Reviewer's report

Title: A systematic review including meta analysis of work environment and depressive symptoms Running title: Job strain and bullying at work are related to depressive symptoms

Version: 2 Date: 23 March 2015

Reviewer: JianLi Wang

Reviewer's report:

This is a systematic review on relationship between workplace factors and depression, which is an important research topic. This review focused on depression only and a broad spectrum of workplace factors. The conclusions are consistent with the literature that high job strain and bullying have significant impacts on the development of depression. I offer several comments on the paper for the authors’ consideration.

Major compulsory revisions:

First, the review included studies that used structured diagnostic interviews or depression rating scales. The outcomes based on these instruments could be either major depressive episode/disorder based on the DSM or ICD criteria, or “depression” that exceeds certain cut-offs. Whereas in the manuscript, the authors used the term of “depressive symptoms” which is a very broad concept. “Depressive symptoms” may include one or two symptoms, which can be normal mood changes; it may also refer several symptoms that exceed the pre-defined threshold. To be distinguished from normal mood changes, why not use the term “depression” or “severe depressive symptoms”, or other appropriate terms?

Second, I believe that the selected studies used different instruments/scales to measure the exposure variables, e.g., job strain, and the studies might have used different cut-offs or definitions for a specific exposure. It will be helpful if the authors could comment how different definitions of exposure may have affected the conclusions.

Third, the authors reported no gender/sex difference. Again, I think that it may be related to how exposure is defined and whether the same or different thresholds were used for men and women. Wang et al.’s research indicated that job strain seemed to affect men and women differently in relation to the risk of major depressive disorder. For example, men had elevated risk of MDD only if they were exposed to extremely high level of job strain; women on the other hand had high risk of MDD even they were exposed to moderate job strain. If the same threshold of job strain for men was used for women, the association between job strain and MDD in women disappeared or diluted. You may find the results and also sex specific associations between work-family conflicts, effort-reward imbalance and MDD in Wang et al. Am J Epidemiol. 2012. 176(1): 52-59.
Finally, given that there have been several systematic reviews on this topic, it would be helpful if the authors could elaborate in the Discussion on what this review has added to the literature on top of the previous ones.

Discretionary revisions.

Several longitudinal studies on this topic were not included in the reviews, for example:


and few others. I will leave it to the authors to determine the eligibility.

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.