



University
of Glasgow

GRG

DOES THE TOTAL CONSUMPTION MODEL APPLY TO GAMBLING?

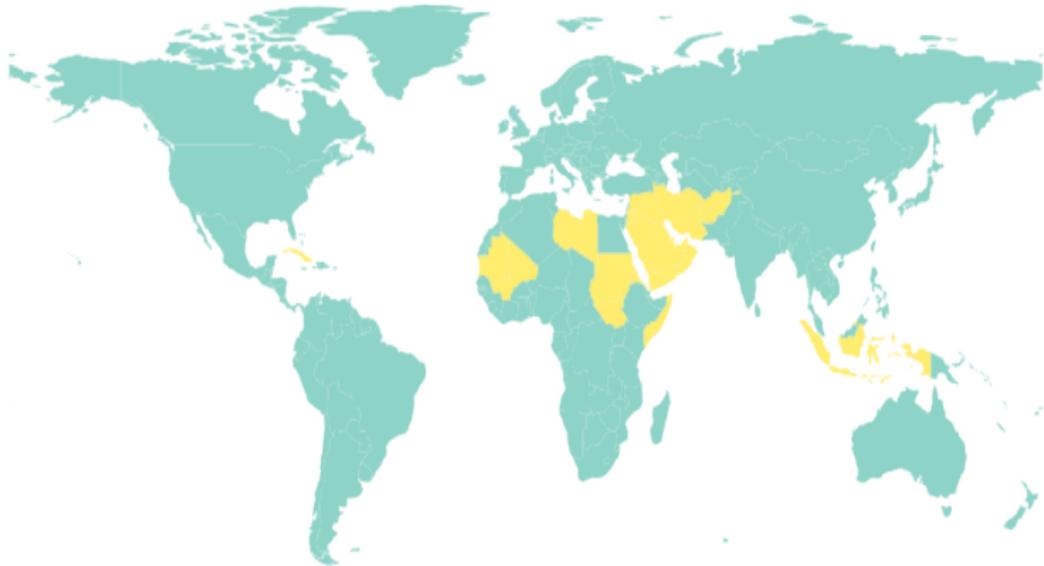
Viktorija Kesaite¹, Heather Wardle¹, Ingeborg Rossow²

24th November 2022

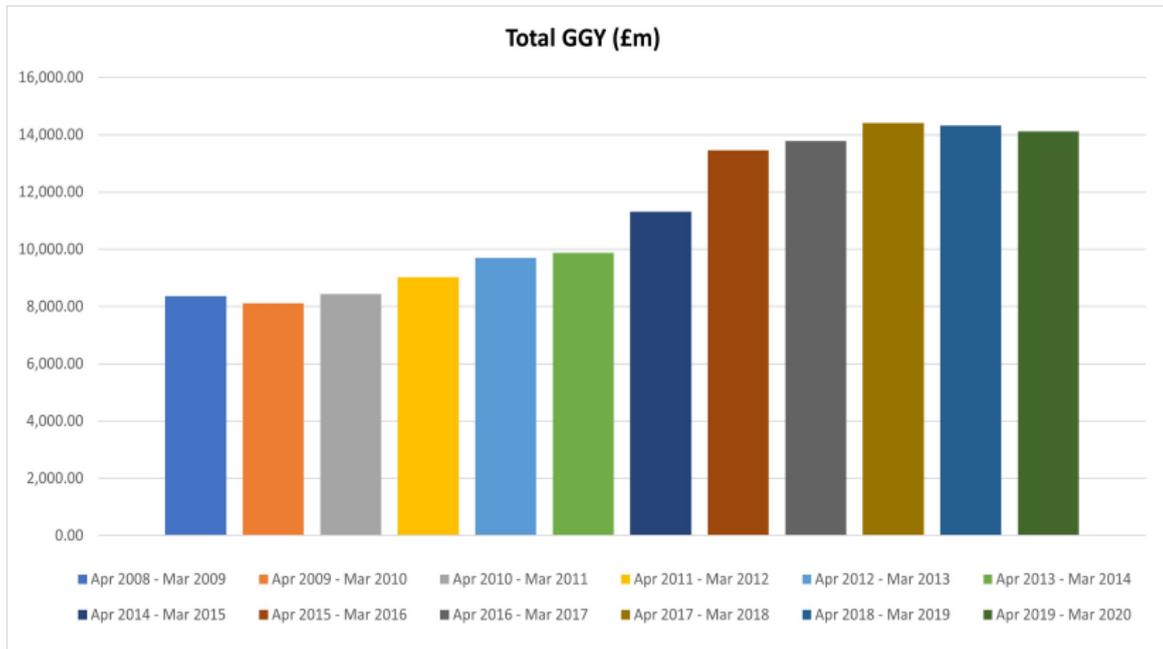
Gambling Research Glasgow, University of Glasgow¹; Norwegian Institute of Public Health²

- Background
- Motivation
- Methods
- Results
- Limitations and further research
- Conclusions

Many countries have legislated to permit gambling activity and advertising, thus normalising gambling activity across populations (Hing et al., 2015).



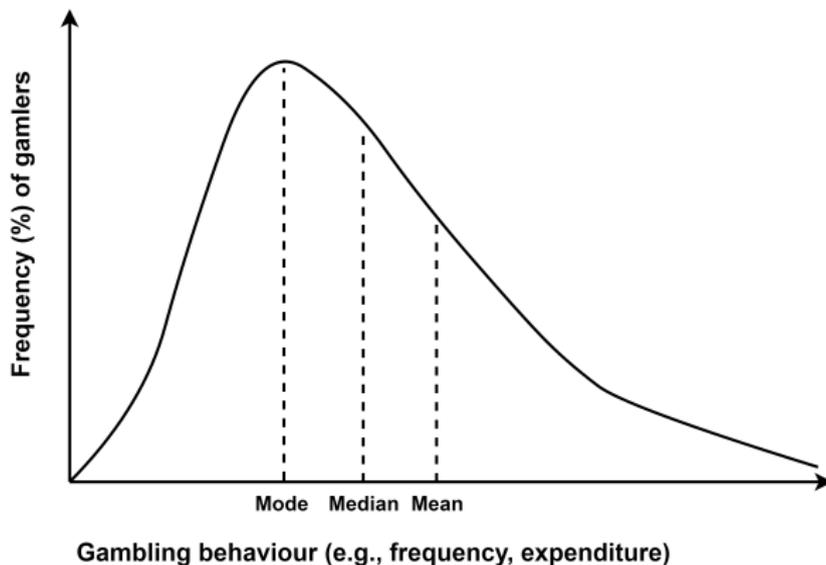
Current projections suggest that Gross Gambling Yield will continue to increase globally.

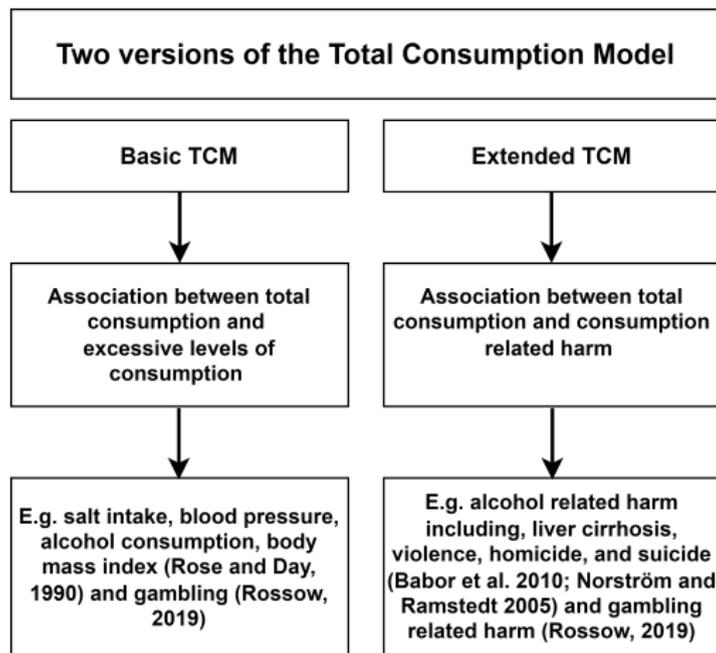


Note: produced using data from the Gambling Commission

- The consequences include but are not limited to financial difficulties, relationship breakdown, increased experience of adverse physical and mental health symptoms (Richard et al., 2020; Wardle and McManus, 2021).
- Gambling is associated with a range of adverse consequences, affecting not only the person who gambles but also their families and communities.
- The consequences of gambling can be long lasting, affecting people long after gambling has ceased.

- Ledermann (1956) suggested that there is a strong association between mean per capita consumption and excessive alcohol consumption in a population.





- To date there has been relatively little systematic evaluation of the elements of the TCM and of the broader applicability of the TCM to gambling.
- Prior review (Rossow, 2019) provides some insights on the aggregate relationships of the TCM, it fails to consider the probability of harm at different levels of consumption and the concentration of consumption distribution.
- Inform us whether prevention policies used in alcohol could also be applied to reduce gambling harm.

- This review was conducted and reported according to PRISMA guidelines (Moher et al., 2009).
- The search strategy included terms on: the shape of the risk curves in gambling, the consumption of gambling and its concentration that affect the skewness of the distribution, and the two versions of the total consumption model.
- We searched the following databases: Medline, PsycINFO, and Web of Science between 1st January 2010 and 11th February 2022.
- All searches were limited to English language articles.

- 16 studies were included in this review.
- All studies were based on high-income populations.
- Most studies used cross-sectional datasets (n=13) and a few studies carried out the analysis using a longitudinal dataset (n=3).
- In majority of the analyses, gambling intensity is measured at the same time as gambling harms (n=14), and two studies used a lagged measure of gambling intensity.
- Most studies used frequency of gambling (n=9), gambling expenditure (n=15), percent of income spent on gambling (n=7) as gambling intensity measures
- Most studies used PGSI or SOGS as gambling harm measures

- Nine studies were identified that examined the shape of the risk curves between gambling intensity and experience of gambling harms. Majority found a J-shaped relationship, and a handful of more recent studies found either r-shaped or linear-shaped risk curves.
- Four studies were identified which examined the concentration of gambling consumption among individuals with problem gambling. All studies showed that gambling expenditure or activity was highly concentrated among problem gamblers.
- Three studies were identified which specifically looked at the application of the basic and its extended version of the Total Consumption Model.

LIMITATIONS AND FURTHER RESEARCH

- The review is based on a relatively small evidence base of high-income countries; the majority of the datasets analysed by the included studies are more than two decades old and thus might not be considered relevant for today.
- Evidence assessing the shape of the risk curves for gambling has been analysed by a handful of studies, but it is fraught with methodological challenges and, as yet, there is limited consensus on the shape of these curves.
- There is a notable gap in evidence on the applicability of the tcm in gambling.
- More research is required on the moderating influence of gambling formats/geographical regions/demographic characteristics among others.

- A small and consistent evidence base continues to show that gambling is highly concentrated among a few individuals and that this is even more so for certain activities.
- Evidence on the shape of risk curves needs further investigation and would benefit from a common set of methodological standards to guide this analysis.
- Policy makers should carefully consider these parameters for individual activities and take appropriate precautionary actions in response, which may include aiming to reduce population prevalence for some activities in order to reduce harms.

The Lancet Public Health Commission on Gambling: Prof Michael Farrell, Prof Louisa Degenhardt, Dr Audrey Ceschia, among others

Thank you for your attention!