); (b) the fitting model indices have all changed (please see page 9, para 1, last line), which is now slightly worse than the one described in our previous draft, but it is still very good according to these indices (please also see our answer to the next comment); (c) the internal alpha of Factor 1 has been changed to .79 (please see page 9, para 2, line 11); and (d) Figure 2 have been re-drawn (please see the new Figure 2). For group comparisons, (e) the scale score of Factor 1 in MO and MA have been changed (please see Table 2), BUT the statistical significances remain the same as we described in our previous draft. Due to the results-similarity, our Discussion part regarding this factor remains the same as that in our previous one.}

2. The factor “PRODROMAL SYMPTOMS” includes only three prodromal symptoms (namely the first three items of the list). The six remaining items within the factor refer to a mixture of triggers (Mental pressure could trigger my headache), pain type (I felt throbbing over my head when headache attacked), side symptoms (“I got ringing in my ears when headache attacked”, “I was easily irritated when headache attacked”). Moreover the items “I was often upset about my life or study/work” and “Insomnia intensified my headache” can hardly be considered as prodromal symptoms.

Results should be reassessed after the classification revision.

Answer: {Again thank Prof. Prudenzano for the important comment. Following this advice, we have re-analyzed our data. The changes are: (a) one item “I felt throbbing over my head when headache attacked” which was in previous Factor 4 but now is grouped to the new Factor 3; meanwhile, we have deleted two items in this factor. (b) The deleted two items are “Mental pressure could trigger my headache” (which illustrates a trigger of headache, and is highly cross-loaded on other factors), and (c) “I got ringing in my ears when headache attacked” (which
indeed describes side symptom of headache, and is lower-loaded on the target factor). With the left items, we have re-named the factor as “Prodromal/ Aggravating Symptom”. Therefore, in the current draft, (d) the total number of items of the Headache Symptom Questionnaire has been reduced to 27 (please see page 9, para 1, line 6), and (e) the fitting model indices have all changed (please see page 9, para 1, last line), which is now slightly worse than the one described in our previous draft, but it is still very good according to these indices (please see our answer to the first comment). Consequently, we have changed the respective places in our text, (f) in Abstract (page 2, para 2, line 9 and 11), in Results (page 9, para 2, lines 5, 8-9 and 11-13; and page 10, para 2, lines 2, 4-5), and in Discussion (page 10, para 4, line 4, and page 12, para 1, line 1-2) sections. (g) Please also see the new Tables 1 and 2, and the Figure 2, for the related changes.

Dear Prof. De Tommaso, we hope our changes this time would satisfy you and Prof. Prudenzano. If you have any suggestions, please feel free to contact me.

Yours,

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