Reviewer’s report

Title: Marijuana legalization and historical trends in marijuana use among US residents aged 12-25: Results from the 1979-2016 National Survey on Drug Use and Health

Version: 1 Date: 14 Dec 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses one or several testable research questions? (Brief or other article types: is there a clear objective?)

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with sufficient technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable

OVERALL MANUSCRIPT POTENTIAL - Has the author addressed your concerns sufficiently for you to now recommend the work as a technically sound contribution? If not, can further revisions be made to make the work technically sound?

Yes - current version is technically sound
PEER REVIEWER COMMENTS:

GENERAL COMMENTS: The authors have responded appropriately to all but one of my comments, and so far as I can determine, they have also responded appropriately to comments from the other reviewer.

ADDITIONAL REQUESTS/SUGGESTIONS:

The exception is my final comment: "The limitations section should draw attention to the fact that the discussion of the legal context at different times is discursive and lacks methodological rigor."

The authors' reply states that: "We put it as a limitation (Line 344-345, Page 16)". But I do not see a response either at the point indicated or elsewhere.

The issue I raised is that the authors' account of the legal context lacks methodological rigour. It seeks post hoc to identify legal innovations that might explain the data, but does not constitute - for example - a systematic review of all potential influences. Another way to view this issue is that the authors' could have made some ad hoc predictions about the data they obtained based on a prior consideration of how legal innovations would be expected to influence drug use.

So I repeat: this limitation should be discussed.

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:

Acceptable
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