

Review of: "Purchasing and sourcing of e-cigarettes among youth in Scotland and England following Scotland's implementation of an e-cigarette retail register and prohibition of e-cigarette sales to under-18s"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

General Comments :

Thank you very much for the opportunity given for reviewing this paper. The study is relevant because aimed to examine youth purchasing, sale refusal, and sourcing of e-cigarette products in Scotland after retail regulations were implemented. Furthermore the study compared results obtained between Scotland and England after implementation of new e-cigarette regulations prohibiting sales to under-18s in both countries. However, I have some suggestions and questions that I hope will help to clarify the content and will make the paper more suitable for readers. Generally, I think additional information in the Introduction, Methods, and further information and ideas to the discussion would greatly improve the paper.

Major comments

Abstract :

In methods, I suggest that authors talk about the questionnaire used just before talking about the logistic regression.

Introduction :

- First of all, I suggest that authors start by giving an overview about the e-cigarette usage around the world by giving the rate of usage. Then, talk slightly about its consequences on health.
- Secondly, I recommend that authors invert the paragraphs order they made in the introduction. So, after including the overview and the consequences I have suggested above, they should add the two sentences they wrote " In the United States (US) and Canada, regulations.....vaping prevalence. Self-reported difficulty.....although obtaining e-cigarettes from social sources increased (Nguyen, 2019)."
- Moreover, I am not sure that the two sentences which say " There is little research examining the impact of prohibiting e-cigarette sales to under-18s and retailer registration outside the US and Canada. Such evidence is important for countries considering how to regulate e-cigarette sales." will be suitable to readers; instead, while the paper is talking about a study conducted in Scotland compared to England. I think it is better to remove those two sentences and limit the arguments on the reason why they chose to perform the study in Scotland and compare it with England investigation (e-cigarette context problem in Scotland).
- Next, they should append then the first paragraph they made in the introduction "Scotland implemented new e-

cigarette..... to under-18s, and went further by mandating retailer registration "

- Finally authors should complete the introduction part with the last paragraph they they wrote "This study aimed to examine youth purchasing,..... aged 18-19 (i.e., those of legal purchasing age)".

Methods:

In this part authors should show more information for making understandable the paper.

Firstly, they should talk about the study area. Was the study performed in all areas in Scotland? Could authors provide statistics about the rate of young aged from 16 to 19 years in Scotland?

Secondly, authors wrote that "Methods are described online (Hammond et al., 2020; Hammond et al., 2019)". They should explain on their paper the methods they used. Readers should not read an online document to understand their study.

Furthermore, what were their sampling method and technique?

Thirdly, could authors classify variables into dependent and independent variables? How authors did to ensure the data quality? How did they define these expressions "Past 12-month purchasing, past-12-month sale refusal; and past-30-day source" according to the frequency of purchasing, sale refusal, and the sourcing? For instance, did they consider young who purchased e-cigarette once in the past 12-month in their account?

Fourthly, in the statistical analysis section : what statistical tests they performed? What were the confidence interval and the significance level they conducted? Did they research confounding factors?

Finally, Could authors explain how they dealt with the Ethical aspect?

Results

Authors should start by describing the sample (The survey consent rate, the boy/girl sex ratio,.....).

I think that authors should remove the expressions "N are unweighted, % are weighted" on the title of table 2; they can put it in data analysis section in methods or below the table 2.

In my view tables are too long, authors should simplify the table sizes through describing in phrases some results and removing not relevant information that do not help to answer the objective of the study. Furthermore the number of the result tables is high; could they reduce it?. Three or at most four tables may be fine to answer objectives.

On tables 4, 5 and 6 Could authors show unadjusted OR and adjusted OR? How did they validate the final model?

Could authors explain how they chose the variables tested for interactions?

Discussion

Could authors find more studies over the world apart from US and Canada and compare them with their results?

Authors states that "Despite this, in 2018 (16 months post-regulations), 50% of youth vapers aged 16-17 (i.e., minors) in Scotland reported purchasing an e-cigarette product in the past 12 months". Could they explain why this augmentation despite the rules implemented? Is that because a low rules compliance? or political and socio-cultural influences ?

Minor comments

Results

The format of the tables should be reviewed (we see many lines and columns inside).

To wrap up, could authors remove this expression "Difference-in-differences analysis: " on the table 4 title to make it simple.