Author's response to reviews

Title: Income inequality and alcohol related harm in Australia

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Author's response to reviews: see over
We thank the reviewer and editorial board member for their consideration of the manuscript. Our response to the queries is presented as indented italicised text directly after each of their comments.

Reviewer’s report
Title: Income inequality and alcohol related harm in Australia
Version: 2 Date: 25 November 2008
Reviewer: Esa Lauri Österberg
Reviewer’s report:
I have now read the revised submission of the article "Income inequality and alcohol related harm in Australia" by Paul M Dietze, Damien J Jolley, Tanya N Chritkizhs, Susan Clemens, Paul Catalano and Tim Stockwell as well as the covering letter, and find the article publishable as it now stands.

We thank the reviewer for these comments about our revised submission.

Editorial Board member’s report

1. The authors now explain quite clearly that they centered the GINI coefficients (point 1). However the changes made, have not been incorporated in the text belonging to the respective figures.

References to the ‘squared Gini coefficient’, have now been changed to the ‘squared centred Gini coefficient’ throughout the manuscript.

2. The authors carried out a sensitivity analysis but did not describe the results. Apart from this I suggest to look for possible effect modification by size of LGA. As the authors mention in the introduction (which contains wrongly a part about the measurement of the GINI coefficients; should be included in the methods section) some possible mechanisms, it seems worthwhile to look for differences between small and big LGAs. Social Capital and social connectedness are supposed to differ between large and small communities. It might increase the robustness of their findings or otherwise give a more detailed picture.

We have moved the description of the measurement of Gini coefficients to the methods section as suggested. We found the remainder of point 2, somewhat difficult to follow. We have now included a statement, early in the results section, to the effect that we conducted a sensitivity analysis (using the middle two quartiles of LGAs by population size) which showed a more-or-less identical pattern to the results presented. Indeed, the aim of the sensitivity analysis we conducted (at the request of Reviewer 1) was to examine consistency of our results (i.e. are they stable when we look at a central subset of LGAs?) whereas the editorial board member seems to be suggesting that we should look for differences, which would not be the aim of a sensitivity analysis. Our current results present an appropriate picture of the overall pattern of results. Issues around social capital and connectedness, raised by the Editorial Board Member in point 2, were not measured in this study but could be the subject of future work.
3. Given the large variation in cases occurring in LGAs the authors decided to control for this by weighting the models by the number of cases (both study and control cases). I wonder whether this is a sound measure as they are changing a variable of the supposed causal chain. At least this should be more explained.

The weighting we have undertaken involves using information for each datum (the generalised inverse variance of each datum) to adjust the contribution of each datum in analysis. This weighting therefore is not a predictor or outcome variable and merely provides a mechanism of correctly calculating the standard errors of the coefficients. In no way does it play any role in the causal chain. In this light the comment of the Editorial Board Member about the causal chain is difficult to understand. In order to better explain the weighting we have changed the description from "There was a large variation evident in the number of cases occurring in LGAs, related in part to the size of the LGAs. In order to control for these variations in the models we weighted the models by the number of cases (both alcohol-attributable and control) using the analytic weights procedure available in Stata." to "There was a large variation evident in the number of cases occurring in LGAs, related in part to the size of the LGAs. In order to control for these variations in the models we weighted the models by the number of cases (both alcohol-attributable and control) using the analytic weights procedure available in Stata. This weighting involves using the generalised inverse variance for each LGA in order to account for variation in LGA size."

4. I agree that the relevance of this contribution should be more highlighted in the introduction.

Additional statements have been included in the introduction to highlight how this work relates to current debate in Australia on the importance of social context. At the end of the fourth paragraph, we now state "These questions are of fundamental interest to public policy with recent debate in Australia, for example, focusing on questions of mechanisms for social improvement. In this debate understanding the interrelationships between social-contextual variables and health outcomes is seen as crucial [15]. Indeed, the recently-elected Australian Government has convened a National Preventive Health Taskforce that has a specific mandate in the area of alcohol harm reduction that sits within the Government’s agenda on social inclusion [16]." citing Moodie (2008) and reiterate this point at the end of the background section.

Editorial Changes
1. Can you please include contact e-mail addresses for all authors listed on the Title Page

Email addresses included as requested.
2. Can you please state the name of the ethical committee / board, which granted you permission to perform this investigation, in the Methods section of your manuscript.
   *Details of ethical clearance included as requested.*

3. Can you please include a "Conclusions" section. This should follow your Discussion. Details on how to prepare this section may be found here:
   [http://www.biomedcentral.com/bmccommentaries/1471-2458/16/1177](http://www.biomedcentral.com/bmccommentaries/1471-2458/16/1177)
   *A conclusions section has been included as requested.*

4. Can you please include a "Competing Interests" section. This should follow your Conclusions section. Details on preparation may be found here:
   [http://www.biomedcentral.com/bmccommentaries/1471-2458/16/1177](http://www.biomedcentral.com/bmccommentaries/1471-2458/16/1177)
   *Competing interests have been stated in accordance with journal policy.*

5. Can you please rename your "Contributions" section as "Authors' Contributions"?
   *Renamed as requested.*

6. Can you please move your Acknowledgements section, so that it follows the Authors’ Contributions section.
   *Repositioned as requested.*

7. Can you please remove the following sentences from your Title Page:
   - Running Head: Alcohol harms and income inequality
   - Word count: 3531
   *Details removed as requested.*