Author's response to reviews

Title: Workplace gender composition and psychological distress: The importance of the psychosocial work environment

Authors:

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Author's response to reviews: see over
Dear Editor

We would like to thank you for your comments and suggestions regarding our manuscript. We have now prepared a revised manuscript in accordance with your suggestion. You can find our responses to each comment below.

Sincerely

Sofia Elwér

Bold font=comments from the editor
Plain font= authors’ response
Indented, italicized font= sections from the revised manuscript

Comments and responses to the editor

Abstract.
Comment 1. At the end of the method section, the end of the sentence '...to assess possible mediators' should be replaced by '... to assess differential associations between psychosocial work factors and psychological distress according to gender composition'.

Response: We have changed the sentence in accordance with your suggestion.

Comment 2. The sentence in the result section 'In addition, working at workplaces with more women was related to psychosocial distress, until adjustment for gender' should be deleted (please see also comment no 9).

Response: We have deleted this sentence from the result section in the abstract. We have also deleted a corresponding sentence from the discussion section of the manuscript.

Comment 3. The last sentence of the results section should be clearer and simpler. My suggestion would be to replace it by the following: 'Psychosocial work factors did not explain the association between gender composition and psychological distress'.

Response: We have changed this sentence in accordance with your suggestion.

Comment 4. Please remove the terms 'reaction' or 'contextual reaction' everywhere in the text (not appropriate). They may be deleted or replaced by 'perception'.

Concerning the manuscript: 8011017741009685.
Manuscript Title: Workplace gender composition and psychological distress: The importance of the psychosocial work environment
Sofia Elwér, Klara Johansson and Anne Hammarström
Response: Thank you for pointing this out. We have replaced reaction with perception throughout the manuscript.

**Analyses section**  
**Comment 5.** The interaction between gender and gender composition should be added in this section.

Response: The following sentence was added to the analysis section:

Analysis section, page 8, paragraph 1:  
*Interaction between gender composition and gender was also tested (data not shown).*

**Results section**  
**Comment 6.** Paragraph 3 should be moved just after the first paragraph of this section (results related to Table 1).

Response: We have moved paragraph 3 accordingly.

**Comment 7.** Last paragraph, the sentence 'With interaction terms included in the model, high demands, low control and low support were still associated with psychological distress' should be deleted (as the interaction terms are not significant, the best model may be the one without interaction term). The end of the sentence '...except for the final model of being looked down upon' should be deleted for the same reason. Next sentence, '...based on gender composition' should be changed into '...according to gender composition'.

Response: We have deleted the sentences as suggested and changed the last sentence in accordance with your suggestion.

**Comment 8.** Discussion section. Page 10, last sentence 'In light of our results, gender composition does not seem to have...' seems incorrect. Please revise.

Response: We are not certain that we understand in what sense you find the sentence incorrect. However, we have changed this sentence to the following and hope that it is clearer:

Discussion section, page 11, paragraph 1:  
*Previous research has suggested an influence of gender composition on the association between high strain jobs and sickness absence for both women and men [9]. Our results indicate that when the outcome is self-reported psychological distress rather than sickness absence, gender composition does not influence the association between the psychosocial work environment and the outcome in a corresponding way.*
Comment 9. Table 2. I suggest three models only: model 0 (without adjustment), model 1 with adjustment for the three covariates (socioeconomic position, psychological distress at 21 and gender), and model 2 with additional adjustment for psychosocial work factors.

Response: We have changed table 2 accordingly and added a comment in the result section to make explicit that it was the adjustment for gender that caused the insignificant association.

Result section, page 9, paragraph 2:
Employees at workplaces with more women did not have a higher OR of psychological distress compared to workplaces with more men when the association was adjusted for covariates in model 1, and among the covariates it was the adjustment for gender that made the association insignificant.

Table 2, page 18:
Table 2: Logistic regression analyses for psychological distress in relation to workplace gender composition (ORs and 95% CIs).

<table>
<thead>
<tr>
<th>Gender composition</th>
<th>OR Model 0</th>
<th>OR Model 1</th>
<th>OR Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>More men (reference)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Mixed</td>
<td>2.02 (1.34 – 3.03)</td>
<td>1.88 (1.20 – 2.94)</td>
<td>1.77 (1.10 – 2.83)</td>
</tr>
<tr>
<td>More women</td>
<td>1.62 (1.14 – 2.29)</td>
<td>1.21 (0.78 – 1.89)</td>
<td>1.26 (0.79 – 2.00)</td>
</tr>
</tbody>
</table>

Model 0: Bivariate for each exposure
Model 1: Adjusted for socioeconomic position, psychological distress at age 21 and gender.
Model 2: Adjusted for socioeconomic position, psychological distress age 21, gender and all psychosocial work environment factors (high demands, low control, low support, not important work and looked down upon).