# PEER REVIEW HISTORY

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#### ARTICLE DETAILS

TITLE (PROVISIONAL)	Is manager support related to workplace productivity for people with	
	depression: A secondary analysis of a cross-sectional survey from	
	15 countries	
AUTHORS	Evans-Lacko, Sara; Knapp, Martin	

## **VERSION 1 – REVIEW**

REVIEWER	Dr Ira Madan
	Guy's and St Thomas' NHS Trust and King's College London
REVIEW RETURNED	19-Feb-2018
GENERAL COMMENTS	Comments to authors (BMJ Open)
	This paper attempts to answer an interesting question. Whilst the methodology appears sound there are a few aspects of the description and interpretation of the finding, which I feel warrant further clarification.
	<ol> <li>In the abstract it should be clear that the days lost to work through absenteeism where absenteeism due to depression. This is important as there is emerging evidence that when manager discuss mental health issues with their workers the rate of absenteeism due to non-mental health issues also drops. It should be clear that the association between higher GDP countries and depression was self-reported depression.</li> <li>In the discussion it should be made clear that people from Asian countries are far less likely to report mental health problems, as there is still a huge amount of stigma surrounding the issue. This is implied in the discussion, by referencing relevant work. But this should be explicitly stated. And the influence on your results of the stigma of employees disclosing mental health issues and the possible reticence of managers discussing mental health issues with their workers should be discussed.</li> <li>I did wonder if the finding that countries with higher GDP had a marginally higher prevalence of self-reported depression could be due to lower levels of stigma around mental health in these countries. I think this should be discussed.</li> <li>I was concerned that some of the results in table 2 were at</li> </ol>

5)	odds with findings in studies in developed and I think that reasons for this should be explored. i) individuals with high levels of education relative to those with low levels of education took more days off of work because of their depression. Most studies have shown the opposite. ii) Those working in larger companies relative to smaller companies took fewer days off work. Most studies indicate the opposite. I don't suppose ethical approval was required for this study, but this should be stated and the accompanying guidance from HRA which refers.
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REVIEWER	Masahito Fushimi, M.D., Ph.D.
	Akita University, Japan
REVIEW RETURNED	24-Feb-2018

GENERAL COMMENTS	This paper analyzes data from 15 different countries, touching upon not only the mental health of employees, but also employers' ways of thinking about depression, an extremely interesting approach. In essence, therefore, I feel that this paper is worthy of publication. However, it has a flaw that concerns me: because this is a comparison of data from multiple countries, aren't there a number of diverse ways of thinking about the affliction of depression in the workplaces of these different countries? For instance, this study uses a self-administered evaluation, and it is possible that this evaluation method leads to wide disparities between countries and regions in the evaluation results. The author's observations take these limitations into account, but I feel it is necessary to further improve this method of evaluating diagnoses of depression and severity of depression.

## **VERSION 1 – AUTHOR RESPONSE**

Response to the Reviewers' Comments

Editor Comments to Author:

Please edit your title slightly so that it includes the study design and setting. We recommend something like this: 'Is manager support related to workplace productivity for people with depression? A secondary analysis of a cross-sectional survey from 15 countries'.

Response: Thank you for this suggestion. We have now revised the title to: 'Is manager support related to workplace productivity for people with depression? Secondary analysis of a cross-sectional survey from 15 countries'.

Reviewer(s)' Comments to Author:

Reviewer: 1

This paper attempts to answer an interesting question. Whilst the methodology appears sound there are a few aspects of the description and interpretation of the finding, which I feel warrant further clarification.

1) In the abstract it should be clear that the days lost to work through absenteeism where absenteeism due to depression. This is important as there is emerging evidence that when manager discuss mental health issues with their workers the rate of absenteeism due to non-mental health

issues also drops. It should be clear that the association between higher GDP countries and depression was self-reported depression.

Response: The abstract objectives section now states that we are referring to self-reported depression. The section on primary and secondary outcome measures already states: "absenteeism as measured by number of days taken off because of depression," but we would be happy to specify this in the objectives too if it is felt that this would be clearer.

2) In the discussion it should be made clear that people from Asian countries are far less likely to report mental health problems, as there is still a huge amount of stigma surrounding the issue. This is implied in the discussion, by referencing relevant work. But this should be explicitly stated. And the influence on your results of the stigma of employees disclosing mental health issues and the possible reticence of managers discussing mental health issues with their workers should be discussed.

Response: Thank you for highlighting this important link between stigma and reporting of mental health problems. There is research which highlights relatively high levels of concealment in Asian countries such as Japan and China, in comparison to other Western countries and this may influence workplace culture in relation to openness and comfort in discussing mental health issues. Previous research has shown that a cultural context which is more open and accepting of mental illness is associated with higher rates of help-seeking, antidepressant use and empowerment (5,6). We have now clarified this in the Discussion, and added new references .

3) I did wonder if the finding that countries with higher GDP had a marginally higher prevalence of self-reported depression could be due to lower levels of stigma around mental health in these countries. I think this should be discussed.

Response: This is an interesting point and highlights the interconnectedness of these different factors. We know from other research that economic indicators such as unemployment rate and decline in GDP are negatively correlated with comfort in talking to a person with a mental health problem; however, we think that stigma and economic performance are both important societal indicators and likely to influence disclosure independently. We have now mentioned this in the Discussion.

4) I was concerned that some of the results in table 2 were at odds with findings in studies in developed and I think that reasons for this should be explored. i) individuals with high levels of education relative to those with low levels of education took more days off of work because of their depression. Most studies have shown the opposite. ii) Those working in larger companies relative to smaller companies took fewer days off work. Most studies indicate the opposite.

Responses: Although it is well established that education and higher socioeconomic group more generally are inversely related with prevalence of depression, the link between education and time off work due to depression seems less clear from the literature. One systematic review found only limited evidence to support a relationship between increased work disability and low education (7). However, when looking at absenteeism in particular, other large studies, based on nationally representative populations, have found that absenteeism associated with depression is higher among those with more education and higher incomes (8). It may be that those with more education and higher pay have more control over their job and working hours compared to those with lower education and lower salaries whose jobs are often more vulnerable and less flexible. Similarly, we found that living in a country with a higher GDP was associated with higher levels of absenteeism and it may be that countries with more financial resources also have more job security and protections and so it is easier for individuals to take days off work. Similarly, large companies are more likely to have clear protocols to deal with taking time off and more flexibility for returning to work on a part-time basis (9,10). More

research is needed on the variations in these relationships with productivity among people with depression in the workplace and how this varies by cultural and economic contexts.

5) I don't suppose ethical approval was required for this study, but this should be stated and the accompanying guidance from HRA which refers

Response: We confirm that this study was classified as exempt by the King's College London, Psychiatry, Nursing, and Midwifery Research Ethics Subcommittee as this was secondary data and was fully anonymized. Data collection was performed independently by Ipsos MORI in accordance with the standards of ESOMAR, AIMRI, and EFAMRO in Europe, and is in line with the data protection act 1998.

#### Reviewer: 2

This paper analyzes data from 15 different countries, touching upon not only the mental health of employees, but also employers' ways of thinking about depression, an extremely interesting approach. In essence, therefore, I feel that this paper is worthy of publication. However, it has a flaw that concerns me: because this is a comparison of data from multiple countries, aren't there a number of diverse ways of thinking about the affliction of depression in the workplaces of these different countries? For instance, this study uses a self-administered evaluation, and it is possible that this evaluation method leads to wide disparities between countries and regions in the evaluation results. The author's observations take these limitations into account, but I feel it is necessary to further improve this method of evaluating diagnoses of depression and severity of depression.

Response: We agree that self-report of depression is a limitation of the study and it is a pity that it was not feasible to collect depression diagnoses in a more standardized way across the countries: this was beyond out influence. We hope that the anonymized format of data collection online increased participants' willingness to disclose mental health problems (11). We have also described the characteristics of individuals who did and did not report depression (in table 1) and the patterns atre consistent with other epidemiological research. For example, those reporting a diagnosis of depression were more likely to be female, divorced and working part-time. Individuals who reported never having a diagnosis of depression were more likely to be married and working full-time (12,13). Additional analyses suggest that within the European countries, Italy had the lowest prevalence of depression and that those living in Asian countries also had relatively lower prevalence; this is consistent with other epidemiological data (12,14). Although we feel that our findings provide an initial important step to understand depression in the workplace in relation to managers' reactions and productivity across diverse settings, we have further emphasised in the limitations section that the results should be interpreted with caution.