

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Working from home in Australia during the COVID-19 pandemic: Cross-sectional results from the Employees Working From Home (EWFH) study.
AUTHORS	Oakman, Jodi; Kinsman, Natasha; Lambert, Katrina; Stuckey, Rwth; Graham, Melissa; Weale, Victoria

VERSION 1 – REVIEW

REVIEWER	Vaish, Hina Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Cardiopulmonary Physiotherapy
REVIEW RETURNED	27-Jun-2021

GENERAL COMMENTS	<p>The focus on mental health, work at home, work family conflict and physical wellbeing during Covid-19 is relevant and responsible. Your research contributions here are appreciated.</p> <p>Format issues: Line no 68 : Comma is missing in between reference in line number 68, 82 and 94 for reference number 2 and 3; 4 and 5; line number 82 :12 and 13; line number 94: 15 and 16</p> <p>1) Since this is a study about Australian population, the authors should begin by describing what is similar and different about the disease in COVID 19.</p> <p>2) The concepts of working at home also need discussion with regard to individuals in Australia when there hasn't been a pandemic. The work family conflict also need to be highlighted when there hasn't been a pandemic. The meanings of "work at home" and "work family conflict" should be operationalized. This will allow readers an opportunity to understand the nuances in which these terms are being coined/defined.</p> <p>3) Manuscript should be reorganized to make a theoretical contribution to the literature highlighting what they mean by working at home before and after pandemic.</p> <p>4). Statistics are necessary to describe what percentage of women are employed before pandemic in work, percentages of men and women working online prior to pandemic and the changes introduced by the pandemic in the type of work with reference to literature.</p> <p>5) Regarding methodology, working at home status should be established as 'at all' or partial. Some participants may have worked from home at the beginning of the pandemic and has changed since, or work some days from home and others not.</p>
-------------------------	---

	<p>6) The authors state the study as a national survey however major number of participants recruited were from Victoria. It is not justifiable to quote the study as national survey.</p> <p>7) Australian residents working at home for at least two days a week at some time in 2020 during the COVID-19 pandemic were enrolled. However to judge the work family conflict, musculoskeletal health, mental health a definite time period is required as minimum criteria which was not well defined. This could have introduced a bias.</p> <p>8) The authors stated the use of Chi-squared or Mann-Whitney test of difference between male and females as applicable. However, it is unclear where Mann Whitney test was used and why z value and median difference were not reported. The authors could have used some symbol to differentiate where which test was used as in the entire table data is reported only as frequencies and percentages. More details about statistical analysis are warranted. It is unclear about whether there was missing data on the items where frequencies and percentages were reported.</p> <p>9) The authors state that almost all respondents worked from home for an increased number of days during the COVID-19 pandemic (Table 2), however the methodology lacks data on how the increased number of days were judged. Neither the authors reported in introduction about less number of working days prior to pandemic.</p> <p>10) Under discussion section around line number 301, the authors cite that many people with dependents were WAH while also supervising children. Whilst this situation is unusual, the dual responsibilities of managing work and childcare are more commonly undertaken by females.²⁸ The introduction lacks literature on gender disparities in Australian population with respect to home and family responsibilities.</p>
--	---

REVIEWER	Van de Velde, Dominique Ghent University, occupational therapy
REVIEW RETURNED	30-Jun-2021

GENERAL COMMENTS	<p>This is an interesting study and is relevant. However some major issues could be raised here.</p> <p>Regarding the method. The authors mention that in this study also focus groups were used to collect data. it was however not clear how the focus groups were organised, online, face-to-face, ... And also the sampling technique was not clearly described. But, because the focus groups will be described in another paper, it doesn't seem logic to give this information in this paper.</p> <p>About the results of the survey. All the information is described in a correct way. There are no mistakes in the statistical analysis, but unfortunately only descriptive information is given. The data are to my opinion much richer than what has been written down in this paper. No hypotheses were raised and no explanation is given based on more fundamental statistics (in the discussion section some aspects are discussed but could probably be explained and supported by more sophisticated, but still easy statistics such as multiple linear regression analysis). Without further analysis of these data, one cannot attribute for instance that the difference between gender are due to covid-19 and working at home. What</p>
-------------------------	--

	are the explaining variables? More in depth statistical analysis is necessary in this data set.
--	---

VERSION 1 – AUTHOR RESPONSE

BMJ Open reviewer comments 13082021

Reviewer 1	
The focus on mental health, work at home, work family conflict and physical wellbeing during Covid-19 is relevant and responsible. Your research contributions here are appreciated.	Thank you
Line no 68 : Comma is missing in between reference in line number 68, 82 and 94 for reference number 2 and 3; 4 and 5; line number 82 :12 and 13; line number 94: 15 and 16	Thank you we did check the ref style, and also in the ENDNOTE file supplied which had no commas. We have then left without, but you are correct, there is different advice in different places about the required style.
1)Since this is a study about Australian population, the authors should begin by describing what is similar and different about the disease in COVID 19.	Thank you for this comment. We have added some Australian context in the first paragraph.
2)The concepts of working at home also need discussion with regard to individuals in Australia when there hasn't been a pandemic. The work family conflict also need to be highlighted when there hasn't been a pandemic. The meanings of "work at home" and "work family conflict should be operationalized. This will allow readers an opportunity to understand the nuances in which these terms are being coined/defined.	Thank you, we have added a paragraph to include some Australian contextual information. We have defined the variable working at home in the methods and how that was constructed.
3)Manuscript should be reorganized to make a theoretical contribution to the literature highlighting what they mean by working at home before and after pandemic.	Thank you we have reordered the introduction so that it starts with a discussion about WAH and then moves to the specific aspects or work that occurred before the pandemic.
4). Statistics are necessary to describe what percentage of women are employed before pandemic in work, percentages of men and women working online prior to pandemic and the changes introduced by the pandemic in the type of work with reference to literature.	We have provided overall statistics for working at home in the Australian context, as a population and then an additional paragraph on gendered impacts.
5) Regarding methodology, working at home status should be established as 'at all' or partial. Some participants may have worked from home at the beginning of the pandemic	The characteristics presented in table 2 establish the number of days worked from home during COVID-19 (from 2 to 5 days), the average hours worked, and whether there

<p>and has changed since, or work some days from home and others not.</p>	<p>has been a change in the number of days WAH pre to during pandemic. Data on whether participants work some days from home and not others was not collected. At the time of the survey for the majority of participants, as per state government regulation regarding lockdown, if they could WAH they must WAH. We did attempt to re-examine the data to address this, but we could not do that in a meaningful way, for the baseline.</p>
<p>6) The authors state the study as a national survey however major number of participants recruited were from Victoria. It is not justifiable to quoter the study as national survey.</p>	<p>We understand this comment, the questionnaire was sent to potential participants in other states. We have added a comment in the limitations though to ensure this is a clear limitation. We have taken out the word “national” from the design.</p>
<p>7) Australian residents working at home for at least two days a week at some time in 2020 during the COVID-19 pandemic were enrolled. However to judge the work family conflict, musculoskeletal health, mental health a definite time period is required as minimum criteria which was not well defined. This could have introduced a bias.</p>	<p>Thank you, we used standardised measures for the WFC, mental and physical health so the item stems were pre-determined. However, we did specify the following in questions where appropriate to capture whilst people are working at home</p> <p>When you are answering these questions, think about the times when you are /were working from home due to the COVID 19 pandemic.</p>
<p>8) The authors stated the use of Chi-squared or Mann-Whitney test of difference between male and females as applicable. However, it is unclear where Mann Whitney test was used and why z value and median difference were not reported. The authors could have used some symbol to differentiate where which test was used as in the entire table data is reported only as frequencies and percentages. More details about statistical analysis are warranted.</p>	<p>As statistically appropriate, the Chi-square test is used whenever frequency and percentages are reported in the tables. The Mann-Whitney test of difference is used when mean \pm standard deviation are reported in the tables (for example, satisfaction with division of household responsibilities – Household Tasks in Table 1). The use of Mann-Whitney in the tables is now indicated by a † and appropriate footnotes have been added.</p>
<p>It is unclear about whether there was missing data on the items where frequencies and percentages were reported.</p>	<p>The following lines have been added to the methodology section:</p> <p>To adequately describe the respondents of the EWAH survey, all valid responses were used. Variable sample sizes between items are therefore expected. Sample size or frequency are presented.</p>

<p>9) The authors state that almost all respondents worked from home for an increased number of days during the COVID-19 pandemic (Table 2), however the methodology lacks data on how the increased number of days were judged. Neither the authors reported in introduction about less number of working days prior to pandemic.</p>	<p>The following lines have been added to the methodology section:</p> <p>Change in days WAH pre to during pandemic was determined by taking a respondent's answer to "Before the start of the COVID-19 pandemic, how many days per week did you usually work from home?" – with allowed responses from 0 to 5 days – from their answer to "When you are working at home during the COVID-19 pandemic, how many days per week do you usually work from home?" - with allowed responses from 2 to 5 days. The generated variable theoretically runs from -3 to +5 with -3 indicating a decrease from 5 days WAH prior to COVID-19 to 2 days WAH during COVID-19 and +5 indicating an increase from no days WAH prior to COVID-19 to 5 days WAH during COVID-19. Given the incredibly low numbers of decreasing WAH, the variable was collapsed into "Decreased" (negative value), "Stayed the Same" (0), and "Increased" (positive value).</p>
<p>10) Under discussion section around line number 301, the authors cite that many people with dependents were WAH while also supervising children. Whilst this situation is unusual, the dual responsibilities of managing work and childcare are more commonly undertaken by females.²⁸. The introduction lacks literature on gender disparities in Australian population with respect to home and family responsibilities.</p>	<p>We have added some information in the background to address this comment.</p>
<p>Reviewer 2</p>	
<p>This is an interesting study and is relevant. However some major issues could be raised here.</p>	
<p>Regarding the method. The authors mention that in this study also focus groups were used to collect data. it was however not clear how the focus groups were organised, online, life,... And also the sampling technique was not clearly described. But, because the focus groups will be described in another paper, it doesn't seem logic to give this information in this paper.</p>	<p>We do understand the comment, but the idea was to give a sense about the whole study here; we have added some additional text here to support, but as this is a baseline paper, we are keen to leave this in.</p> <p>We have included the location of the focus groups and how these were selected in the section on Focus groups (see page 7 and 10)</p>
<p>About the results of the survey. All the information is described in a correct way. There are no mistakes in the statistical analysis, but unfortunately only descriptive</p>	<p>Thank you. The purpose of this baseline exploratory study was to describe the impact of mandated WAH and to determine if there were any gender differences. The purpose</p>

<p>information is given. The data are to my opinion much richer than what has been written down in this paper. No hypotheses were raised and no explanation is given based on more fundamental statistics (in the discussion section some aspects are discussed but could probably be explained and supported by more sophisticated, but still easy statistics such as multiple linear regression analysis). Without further analysis of these data, one cannot attribute for instance that the difference between gender are due to covid-19 and working at home. What are the explaining variables? More in depth statistical analysis is necessary in this data set.</p>	<p>was not to undertake modelling to address a specific hypothesis which would have limited the range of measures that we could include. We will do more specific analysis in other papers based on longitudinal data, but this was not the intent of the current analysis. Modelling has been undertaken regarding the gender differences and has been reported elsewhere.</p>
---	---

VERSION 2 – REVIEW

REVIEWER	Vaish, Hina Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Cardiopulmonary Physiotherapy
REVIEW RETURNED	05-Oct-2021

GENERAL COMMENTS	Thank you for the response. Thus is an interesting study and is relevant. Best wishes
-------------------------	---

REVIEWER	Van de Velde, Dominique Ghent University, occupational therapy
REVIEW RETURNED	12-Oct-2021

GENERAL COMMENTS	Notwithstanding the comments about the 'lack of richness' in the reported data, the authors did not alter their manuscript. The Authors describe that the 'depth' of the available data will be published elsewhere. They actually agree with the comment that additional analysis could have been done, but they obviously chose not to add this information to this paper and decided to write this additional information in another journal. This is a pity, because by sticking to the level of descriptive analyses, this paper does not add to the body of knowledge and actually there is no explanation of the descriptive data. With this descriptive analysis not possible to attribute the impact on mental health by working at home (and that it is gendered) is due to covid-19. One should be very carefully with these data. It remains only an assumption. Therefore I cannot agree to accept this paper for publication.
-------------------------	---

VERSION 2 – AUTHOR RESPONSE

Reviewer 1:

Thank you for the response. This is an interesting study and is relevant. Best wishes

Reviewer 2:

Notwithstanding the comments about the 'lack of richness' in the reported data, the authors did not alter their manuscript. The Authors describe that the 'depth' of the available data will be published elsewhere. They actually agree with the comment that additional analysis could have been done, but they obviously chose not to add this information to this paper and decided to write this additional information in another journal. This is a pity, because by sticking to the level of descriptive analyses, this paper does not add to the body of knowledge and actually there is no explanation of the descriptive data. With this descriptive analysis not possible to attribute the impact on mental health by working at home (and that it is gendered) is due to covid-19. One should be very carefully with these data. It remains only an assumption. Therefore I cannot agree to accept this paper for publication.

Authors response:

Thank you for your comments, we did make changes to the manuscript and addressed the comments or provided responses as to the reasons we could not make the suggested changes, which was in line with one of the reviewers. However, the fundamental issues that are raised by Reviewer 2 related to the overall aim of the paper. This is not something we can change, other than redesigning and rewriting the paper. The intent of the paper is to provide an overall description of a study cohort, which is a baseline paper. This has several key benefits. It tells the research community about the data set that we have and that they may like to share with their own data or make suggestions about collaborations with their own data. This paper provides insights into the most locked down city in the world. The comments about this does not add to the body of knowledge are somewhat unjust. Data relating to mandatory working at home of is completely without precedence and by virtue of that we are adding to the body of knowledge. We have provided the limitations of the data and in no way have we proposed that there are associations, but relationships, and that is completely in line with the analysis that was presented. It is providing the baseline data of the population and presenting the relationships that are observed. We are not at all clear about what this means that there is no explanation of the descriptive data as this is the basis of the paper. A description of the statistical methods employed is provided on page 11.

We have revised the limitations section to acknowledge that the current analysis does not enable causality to be conferred and added some text to highlight the unique aspects of this data set.

“The analysis presented in this baseline paper, does not allow for causality to be inferred and a range of cofounders need to be considered in future analysis”.

We have also modified the conclusions in the abstract to the following text:

“Preliminary evidence from the current study suggests that working from home may impact employees’ physical and mental health, and that this impact is likely to be gendered. Although further analysis is required, this data provides insights into further research opportunities needed to assist employers in optimising working from home conditions and reduce the potential negative physical and mental health impacts on their employees.”

VERSION 3 – REVIEW

REVIEWER	Van de Velde, Dominique Ghent University, occupational therapy
REVIEW RETURNED	02-Feb-2022
GENERAL COMMENTS	The changes in the manuscript are not in line with the comments that I have raised. The data-analysis is limited to descriptives and the authors did not go for further analysis as suggested. Therefore, i'm dissapointed in the rebuttal and the changes that have been made. The fact that the requested changes have been takled by adding some lines about the fact that this study is an preliminary study and that deeper analysis is written down in another article does not provide enough justification to publish this article. Excuse me for that.