Reviewer’s report

Title: Secularity, abortion, assisted dying and the future of conscientious objection: Modelling the relationship between attitudes

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Reviewer: Anne Slowther

Reviewer's report:

This is an interesting and well written paper considering an important topic. The views of the public regarding abortion, assisted dying and medical conscientious objection, and how these may interact and change in response to changing demographics and societal culture are very relevant to the current debate on assisted dying that is occurring in many countries.

I am not familiar with the method of Latent moderated structural equations modelling so my comments may be misinformed. I think it will be important for a statistician with experience of this kind of modelling to review the paper.

Stating the hypothesis. Whilst I see that it is a reasonable hypothesis that religiosity or secularism are fundamental attitudes capable of predicting attitudes to abortion, presumably they are also capable of predicting attitudes to assisted dying and conscientious objection. It is not clear to me why your hypothesis then links abortion to secularism and religiosity as a trio that predict attitudes to the other two phenomena, nor why you hypothesise that attitudes to the 2 latter phenomena are determined 'to a large degree' by attitudes to abortion. You do not appear to have provided any evidence or argument to support your hypothesis that it is attitudes to abortion that drive attitudes to AD or CO rather than secularism or religiosity being the main driver. So in your conceptual model there are no direct links between secularism and attitudes towards assisted dying or conscientious objection.

Results. I presume because of your hypothesis that attitudes to abortion drive attitudes to AD and CO that you have not calculated associations between attitudes towards secularism or religiosity and AD or CO. While I see that this may be consistent with statistical modelling method chosen (as I said I am not familiar with this) it seems odd to me as a non-statistician that you would not calculate all the possible associations before developing or confirming your model. (or indeed attitude to AD and attitude to CO).

Discussion. It is not clear to me (in line with my previous comments) why your analysis demonstrates that the effect of secularity on attitudes to AD is fully mediated through attitudes to abortion. I do not disagree that it is likely that in the public consciousness CO has become closely tied to abortion. I think that this would be true in the UK also partly because the main
debate on conscientious objection uses abortion as its example. I can also see that if CO is perceived as being anti-abortion then any shift in public support for abortion may be associated with a reduced tolerance of CO. However, an increased tolerance of abortion and a reduced tolerance of CO could both arise from an increase in secularity more generally without one necessarily being mediated through the other.

I think that you argument in the discussion flows well from your initial conclusion that attitude to abortion is the mediator. My only concern is whether this conclusion is robust and I am unable to decide based on your presentation of your results.

The interaction between time taken to respond to the question and the strength of the association between attitudes to abortion and attitudes to AD and CO is interesting. It would be interesting for the reader if the authors could reflect on why this may be the case and what might be the implications for public engagement in developing policy on AD and CO.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
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