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

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Reviewer: Francis Markham

Reviewer’s report:

This is a well conducted study demonstrating that, once again, EGMs are more highly accessible in poorer neighbourhoods. The study appears to be well conducted, and uses data that appear to be generally sound (although I do not claim to know the specifics of the Finnish social science and EGM data infrastructure). It is the first of its kind in Finland. It makes a novel contribution to the literature, given that EGMs in Finland are subject to a government monopoly, unlike other countries where the bulk of the research of this type has been undertaken where EGMs are licensed to private operators (e.g. Australia, New Zealand, UK, Canada, etc.). As such, I am pleased to recommend the paper to the editors.

However, the paper could be improved in some minor ways.

In the introduction (p. 3, lines 56 - 63), the authors outline what they term a socio-ecological approach. So good so far. The final sentence of that paragraph discuss the possibility that "more accessible gambling opportunities" will lead to a greater consumption of gambling. It is unclear why this is of concern to the reader. As such, the link needs to be made between the increased consumption of gambling and a greater quantity of harm (i.e. the 'total consumption theory' of gambling).

The next paragraph seems to be making the claim that the uneven distribution of EGMs in poorer areas leads to an inequitable distribution of harm, because increases in density are correlated with increases in the incidence of harm. No theoretical justification is made for this claim (although an empirical one is provided). The authors should attempt to outline the competing theories for why this might be the case - I attempted to do this briefly in https://doi.org/10.1016/j.socscimed.2016.06.008 with particular reference to domestic violence, but the same general arguments apply to harms in general.

I would like more information about the Finnish licensing environment in the paragraph at the bottom of page 5 / top of page 6. Who decides where EGMs are placed if licenses are not required? On what basis do they make these decisions? Do machines get moved around very much? Who's consent (if any) is required? Is there any geographical system of 'caps' limiting the numbers of EGMs nationally, and in a particular neighbourhoods, districts or regions? If this isn't already documented (i.e. if this is unknown) then stating that would be helpful and might usefully be the subject of a future research project.
On page 6, the reader would benefit from knowing the size of the postcode districts (e.g. mean / median populations and area in km2). This could go in text or in the descriptive stats table.

Page 8, line 164. Does the exclusion of postcodes with 0 EGMs bias the analysis? Why were they excluded? Without further rationale, it seems like a strange design decision.

More attention could be given to making sure that the authors don't accidentally imply causation when they mean correlation. E.g. line 210 "explained by" would be better "correlated with". Line 212 "effect" would be better "association". The phrase "enjoying greater comparative advantage" evokes Ricardo's theory of trade, probably accidentally - rephrasing to avoid using the term "comparative advantage" would clarify this.

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.

Unable to assess

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

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