Gambling and Harm: All quiet on the Western front?

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Outline of Presentation

- Why harm is important in the gambling field and its link with Responsible Gambling
- Definitions of Harm and types
- Previous evidence and its limitations
- Recent developments / improvements
- Strengths and potential issues to consider /areas of caution

Why harm is important?

- 2 Important reasons
- 1. Role in the assessment of clinical disorders/ pathologies
- 2. Central to public health and responsible gambling principles

Harm in clinical diagnosis

- Pathological / Disordered gambling involves behaviour that is statistically rare.

- But it needs to lead to functional impairments to be ‘clinical’, e.g, in DSM-V: pre-occupation, ‘has jeopardized or lost significant relationship, job, or educational or career opportunity because of gambling’
- Earlier versions: criminal behaviour

Harm in Responsible Gambling

- Can be framed in 3 ways:
- Harm prevention: Stop it before it occurs (primary intervention)
- Harm minimisation: Stop it getting any worse (secondary intervention)
- Harm reduction: Reduce pre-existing harm (tertiary intervention)

Public health approaches

- Harm is central to public health approaches which focus on the prevention and reduction of harm
- Problem gambling now often considered a public health problem
- Primary, secondary and tertiary level interventions

What is harm?

- Several conceptual approaches to this:
- Functional impairment (clinical significance): the person can no longer function successfully in life due to the presence of the problem
- General negative impacts: harms in certain domains or areas are indicated
- Quality of life: The person's life is not as good as it could be.

Different types of harm

- Federal Productivity Commission (1999)

- Personal/ psychological
- Social/ Familial/ Relationships
- Financial
- Vocational / Educational
- Legal

- Can also be extended to include the community/ geographic/ regional impact

How well has harm been captured in the past?

Limitations of previous evidence

- Problem 1: Narrow focus

- The range of harms assessed has usually been quite narrow (typically only the ‘hard end’ problems)
- Very low base-rate in population surveys
- Not statistically useful
- Less useful for prevention-problems already present

Prevalence studies

- Prevalence data: Prevalence of serious harms is typically very low, e.g., South Australian prevalence survey in 2012: 3.4% of moderate-risk and problem gamblers reported losing relationship; 0.4% changed job; 0.1% lost job

- Only 0.6% problem gamblers and 2.5% moderate risk (3.1% total).

Clinical/ Treatment samples

- Prevalence rates of serious harms are much higher
- But these samples may not be representative
- A lot of people don't seek help
- Help-seeking populations have high co-morbidity that might explain some problems
- Doesn't help with early prevention/ wider responsible gambling objectives that might have a population focus

Limitations (continued)

- Problem 2: Screening tools usually not harm focused

- PGSI has 3, maybe 4 items, relating to harms
- ‘Borrowed money or sold anything’, ‘Caused you health problems’, ‘financial problems’, ‘been criticized’.

- Exceptions: Victorian Gambling Screen (Harm to Self); PPGM (Volberg & Williams)– separates out harm and behaviour. Neither widely used.

What is needed?

- More refined and comprehensive assessment of harm
- Harm measured across the gambling risk continuum to make it more useful to assessing the impact of responsible gambling policies and interventions

Recent Harm Research

Australian harm research

- Most well-known study: Brown et al. (2016) in Australia; *Int Gambling Studies* (2017)
- Panel survey of 3076 gamblers (who had experienced some harm associated with gambling, no matter how minor and regular gamblers)
- Sample included a high % of problem gamblers; good breakdown across the risk categories

Continuum of harms

- Examined in several areas:

- Financial (Bankruptcy .....Reduced spending on other leisure activities)
- Work/ Study (Lost job.....Reduced job performance)
- Health (Emergency treatment.....Worry/ lost sleep)
- Psychological (Feeling worthless.....feeling regret)
- Relationships (Ended r'ship.....spent less time with family)

Important findings

- A significant % of problem gamblers report serious harms associated with gambling:

- 7% had bankcruptcies
- 11% had lost jobs
- 7.5% had suicide attempts
- 32% had feelings of worthlessness
- 20% threatened relationship ending
- 17% had taken money to gamble

Low risk gamblers rarely reported serious harms

- Bankruptcy/ Going on welfare: 0.0%
- Loss of assets/ Utilities: 0.6%
- Lost job/ work conflict: 0.0%
- Suicide attempt/ Decline in living: 0.6%
- Self-harm: 1.3%
- Feeling worthless: 3.4%
- Threatened ended r'ship: 2.5%
- Crime/ Took Money: 0.6%

More common ‘harms’ in low risk gamblers (mean was 2-3)

- Reduced other recreational expenditure: 19.7%
- Reduced savings: 21%
- Reduced spending on other things: 30.6%
- Less physical activity: 5.1%
- Feel regret from gambling: 17.2% (I lost?)
- Reduced with other relationship activities: 7.6%

Harm or Opportunity Cost?

- The first important point to note is that 3 of the main ‘harms’ associated with low risk gambling involve spending time and money gambling
- Spend time and money on gambling = less time and money available for other things
- Is this really a form of harm?

Calculating Burden of Harm

- An innovative part of this work was to present the harms actually reported by individuals back to them in the form of a vignette.

- e.g., "*Your gambling is affecting your quality of life. You have reduced your spending on essential items. You are losing sleep due to spending time gambling. You neglect your relationship responsibilities*."

Two methods

- People were given a visual analogue scale (VAS) and the asked to rate the situation described against a 0-100 scale with anchor points
- Time-trade off method (TTO): this presented people with a sliding scale.
- The TTO method tended to yield the more conservative results (less harm)

Time-trade off methodology

- People were presented with the scenario and a slide scale
- Imagine you are faced with this combination of problems for 10 years. How many years would you like to trade to be without these problems?
- If ANS = 1, then score = 0.1 and 1 year of quality of life is said to be lost due to those problems.
- One could then add up all the lost years for low risk, moderate and problem gamblers

Low risk vignette

- Imagine if a low risk gambler had endorsed 2 items: spending less on other leisure activities and reduced savings (last 12 mths)

- Vignette:" *Your gambling is affecting your quality of life. You have less spending money and have reduced savings*."

Question about low risk vignette

- The wording 'Your gambling is affecting your quality of life' may prime them to see it as more of a problem? (although some of the sample were recruited on the basis that harm had been experienced)
- What if one wrote:
- "*You will continue to spend your savings and money you might otherwise spend on other leisure activities- on gambling*.'
- Would the same response be given?

Burden of harm in low risk gamblers

- The study took all the years of reduced Quality of life and multiplied it by the number of low, moderate and high risk gamblers?
- There are lots of low risk gamblers.
- Conclusion: There is more total harm in low risk gamblers. In fact, the burden of lost years in low-risk gambling exceeds osteo-arthritis, problem gambling, diabetes.

Browne et al. (2017): IGS

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Figure 1. Annual prevalence of at-risk and problem gamblers compared to other health states in the Victorian adult population.

Table 1. Gambling harm by PGSI category.

Problem Gambling Severity Index (PGSI)	Disability weight	Prevalence in population (%)	Total of Victorian population	Years of Life Lost to Disability (YLD)	Proportion of YLD (%)
Low-risk gamblers	0.13	8.9	391,206	51,082	50.24
Moderate-risk gamblers	0.29	2.8	122,667	35,099	34.52
Problem gamblers	0.44	0.8	35,415	15,494	15.24
Total at-risk and problem gamblers		12.5	549,289	101,675	100

Note: YLD was calculated taking into prevalence of PGSI scores within categories, and DWs specific to each PGSI score. Therefore, YLD is not exactly equal to N*DW in this summary table.

Gambling harm compared to other health states

The annual YLD for Victorian adults were calculated for other health states using a similar method of combining utility weights and prevalence data (see Online Resource 1 for these calculations). Figure 2 plots the YLD for other health conditions against harm from one's own gambling.

Annually, at-risk and problem gambling generates significantly more ongoing harm than other key health conditions such as osteoarthritis, diabetes mellitus, and COPD. Furthermore, the aggregate harm associated with gambling (including all three PGSI lev-

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The Prevention Paradox

Definition and Rationale

- Geoffrey Rose (1985, 1992)
- Majority of clinical/ disease cases arise from within low risk populations
- Makes sense with physical disease (e.g., influenza)
- While there high-risk populations (e.g., women during pregnancy, elderly people), a focus on the general population (e.g., flu-shot) may have higher protective 'yield' in absolute numbers

Two lines of argument

- A greater number of clinical cases will arise from the larger (usually lower risk populations)
- The total absolute burden of harm is greater in low risk populations

- These are more/ easily applied to different diseases or disorders, e.g., Influenza (1st one), but one either has the flu or not (harmed or not harmed)

Application to Addiction

- Both lines of argument have been applied to Addiction
- Alcohol (Rossow & Romelsojo, 2006) in *Addiction* showed that 50%+ of gambling-related violence in Norway was not due to alcoholics, but lower risk people
- With alcohol, there is a reasonable argument that the total burden of harm (in absolute terms) might be higher in people who are not alcoholics

What about gambling?

- Canale, Vieno, & Griffiths, 2016; Raisamo, Makela, Salonen, & Lintonen, 2014
- British or Finnish prevalence data used
- In the UK study, 62% of dependence harms and 26% of social harms were amongst individuals classified as low risk gamblers.

- But both studies scored PGSI 3-4 as low risk gamblers. Usually scored as moderate risk.

The PP and the Australian research

- Browne et al. (2016) did not specifically investigate this concept directly, but their work has implications for PP logic.
- In fact, they have recently done some work on this topic using their data.
- Their findings appear consistent with the notion that there is more harm in the low risk groups of gamblers.

Harm as a more ‘fluid’ quantity

- Harm is considered to be a quantity that can be added up across individuals
- These studies are measuring harm almost as a community / aggregate level rather than in terms of individuals
- This may be useful if you want to get a measure of overall community harm.

Concerns about the PP style logic

- But just because there is more total harm in low risk gamblers doesn't mean that there are more individual people who are harmed or suffering in that group.
- Small elements of harm are being harvested from individuals and aggregated
- 1 symptom doesn't mean you have 1/10 of a disorder; e.g., 1 sneeze does not make a head-cold or really part of a head-cold
- Can you really say that 50 people with a slight tickle in the nose = 1 person with a miserable cold?

PP logic (continued)

- In relation to the methodology: is 1 year with less savings x 300 people = 300 really greater than 8 years x 30 people who are bankrupt = 240?

Individual harm vs. Population level harm

- In effect, harm has almost a ‘liquid’ quality where you don’t need anyone to be really harmed- but you merely harvest off bits of harm from different people and add this up.

- How many low risk gamblers are actually ‘harmed’ to the point that you might say that their psychological, social and physical health is significantly affected?

Conceptual Concerns

Concept Creep

- Nick Haslam (University of Melbourne): in*Psychological Enquiry*
- “Concept creep: Psychology’s expanding concept of harm and pathology”
- Raises concern about the phenomenon of concept creep; expanding definitions of harm in a number of areas of psychology

Concept Creep 2

- Two types of concept creep:
- Vertical expansion: Criteria to satisfy a concept/ phenomenon become less stringent OR the threshold is lowered "to quantitatively milder variants of the phenomenon to which it originally referred" (p. 2)
- Horizontal expansion: Expansion of the concept occurs when we widen the range of people or situations that might fall under a definition (e.g., defining new types of behavioural addiction)

Concept Creep 3

- Both types commonly work in tandem
- Positive implications: represents a more 'caring' society; focus on prevention; precautionary
- Negative: May trivialise true / serious cases (e.g., Sadness = depression; Sexual abuse = Offended by a calendar); May undermine the credibility of the constructs; Over-pathologizing of fairly normative behaviour

Prevalence Creep

- If the focus is upon the quantity of harm, there is a danger that the following will (and is!) happening
- Endorse 1 harm item = harmed individual
- PGSI score = 1 = therefore prevalence rates extend beyond the regular threshold to include anyone with low scores
- Lots of people score 1, so one can use the same logic to argue that the 1s are more of a community problem than the 8s!

Regulatory: Pros and Cons

- Pros: Leads to a focus on prevention and the populations who might be more amenable to lower level, community-level policies.

- Cons: This type of argument encourages potential over-regulation of low risk populations.

Enhancing harm research: What next?

More focus on benefits

- If low risk gamblers spend less time with other friends in non-gambling activities, might they now be spending more time with friends while gambling?
- Recreational gambling will have social benefits?
- Isn't it likely that these benefits will be most concentrated in low risk groups?

Cost-Benefit Cross-over point

- At what point do the costs start to outweigh the benefits of gambling?
- Do we see this in the low-risk range or the moderate risk range?

Refinement of Items

- Threshold approach: What level of harm is needed to signify a significant current loss of QOL (one doesn't have to be problem gambler to fall into this category) at an individual level?

- Item Severity Analysis: Choose harm items that are not opportunity costs and which have meaningful policy relevance (e.g., spending less money on utilities vs. reduced savings)

Community level concept of harm vs. Individual

- The Browne et al. (2016) uses WHO endorsed methodologies to capture broader burdens on harm
- But prevalence research and service planning/ evaluation of strategies needs research into individuals. It is individuals who seek help, not ‘blobs of harm’.
- The two must not be confused: Prevalence of people who report ‘a harm’ is not the same as the prevalence of ‘harmed’ individuals (i.e., whose QOL has been affected).

The best of both worlds

- Harm research has the capacity to provide estimates of community-level harm. Aggregate burden of disease.

- BUT should also be able count the number / prevalence of individuals whose accumulated harm is sufficiently severe to be of policy interest.

Thank you, any questions?

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