Reviewer’s report

Title: Age at first marriage, age at first sex, family size preferences, contraception and change in fertility among women in Uganda: Analysis of the 2006-2016 Period

Version: 0 Date: 06 Oct 2019

Reviewer: Snehanshu Saha

Reviewer's report:

The authors present a factor decomposition model to identify key elements contributing to fertility among women in Uganda. While the statistics is satisfactory such as CIs don't cross zero implying factors loading are trustworthy, I don't see anything new as far as conclusions are drawn. While it's standard to use multivariate decomposition methods, the authors present no justification for using this method over others, such as ICA. Effects and algebra of confounding variables are not presented clearly. Allocation of variation under the model needs to derived as well. Did the authors assume independence of the factors by design? If so, why? Does lifestyle impact fertility? IS it correlated to age at first marriage?

The analytical component of statistical exercise is almost absent.

Please explain and recompute the statistics necessary to justify your conclusions.

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?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:
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None

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