Reviewer’s report

Title: The Impact of Pop-up Warning Messages of Losses on Expenditure in a Simulated Game of Roulette: A Pilot Study

Version: 0 Date: 08 Aug 2018

Reviewer: Jason Landon

Reviewer's report:

Thank you for the opportunity to review this work.

The manuscript reports a small pilot study of expenditure specific warning messages to gamblers in a simulated Roulette task.

Whilst the study is specifically placed as a pilot study, I am not convinced that the work adds to the current literature in a substantial enough way to warrant publication.

The notion of expenditure based pop-up messages is not unique, and experimental studies have shown they have promise with Electronic Gaming Machines (EGMs), variants of which are generally agreed on as potentially the most harmful form of gambling, due to their more continuous nature etc. Here in New Zealand, the Government has mandated a pop-up message of that nature on all EGMs, and our research in live venues (with admitted limitations) suggests moderate harm-minimisation effects at best (Palmer du Preez et al 2016), and a key issue seems to be gamblers doubting the accuracy of the information provided (Landon et al., 2016).

It might be that Roulette is a more appropriate gambling task for these interventions, and the paper could be positioned more along those lines - given the discrete trials etc - but of course this would not be viable for 'real' Roulette. I think the authors could have done more to establish a more specific rationale for the work, and distinguish the approach from previous studies - many have evaluated pop-up messages based on expenditure, and in general the literature has moved beyond simple expenditure based messages. The NZ mandated intervention for example, is simply based on time on device and expenditure, but was only informed by a few very early papers in this area.

My second concern, and ultimately the more problematic one, is that the results seem to be based on a single bet in the trial immediately following the message. I am really not sure what to make of that - there are many ways to interpret it. But put simply, there isn't any way to assess (from the data presented, and from the reading what was collected) whether the effect was a one-trial transient effect, or there was a more long standing effect on betting behaviour after the message. If betting returned to the baseline levels, then it is hard to argue that there is any harm-minimisation potential. The manuscript would be strengthened greatly if the authors could include additional data from after the messages - was there any sustained effect on betting
patterns, or was there any increased likelihood of ending the gambling session earlier (this might not have been an option in this task). The authors mention this "snapshot of single betting decisions" as a limitation, however in my opinion it is a rather profound one, meaning that one cannot draw any firm conclusions, nor is there a clear implication of the results - beyond a partial replication and collecting more extensive data.

**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.

No

**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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