Reviewer’s report

Title: The density of electronic gambling machines and area-level socioeconomic status in Finland: a country with a legal monopoly on gambling and a decentralised system of EGMs

Version: 0 Date: 09 May 2019

Reviewer: Angela Rintoul

Reviewer’s report:

This is an important study that replicates similar studies conducted in Australia, the UK and elsewhere. It is valuable because it provides previously unavailable evidence from a new jurisdiction. The manuscript is well written and I only have a few minor comments.

What was the rationale for dropping gaming arcade data? I realise these are far fewer in number, however is it possible that these arcades are also concentrated in areas of disadvantage?

Can you say something about the strengths or limitations of using Finnish postcodes for social research?

Line 129 - I think it would be better to state the full list of variables from statistics Finland rather than "workplaces etc". Is this the number of workplaces in the postcode, for instance?

Line 144-49 - could you state why mean age was also included as a control variable? i.e. is this about the adult population? Could you have used only the adult population in the density calculations?

It is also possible that the population moves between postcodes or that many machines are located on the border of postcodes and used by people in adjacent areas. This is difficult to account for unless using GIS.

Line 208 - What do you mean by "the tax incidence of EGM gambling"?

Line 222 - this article posits some explanations for the relationship and might be worth referencing if you think appropriate


This article explains why using administrative data is more reliable than population prevalence surveys, it also discusses the plausibility of other potential explanations for the relationship between EGM expenditure and SES.
Another note for the limitations might be that this is an ecological study and further does not necessarily reflect utilization. Using expenditure data would give a clearer picture of utilization of these machines.

Finland is interesting as EGMs can be used legally online (in Australia, for instance, this is illegal and use and promotion by illegal (offshore) online providers is very limited). The use of online gambling on EGMs is not captured here, and this is obviously a different study. However, it would also be very interesting to conduct a study of the relationship between SES and use of online EGMs (and other gambling products) with user account data, should this become available in Finland.

Line 229 - incomplete sentence

The conclusion could be expanded to provide a summary of the results and a statement about the significance of the study etc

**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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