

Gambling Related Harm

Shifting the focus from behaviour to outcomes

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Acknowledgements

- Research Team: Dr Matthew Browne, Dr Phillip Donaldson, Prof Matthew Rockloff, Dr En Li, Dr Talitha Best, Vijay Rawat, Hannah Thorne, Belinda Goodwin, Judy Rose, Nancy Greer
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Background:

- Gambling related harm:
 - Poorly defined
 - Lacked appropriate measures
 - Lack of ability to compare impacts of gambling to other public health issues
- Assessing Gambling Related Harm in Victoria
 - Utilised standard epidemiological methodologies to develop the first summary measure of harm from gambling
 - Used a Health Related Quality of Life measure – specifically a QALY¹

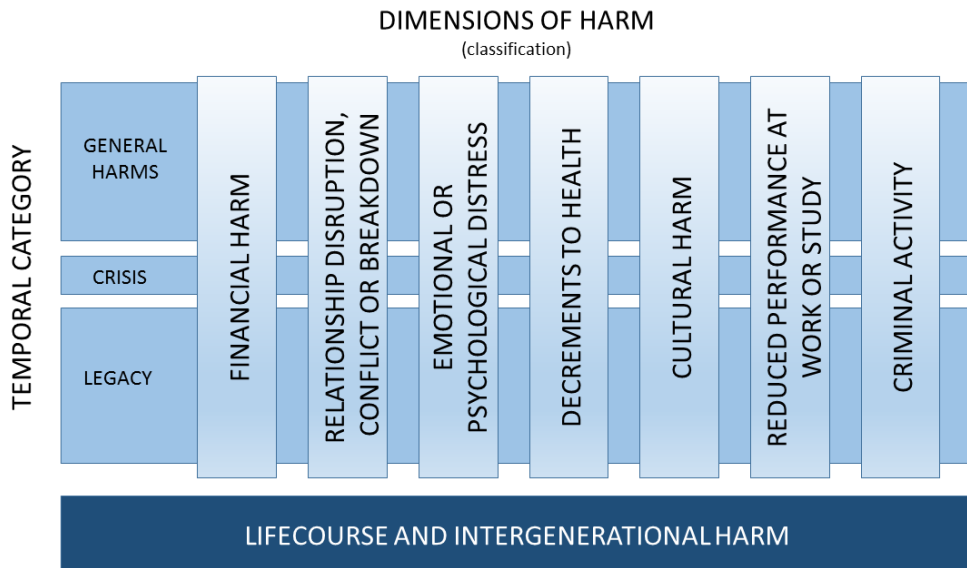
Findings:

- Functional definition of gambling related harm:

Any initial or exacerbated adverse consequence due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family unit, community or population.

Findings

- Conceptual framework
- Taxonomy of harms
 - Person who gambles
 - Affected others
 - Community



Financial harms

- First harm mentioned and a dominant theme
 - Often a trigger for a “crisis”, treatment seeking or behavioural change
 - Easily identified
 - Often have an immediate impact
- Levels of severity
 - Loss of surplus
 - Activities undertaken to manage short term cash flow issues
 - Reduction or loss of ability to meet expenditure with non-immediate consequence
 - Reduction or loss of ability to meet expenditure with immediate consequences
- Assistance seeking related to:
 - Inability to tolerate a magnitude of deprivation for self or others
 - Loss of a significant access
 - Inability to generate funds
 - Bankruptcy

Relationship disruption, conflict and breakdown

- Disruption: decrement to the normal functioning of relationship (passive)
- Conflict: manifestation of disagreements, arguments (active)
- Breakdown: loss or estrangement of relationship
- Mechanisms:
 - Loss of trust
 - Inequality of engagement or investment in relationship
 - Dissonance between the ideal and perceived person / behaviour
 - Distorted relationship roles (infantilising and role reversal)
- Very pervasive from a legacy perspective

Emotional and psychological distress

- Feelings of powerlessness due to loss of control over behaviour or circumstances
- Feelings of insecurity, vulnerability, or not being safe
- Feelings of shame and stigma
- Magnification of harm in small communities (geographic or cultural)
- Impact from harm minimisation strategies
- Resistant to treatment, strong legacy impact

Decrement to health

- Gateway effects and exacerbation of existing morbidities
- Hard to isolate or objectively demonstrate the link
- Mechanisms through determinants of health:
 - Proximal
 - Biological determinants
 - Blood pressure
 - Health behaviours
 - Sedentary behaviour
 - Reduced sleep
 - Links with other behaviours such as dietary, alcohol consumption, tobacco use, illicit drugs
 - Non compliance with medication and other health care practices
 - Poor self care
 - Psychological factors
 - Distal
 - Socioeconomic characteristics and levels of social inclusion

Cultural harm

- Separate to cultural factors that increase vulnerability or risk
- Separated from relationship and psychological harms
- Manifested in:
 - Reduced engagement in cultural practices
 - Culturally based shame in relation to cultural roles and expectations
 - Reduced connection (or disconnection) to culture or cultural community
 - Lost ability to contribute to community (roles and resources)

Reduced performance at work or study

- Includes volunteer work (form of economic contribution)
- Relates not only to the direct harms:
 - Reduced performance
 - Absenteeism
 - Loss of employment / exclusion from study
 - Fraud
- Indirect harm of opportunity cost

Criminal activity

- A second order harm undertaken to address deficits of funds available
- Three types of criminal activity
 - Crimes of opportunity
 - Crimes of neglect
 - Crimes of duress
- Most commonly a threshold harm
- Contributes heavily to further order harms

Lifecourse and intergenerational harm

- Consistent with life course theory (Elder, 1974; Elder, 1985) used in public health and framework for the determinants of health (AIHW, 2014)
- Occurs when a single particular harm or more commonly the cumulative impact of a number of harms was so significant it resulted in a change in the life course of an individual or individuals
- Lifecourse change (loss of primary relationships, homelessness, removal of children, incarceration, forced relocation)
- Also:
 - Milestone failure
 - Generational loss
 - Intergenerational impacts

A taxonomy of harms

General

Financial harm

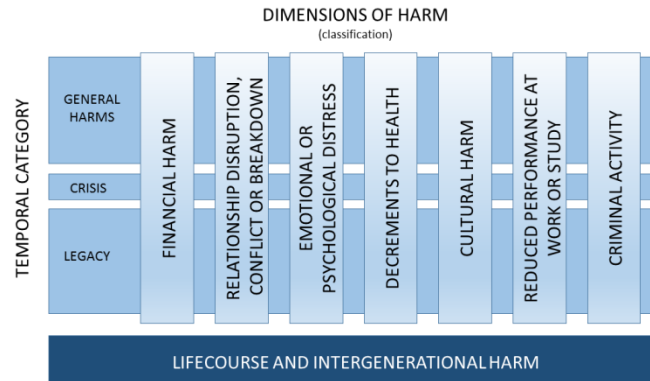
- Reduction or loss of capacity to purchase luxury items such as holidays, electronics
- Reduction or loss of discretionary spending such as non-gambling related entertainment or other family members' activities (ie. children's sports)
- Erosion of savings
- Activities to manage short term cash-flow issues:
 - Additional employment or other forms of income generation
 - Accessing more credit
 - Use of credit cards (kite flying)
 - Selling or pawning items
 - Pay day loans
 - Non-payment or juggling of large bills such as utilities or rates
- Cost of replacing items sold or pawned as part of short term cash strategies
- Reduction or loss of non-immediate consequence expenditure
 - Insurance (health, home, car, income protection, business)
 - Repairs or maintenance costs (home, car, business)
 - Health promotion activities (check-ups, long term medications, allied health support)
 - Household items
- Reduction or loss of expenditure on items of immediate consequence:
 - Children's expenses (education)
 - Medication or health care
 - Clothing
 - Food (including use of food parcel)
 - Housing or accommodation
 - Needing assistance with bill payments from welfare organisations or inability to pay bills (eg utilities)
 - Transport costs (petrol, fares)

Crisis

- Loss of sources of additional funds (ie no further credit available)
- Loss of capacity to meet requirements of essential needs (food)
- Loss of normal accommodation requiring temporary accommodation or resulting in homelessness
- Loss of major assets (car, home, business)
- Bankruptcy

Legacy

- Reliant on welfare
- Restrictions due to bankruptcy or credit rating
- Ongoing financial hardship
- "Forced" cohabitation or involvement in unhealthy relationship due to financial constraint
- Further financial harm from attempts to manage debt (ie. Non-reputable finance providers for debt consolidation)
- Ongoing issues relating to financial security, poverty, or financial disadvantage.
- Higher costs associated with poor credit rating including premium cost of pay as you go services or increased security bonds.



Changing our focus on harm



Changing our focus in response



Early Screening

Ask the question and help them connect with an appropriate service or treatment option

Further information:

- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2016). Understanding gambling related harm: a proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health*, 16(80). doi: 10.1186/s12889-016-2747-0
- Browne, M., Langham, E., Rawat, V., Greer, N., Li, E., Rose, J., . . . Best, T. (2016). *Assessing Gambling Related Harm in Victoria*. Retrieved from Victorian Responsible Gambling Foundation
- Contact: e.langham@cqu.edu.au

Legacy Harms:

Definition: those harms that continue to occur (or emerge) even if the person's engagement with gambling ceases through changes in their own or someone else's behaviour, but may be experienced if a person continues to gamble.



Two questions:

- How long do the harms linger when the behaviour stops?
- What are the implications for policy?

Activity Part 1:

- Timeline:
- Hypothetically let's say someone has stopped (or controlled) gambling.
- To keep this more simple, let's assume they have no serious relapses
- How long before each of these harms “fade out”?
- What do we mean by fade out?

What we would like you to do:

- **INDIVIDUALLY** consider each of the harms on the sheet in front of you – how long before it would fade out.
 - From your experience (lived experience or professional experience)
 - From your understanding
 - From your best guess
- Place the sticker on the timeline at this point
 - 1 year
 - 2 years
 - 5 years
 - 10 years

A shared understanding

- What are the similarities and differences between people's responses?
- Is there a consensus?

What does this mean for policy?

- Are there services aligned to address these harms?
- Are there services that are missing?
- What are the challenges in addressing these harms?

THE STATE OF GAMBLING-RELATED HARM IN VICTORIA

Presented by Matthew Browne

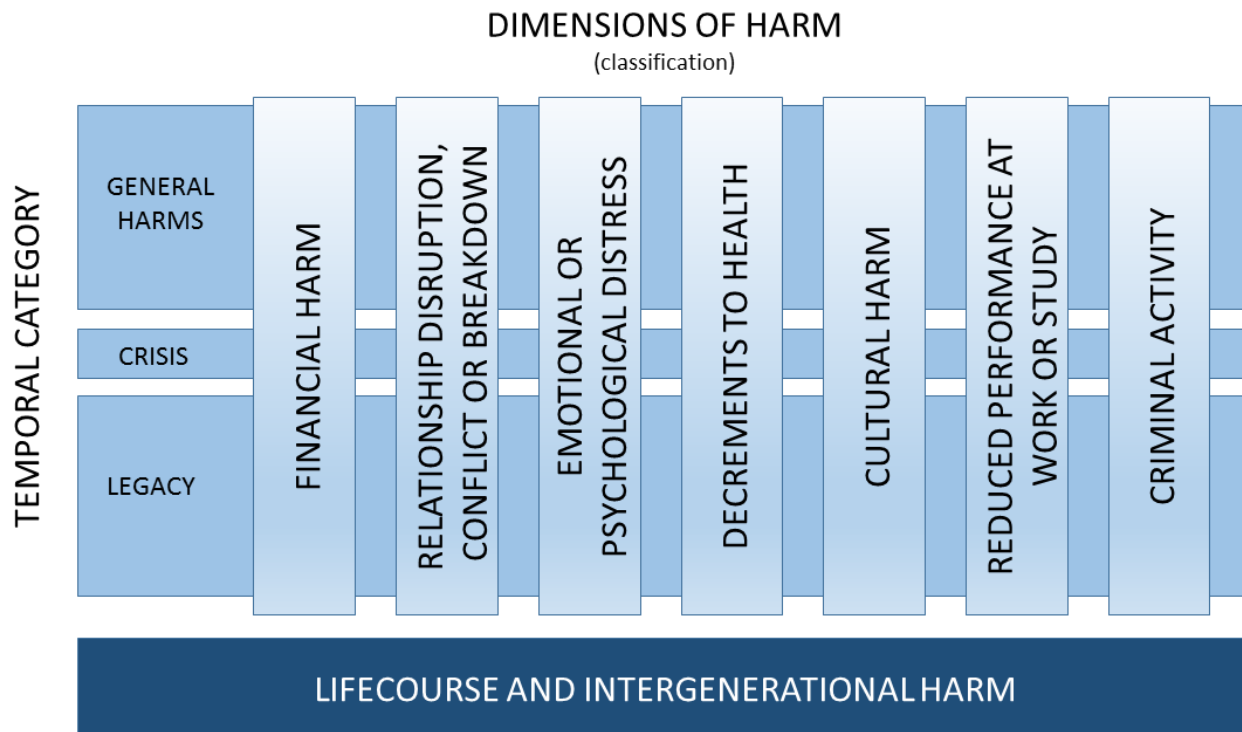
Many Ways To Help, Melbourne, October 2016



DEFINITION

Any initial or exacerbated adverse consequence experienced due to an engagement with gambling that leads to a decrement to the health or wellbeing of an individual, family unit, community or population.

CONCEPTUAL FRAMEWORK



THE SYMPTOMS OF HARM

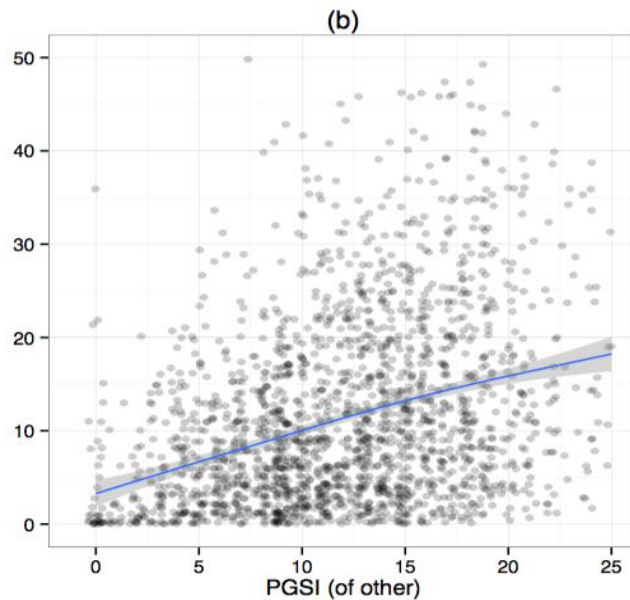
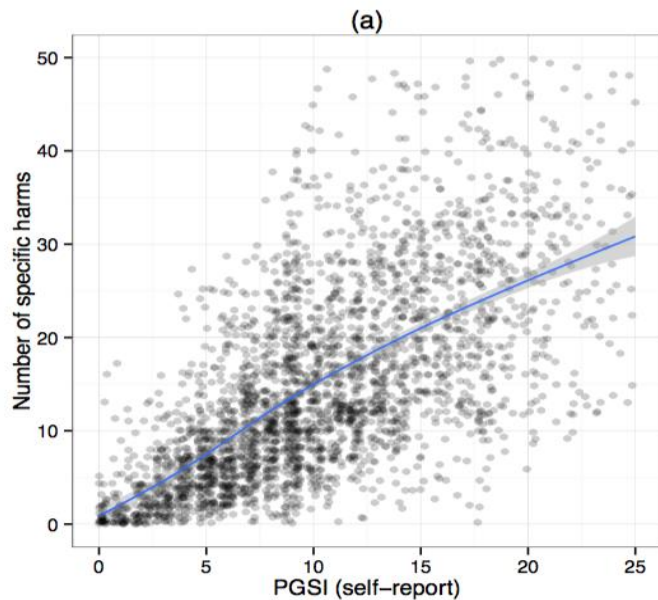
Development of harms checklist

- 73 specific potential harms arising from gambling, organised within the six broad domains adapted from the dimensional harms framework
- Linked to the Problem Gambling Severity Index (PGSI) – the main screen for gambling problems

Financial
• Bankruptcy
• Late payments on bills (e.g. utilities, rates)
Work/Study
• Conflict with my colleagues
• Was late for work or study
Health
• Unhygienic living conditions (living rough, neglected or unclean housing, etc)
• Stress related health problems (e.g. high blood pressure, headaches)
Emotional/Psychological
• Felt worthless
• Felt like a failure
Relationship
• Actual separation or ending a relationship/s
• Got less enjoyment from time spent with people I care about
Other
• Felt less connected to my religious or cultural community
• Took money or items from friends or family without asking first

REGRESSION FINDINGS

- Fitted regression lines



MEASURING GAMBLING HARM

Burden of Disease Approach

- We used ideas from Burden of Disease (BoD) framework.
- BoD measures impact of health states on quantity and quality of life.
- 'Health state utility' (between 0 and 1) summarises total impact on quality of life
 - E.g. alcohol dependence = .55, bipolar affective disorder = .18
- Utility * N persons affected = approximate population impact
- Years of (healthy) life lost in a given year

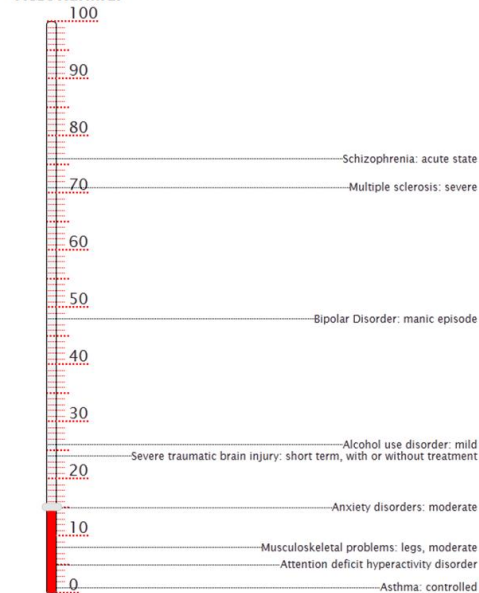
MEASURING GAMBLING HARM

- We need to describe the condition of experiencing gambling harm covering
 - Harms from 'own gambling'
 - Harms to 'affected others'
- Harm utilities (0-1) elicited via:
 - Visual Analogue Scale (VAS)
 - Time Trade-Off (TTO)
- Online methodology
- Sample
 - Experienced gambling harm (gamblers, affected others)
 - General population
 - Experts

Use your mouse or keyboard arrows to move the slider and rate how much you believe experiencing the scenario would impact your quality of life.

Your spouse's gambling is affecting your quality of life. The gambling is making you feel distressed. In your relationships you're experiencing greater tension.

Most Harmful



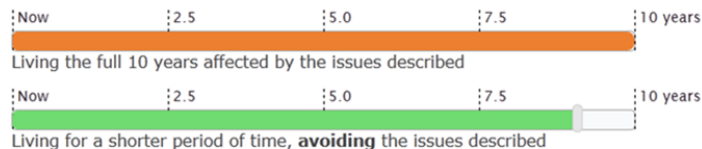
Least Harmful

Value: **15**

SCENARIO 1

Adjust the bar until you believe Option B is equivalent to Option A. You can use your mouse or keyboard arrows to adjust the slider, or enter the value in the textbox. You may choose to enter your answer in years, days, or months by using the dropdown menu.

Your spouse's gambling is affecting your quality of life. The gambling is making you feel distressed. In your relationships you're experiencing greater tension.



*Value: **9.00** Years

**Living for this length of time free of the problems described in the scenario above, would have the same worth to me as 10 years of life affected by those issues.*

Visual Analogue Scale (VAS) and Time Trade-Off (TTO)

BURDEN OF GAMBLING HARM STUDY

Gambling Harm Descriptions

- 798 gambling harm descriptions (vignettes) randomly sampled from national gambling harms survey
- Intent to capture diversity in the experience of harm
- Generated algorithmically
 - Two groups: gamblers and affect others
 - Each participant responded to 6 vignettes

Vignette group	Problem Gambling Severity				Total
	Non-Problem	Low-Risk	Moderate-Risk	Problem	
Own gambling	47	104	200	200	551
Affected others	18	29	100	100	247
Total	65	133	300	300	798

BURDEN OF GAMBLING HARMS STUDY

Gambling Harm Descriptions

- Example vignette for harms from own gambling ('Own gambling' group)

Your gambling is affecting your quality of life. The gambling is making you feel regretful. You spend less recreationally (e.g. movies, eating out) and are late on bill payments. Additionally, you have reduced your spending on essential items (e.g. medication, food). You are losing sleep due to spending time gambling. You are eating too much and drinking more alcohol. You spend less time with the people you care about. In your relationships you're experiencing greater conflict. You neglect your relationship responsibilities. Additionally, in your work/study you use this time to gamble.

(A1003, PGSI = 6, $z = -0.01$)

- Example vignette for harms from another's gambling ('Affected others' group)

Your parent's gambling is affecting your quality of life. The gambling is making you feel angry and hopeless. You also feel extremely distressed. You have reduced spending on beneficial expenses (e.g. insurance, car and home maintenance). You are experiencing depression and are experiencing stress related health problems (e.g. high blood pressure). Your tobacco use is increasing. Within your religious/cultural community, you feel less connected. In your relationships you're experiencing greater tension and conflict. At work/study you have reduced your performance (e.g. due to tiredness or distraction).

(B1007, PGSI = 15, $z = +0.42$)

BURDEN OF GAMBLING HARMS STUDY

Sampling

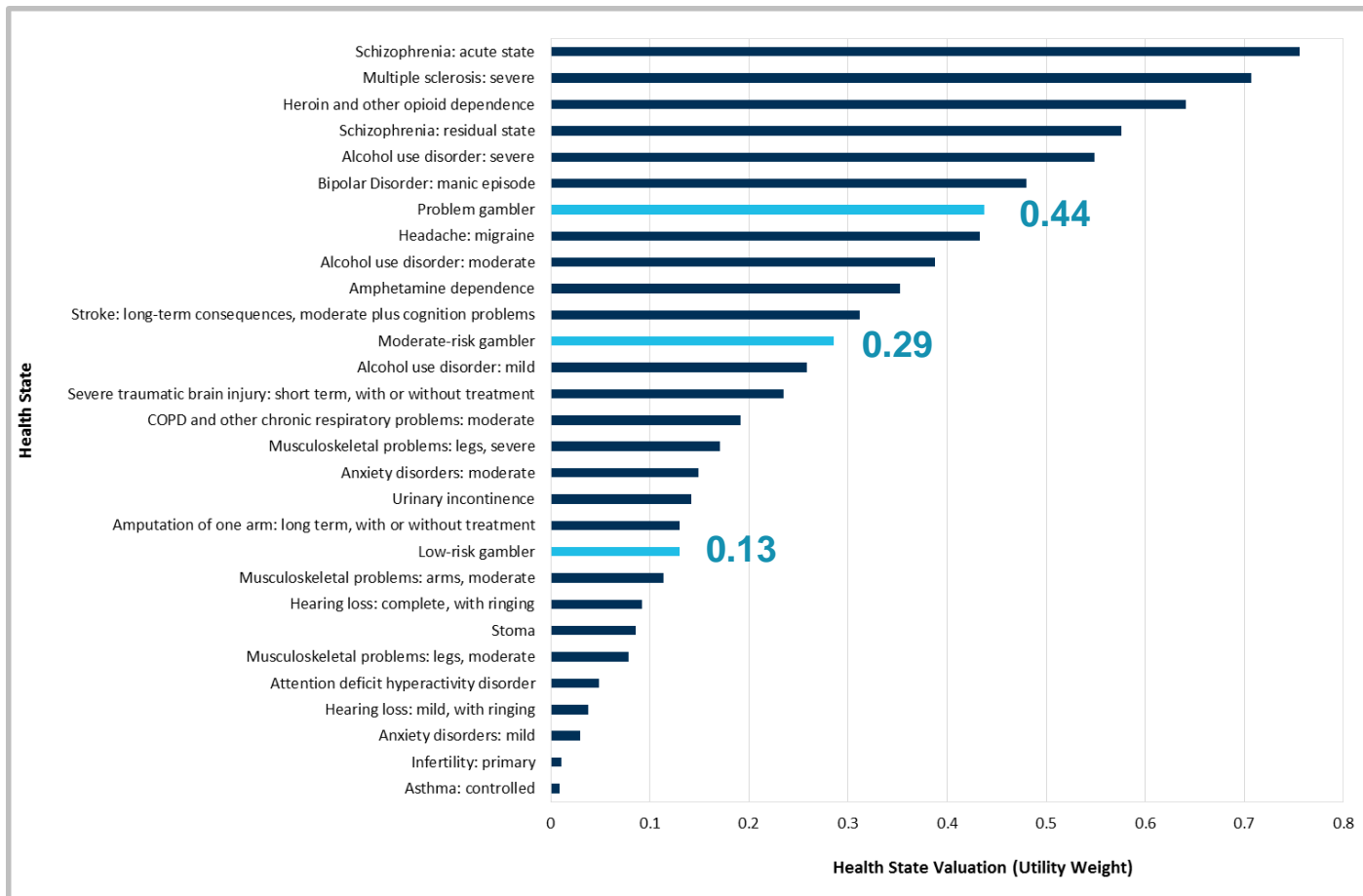
- Participants (n=786)
 - National online panel sample invited: Gamblers, affected others, general population
 - 'Experts' - professional experience with persons experiencing gambling harms/affected by another (e.g. counsellors and support workers). List obtained by VRFG and invited via email by CQU.

Participant Type	Vignette Group		Total
	Own Gambling	Affected Other	
Gamblers	124	128	252
Affected Others	115	123	238
General population	123	122	245
Expert	29	22	51
Total	391	395	786

ANALYSIS

- In total, 9,432 utility evaluations were elicited from 786 participants (735 general population, 51 experts)
- We modelled utility (monotone reg. / logit transformed) as function of
 - PGSI
 - + 'nuisance' variables (e.g. respondent category, protocol)
- Harms for PGSI score of 0 excluded from analysis
- Harm to others analysed separately from harm to self

RESULTS: HOW DOES GAMBLING PROBLEMS COMPARE TO OTHER CONDITIONS?

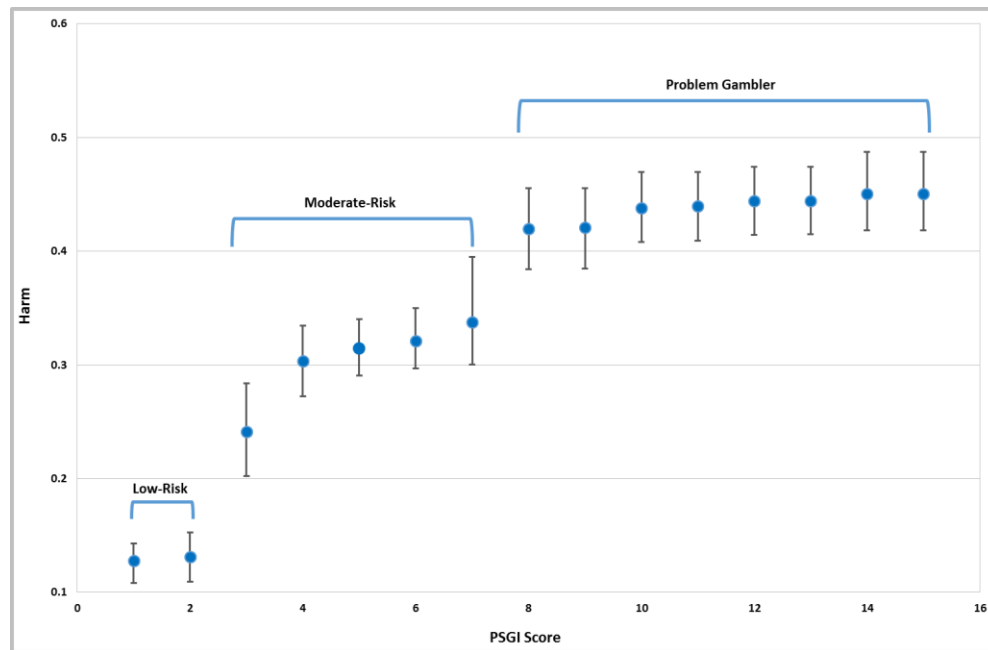


Harm utilities for gambling harm compared to other health states

RESULTS

Gambling harm utility scores – PGSI Score

- Harm valuations increased by PGSI score and grouped by PGSI category (1-2, 3-6, and 8+)
- TTO and VAS showed the same trends

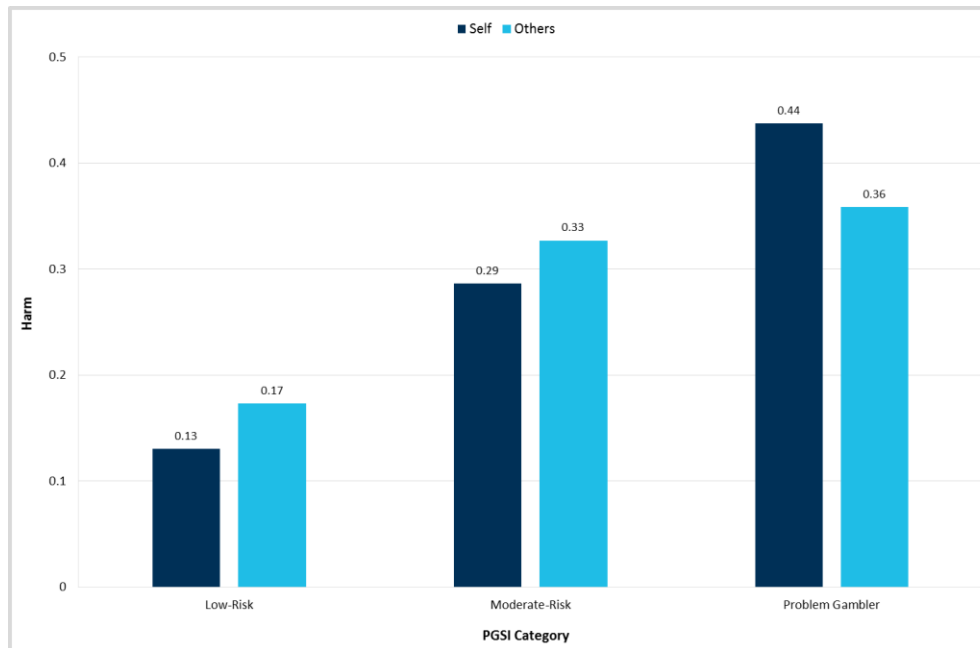


Harm from one's own gambling by PGSI Score

RESULTS

Gambling harm utility scores – by harm type and PGSI Category

- Slightly higher estimates of harms due to others gambling for low and moderate risk categories
- Higher estimates of harms due to own gambling for problem gamblers

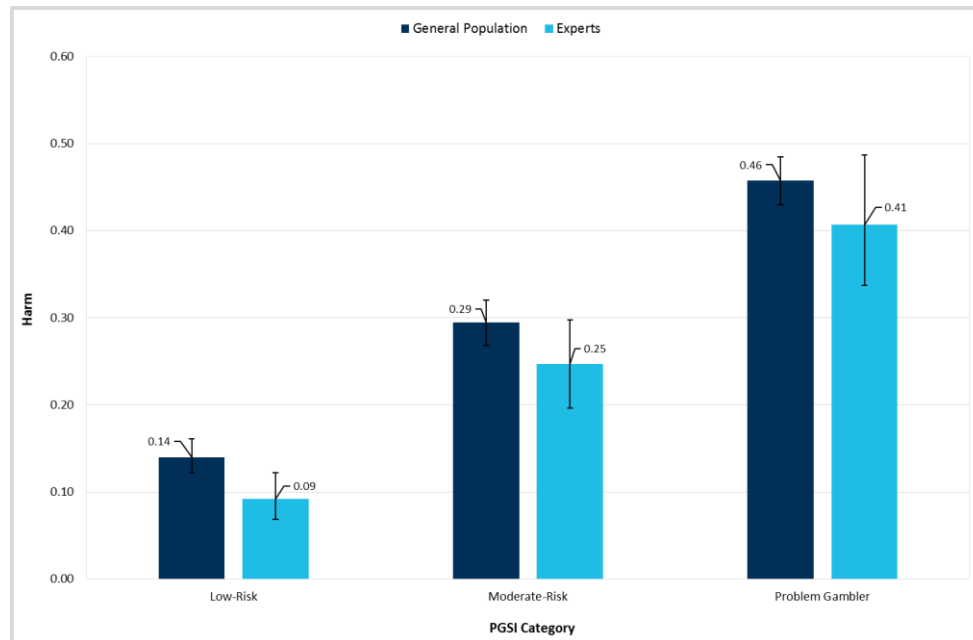


Harm by harm type and PGSI category

RESULTS

Gambling harm utility scores – by sample type and PGSI category

- Experts provided lower harm valuations than general population for all PGSI categories



Harm by sample type and PGSI category

ASSESSING POPULATION LEVEL HARM FROM GAMBLING IN VICTORIA

CALCULATING QALY₁ – ANNUAL YEARS OF LIFE LOST TO DISABILITY (YLD₁)

- Aim: Quantify gambling harm per year using a QALY₁ approach – the aggregate years of healthy life lost each year due to gambling in the Victorian adult population (YLD₁).

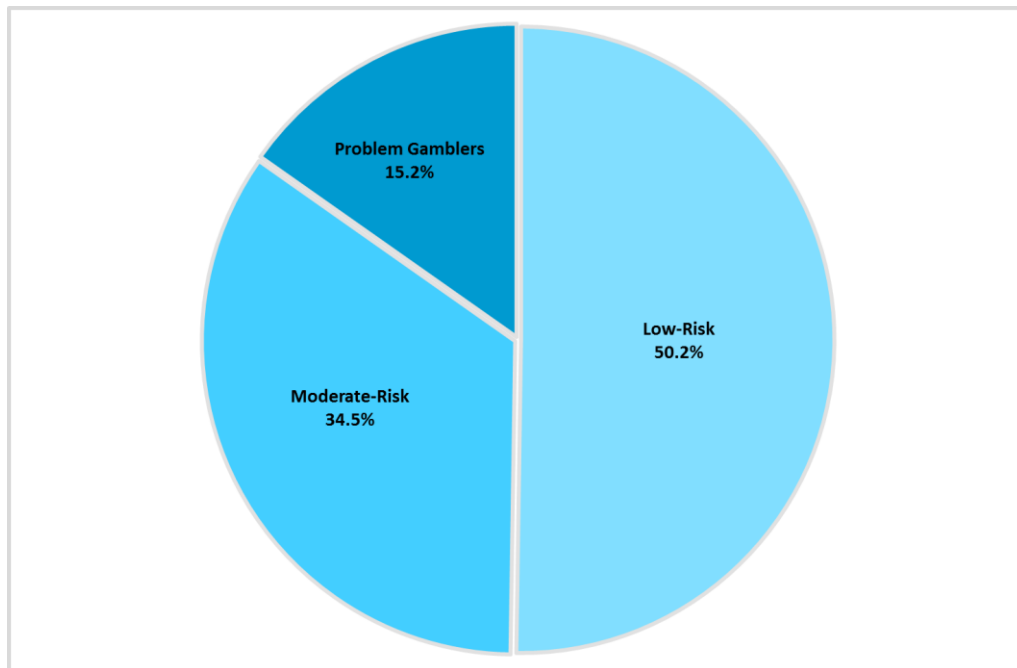
$$\text{YLD}_1 = \text{Victorian Adult Population} \times \text{Annual Prevalence for Health State (\%)} \times \text{Utility Weight of Health State}$$

- Approach based on Global Burden of Disease Studies (e.g. Murray & Lopez, 1996; Salomon et al., 2013) and the Victorian Burden of Disease 2001 Study (Department of Health & Human Services, 2005).

RESULTS

QALY₁ YLD₁ – Own Gambling Harms by PGSI Category

- Aggregate years of healthy life lost annually (QALY₁ YLD₁) in Victorian adult population = **97,877 years**
 - Low-Risk = 49,173 years
 - Moderate-Risk = 33,788 years
 - Problem Gambler = 14,916 years



Proportion of harm in Victorian population by PGSI risk category

RESULTS

QALY₁ YLD₁ – Gambling Harm to Others

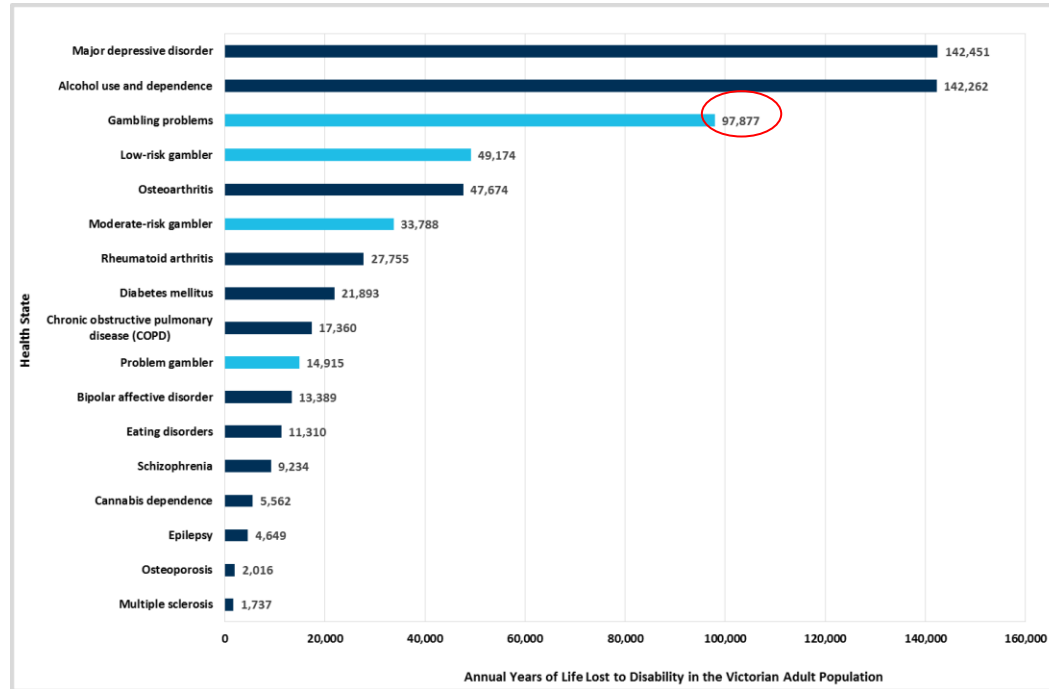
- Aggregate years of healthy life lost annually (QALY₁ YLD₁) in Victorian adult population caused by another's gambling = **20,820 years**
 - Underestimate (?) based on 2014 Victorian Gambling Survey – conflicts with common assumption of 5-8 affected others

QALY₁ YLD₁ – Total gambling harm to Victorian population

- Combined YLD₁ (own harm + harm to others) = **118,697 years**

Population level harm (utility weight * prevalence * Vic population)

- YLD₁ in Victorian population due to own gambling less than major depression and alcohol use/dependence
- But higher than other prominent health states, such as Diabetes
- Figures exclude YLD₁ due to gambling harms to others



Annual Years of Life Lost to Disability in the Victorian Adult Population

IT'S NOT JUST YOUNG MEN

Gender

- Males (55.9%), females (44.1%)
- Females in low-risk gambling problem category (high prevalence) contribute 28.9%
- Moderate-risk males (25.3%) and low-risk males (21.3%)

Age

- Population aged 55 years+ (41.3%)
- Followed by 35-54 years (34.8%), and 18-34 years (23.9%).

Age by Gender

- Females 55 years+ with low-risk gambling problems **accounted for the largest proportion of the harms of any single category (14.5%)**
- Followed by males 55 years+ with moderate-risk gambling problems (13.8%)

KEY FINDINGS

- Estimates of gambling harm utility weights validate PGSI categories
- For an individual
 - Problem gambling (.44) is severe impact of quality of life, similar to moderate depression (.41)
 - Low-risk problems (.13) has an impact similar to alcohol harmful use (.11)
- At the population level, gambling problems generate
 - Approx. 2/3 amount of harm as other major social issues - alcohol and depression
 - Markedly more harm than issues such as schizophrenia and eating disorders
- Low-risk gamblers contribute 50% of gambling harm
 - Only 15% contributed by problem gamblers

IMPLICATIONS

- **Severity**
 - Being 8+ on the PGSI is bad - about the same as major alcohol disorder
 - Mild gambling disorder similar to moderate anxiety disorder
- **Distribution**
 - 85% of harm accruing to non-problem gamblers
 - Like alcohol, the focus should be broader than clinical addiction
- **Scale**
 - Surprisingly large - about 75% of major depression and alcohol use / dependence
 - Never before estimated, and arguably previously implicitly downplayed by the '~1.5% PG prevalence'

Does resource investment match the impact on the community?

ACKNOWLEDGEMENTS

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