

research snapshot

summarize | mobilize



How much harm do gambling problems cause on quality of life?

What this research is about

Researchers often use the Problem Gambling Severity Index (PGSI) to measure gambling problems in a community or population. However, different groups may experience different harms from gambling. The PGSI captures symptoms of problem gambling on an individual basis based on the person's gambling behaviours. It cannot determine the degree of harms experienced by individuals with different levels of problem gambling (e.g., low-risk versus problem gambling). Also, the PGSI does not allow for the harms that gambling causes to be compared to the harms resulting from other health conditions.

The current study determined how much a typical person is harmed, given their level of problem gambling. To do this, it related problem gambling severity based on the PGSI to health-related quality of life (HRQoL). HRQoL refers to an individual's or group's physical and mental health over time. Also, the current study compared the impacts on quality of life caused by gambling to the impacts caused by other health conditions.

What the researchers did

The researchers did the study in three parts:

Part 1: The researchers created a large set of 798 vignettes, or hypothetical situations, to describe the harms experienced by a gambler or an affected other (i.e., person harmed by another's gambling). The vignettes were based on a previous research study in Australia that identified a broad range of harms reported by 3076 gamblers and 2129 affected others.

Part 2: The researchers established a general population panel of 735 gamblers, affected others,

What you need to know

The current study aimed to quantify the degree of harms experienced by individuals with different levels of problem gambling. It was estimated that the quality of life of problem gamblers decreased by 44%. The quality of life decreased by a smaller amount for moderate-risk (29%) and low-risk gamblers (13%). The impact of problem gambling on a person's quality of life was somewhere between that of moderate and severe alcohol abuse disorder.

and members of the general population in Victoria, Australia. They also established an expert panel including 51 gambling counsellors and support workers. The panel participants rated the impact of the vignette descriptions on quality of life using the Time Trade-Off (TTO) task and a Visual Analogue Scale (VAS). The TTO involved participants indicating how much lifetime they would give up in years, months and days, to avoid the harms described in the vignette. The VAS involved participants rating where on the scale, from 0 (least harmful) to 100 (most harmful), he or she would place the health state of the person in the vignette. Each participant evaluated six vignettes using the VAS and the TTO. This resulted in 9,432 (612 expert) evaluations. Each vignette was evaluated an average of 8.7 times.

The TTO and VAS scores were used to calculate the disability weights (DWs). In public health, DWs have been used to measure the harm to quality of life a health state has on a person living one year with the condition. DWs allow comparisons to be made between health states on their impacts to the

population within a given timeframe. DWs are measured on a scale between 0 and 1, with either 0 or 1 being equal to death, and the other end of the scale reflecting ideal health and well-being.

Part 3: The researchers related the DWs from the VAS and TTO to the PGSI scores of the gamblers described in the vignettes. The researchers then compared the DWs generated for each level of problem gambling to the DWs established for other health problems.

What the researchers found

On average, gamblers in the vignettes that had a PGSI score of low-risk received a DW of 0.13. Moderate-risk gamblers received a DW of 0.29. Problem gamblers received a DW of 0.44. Thus, the quality of life of problem gamblers decreased by 44%, and by a smaller amount for moderate-risk (29%) and low-risk gamblers (13%). In other words, problem gambling resulted in a decrease in the enjoyment of life by over 4 years for every 10 years in a person's lifespan.

Compared to the DWs of other health conditions, problem gambling had a DW between moderate and severe alcohol disorder, and similar to bipolar disorder. Moderate-risk gambling had a DW similar to mild alcohol use disorder and stroke. The DW for low-risk gambling was slightly less than that of moderate anxiety disorder.

How you can use this research

The current study calculated the DWs for different levels of gambling that allowed for a direct comparison with other important health concerns. This way of quantifying harms allows for a better understanding of the costs of gambling at a population level. Government and policy-makers can use the information to determine the appropriate investment and resource allocation to minimize gambling harms. Future research should determine DWs associated with gambling in other countries to confirm the findings of this study.

About the researchers

Matthew Browne and **Matthew Rockloff** are affiliated with the School of Human, Health and Social Sciences at CQUniversity in Bundaberg, Queensland,

Australia. **Vijay Rawat** and **Nancy Greer** are affiliated with the School of Human, Health and Social Sciences at CQUniversity in Melbourne, Victoria, Australia.

Erika Langham is affiliated with the School of Human, Health and Social Sciences at CQUniversity in Cairns, Queensland, Australia. **Christine Hanley** is affiliated with the School of Human, Health and Social Sciences at CQUniversity in Rockhampton, Queensland, Australia. For more information, please contact Matthew Browne at m.browne@cqu.edu.au.

Citation

Browne, M., Rawat, V., Greer, N., Langham, E., Rockloff, M., & Hanley, C. (2017). What is the harm? Applying a public health methodology to measure the impact of gambling problems and harm on quality of life. *Journal of Gambling Issues*, 36.
<http://dx.doi.org/10.4309/jgi.v0i36.3978>

Keywords

Gambling harm, health related quality of life, disability weights, visual analogue scale, time trade-off, burden of disease

Gambling Research Exchange Ontario (GREO)

Gambling Research Exchange Ontario (GREO) has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. GREO is an independent knowledge translation and exchange organization that aims to eliminate harm from gambling. Our goal is to support evidence-informed decision making in responsible gambling policies, standards and practices. The work we do is intended for researchers, policy makers, gambling regulators and operators, and treatment and prevention service providers.

Learn more about GREO by visiting greo.ca or emailing info@greo.ca.

